## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>EN-4</td>
</tr>
<tr>
<td>I.I Explanation of the safety information symbols</td>
<td>EN-4</td>
</tr>
<tr>
<td>I.II The Groove Go pedelec</td>
<td>EN-5</td>
</tr>
<tr>
<td>II. Information pack</td>
<td>EN-5</td>
</tr>
<tr>
<td>II.I Booklet and CD</td>
<td>EN-5</td>
</tr>
<tr>
<td>II.II Component guides</td>
<td>EN-6</td>
</tr>
<tr>
<td>II.III Service book</td>
<td>EN-6</td>
</tr>
<tr>
<td>II.IV EU declarations of conformity</td>
<td>EN-7</td>
</tr>
<tr>
<td>II.V Guarantee card*</td>
<td>EN-7</td>
</tr>
<tr>
<td>III. Cycle dealers</td>
<td>EN-7</td>
</tr>
<tr>
<td>IV. Legal regulations for pedelecs</td>
<td>EN-7</td>
</tr>
<tr>
<td>IV.I International</td>
<td>EN-7</td>
</tr>
<tr>
<td>IV.II Germany</td>
<td>EN-8</td>
</tr>
<tr>
<td>IV.II.I Lights</td>
<td>EN-8</td>
</tr>
<tr>
<td>IV.II.I.I Replacement bulbs</td>
<td>EN-9</td>
</tr>
<tr>
<td>IV.II.II Disposal</td>
<td>EN-9</td>
</tr>
<tr>
<td>V. Intended use</td>
<td>EN-10</td>
</tr>
<tr>
<td>V.I Pedelec</td>
<td>EN-10</td>
</tr>
<tr>
<td>VI. Pedelec weights</td>
<td>EN-10</td>
</tr>
<tr>
<td>VI.I Overall weight</td>
<td>EN-10</td>
</tr>
<tr>
<td>VII. The pedelec and its components</td>
<td>EN-11</td>
</tr>
<tr>
<td>1. General safety information</td>
<td>EN-13</td>
</tr>
<tr>
<td>2. Protection from theft, manipulation and loss</td>
<td>EN-14</td>
</tr>
<tr>
<td>3. Before your first ride</td>
<td>EN-16</td>
</tr>
<tr>
<td>3.1 Attaching the pedals</td>
<td>EN-16</td>
</tr>
<tr>
<td>3.2 Adjusting the saddle height</td>
<td>EN-17</td>
</tr>
<tr>
<td>3.2.1 Determining the correct saddle height</td>
<td>EN-17</td>
</tr>
<tr>
<td>3.2.2 Adjusting the saddle height: Saddle clamp bolt(s)*</td>
<td>EN-17</td>
</tr>
<tr>
<td>3.2.3 Adjusting the saddle height: Quick-release skewer*</td>
<td>EN-18</td>
</tr>
<tr>
<td>3.3 Shifting and tilting the saddle</td>
<td>EN-19</td>
</tr>
<tr>
<td>3.3.1 Screw supports: Shifting and tilting the saddle*</td>
<td>EN-19</td>
</tr>
<tr>
<td>3.3.2 Twin-screw supports: Shifting and tilting the saddle*</td>
<td>EN-20</td>
</tr>
<tr>
<td>3.4 Adjusting the sprung seatpost*</td>
<td>EN-21</td>
</tr>
<tr>
<td>3.5 Adjusting the height and angle of the handlebars</td>
<td>EN-21</td>
</tr>
<tr>
<td>3.6 Switching the lights on and off*</td>
<td>EN-21</td>
</tr>
<tr>
<td>3.7 Braking</td>
<td>EN-22</td>
</tr>
<tr>
<td>3.8 Chain</td>
<td>EN-22</td>
</tr>
<tr>
<td>3.8.1 Measuring and adjusting the chain tension</td>
<td>EN-23</td>
</tr>
<tr>
<td>3.8.2 Checking for chain wear</td>
<td>EN-23</td>
</tr>
<tr>
<td>3.8.3 Chain cleaning and maintenance</td>
<td>EN-23</td>
</tr>
<tr>
<td>3.9 Gears</td>
<td>EN-24</td>
</tr>
<tr>
<td>3.10 Wheel</td>
<td>EN-24</td>
</tr>
<tr>
<td>3.10.1 Changing the wheel</td>
<td>EN-24</td>
</tr>
<tr>
<td>3.10.1.1 Axle nut*</td>
<td>EN-24</td>
</tr>
<tr>
<td>3.10.1.2 Quick-release wheels*</td>
<td>EN-25</td>
</tr>
<tr>
<td>3.10.1.3 Quick-release axle*</td>
<td>EN-27</td>
</tr>
<tr>
<td>3.10.2 Rims</td>
<td>EN-28</td>
</tr>
<tr>
<td>3.10.3 Tyres</td>
<td>EN-29</td>
</tr>
</tbody>
</table>

*dependent on model
3.11 Suspension fork* EN-29
3.11.1 Lockout system EN-29
3.11.2 Air system* EN-30

4. Before every trip EN-30

5. Quick-start guide EN-31
5.1 Charging a battery EN-31
5.2 Inserting the battery EN-32
5.3 Display panel EN-33
5.4 Switching on the pedelec EN-33
5.5 Changing assist mode EN-33
5.6 Battery charge level EN-34
5.7 Switching off the pedelec EN-35
5.8 Unlocking and removing the battery EN-35

6. Drive unit EN-36
6.1 Safety information EN-36
6.2 Technical details EN-37
6.3 Tips EN-37
6.3.1 Transporting your pedelec EN-37
6.3.2 Trailer bikes and trailers EN-38
6.3.3 Luggage rack EN-38

6.3.3.1 Safety information EN-38
6.3.3.2 Installing the front luggage rack EN-39
6.3.4 Storage EN-39
6.3.5 Cleaning EN-40

7. Battery EN-40
7.1 Safety information EN-40
7.2 Technical details EN-42
7.3 Overview EN-43
7.4 Tips EN-43
7.4.1 Range EN-43
7.4.2 Storage EN-44
7.4.3 Cleaning EN-44

8. Battery charger EN-45
8.1 Safety information EN-45
8.2 Technical details EN-47
8.3 Overview EN-47
8.3.1 LED EN-47
8.4 Tips EN-48
8.4.1 Cleaning EN-48
8.4.2 Storage EN-48

9. Faults EN-49
9.1 Drive unit, display and easy-reach control EN-49
9.2 Battery EN-49
9.3 Battery charger EN-51

10. Torque settings EN-51

*dependent on model
I. Introduction

This user guide contains information on how to use, maintain and look after your Groove Go pedelec.

DANGER

Before using your pedelec for the first time, carefully read this user guide. Please also read the other items in the information pack ⇒ II. Information pack Page EN-5. Familiarise yourself with the appearance and meaning of the safety information symbols. Ensure to contact your cycle dealer ⇒ III. Cycle dealers Page EN-7 in the event clarification is required. Failure to comply with safety symbols and instructions can result in death, very serious injuries and/or damage to the bicycle. The manufacturer's liability and any warranty are deemed null and void for any damage or injury caused by a failure to adhere to safety symbols and instructions.

Ensure that your cycle dealer has provided you with all the documents included with the bike upon delivery. Keep this user manual and the other documents in the information pack for future reference. Please pass on the user manual and information pack to other people who will use, maintain or repair this pedelec. Failure to do so can lead to uncertainty which may cause death, severe injuries and/or damage to equipment.

You can download this guide, the 'Original User Guide | General' and parts of the information pack as PDFs from our website: www.derby-cycle.com/de/downloads/downloads.html. There you will also find links to the websites of the various component manufacturers.

I.I Explanation of the safety information symbols

DANGER

This symbol combined with the signal word "DANGER" indicates a potentially dangerous situation. Failure to comply with this safety instruction can result in death or very serious injuries.

WARNING

This symbol in conjunction with the signal word "WARNING" indicates a potentially dangerous situation. Failure to comply with this safety warning can result in serious injury.

CAUTION

This symbol combined with the signal word "CAUTION" indicates a potentially dangerous situation. Failure to comply with this safety instruction can result in minor injuries.
II. Information pack

In addition to this user guide, your Groove Go pedelec comes with a booklet, CD, a service book, two declarations of conformity, component guides and if you have bought a Kalkhoff or Raleigh pedelec, a guarantee card. The following points describe the contents of the information pack in more detail.

II.I Booklet and CD

The booklet contains a quick-start guide which describes how to check the torque settings, attach the pedals and adjust the height of the saddle. At the back of the booklet is a CD. The CD includes the "Original User Manual | General" in several languages, which provides general information on the different types of bikes and their components. If you go online you can follow a link to our website. The CD can be played on any standard PC or laptop. Proceed as follows:

Method A

1. Insert the CD.
2. Left-click the shelexec.exe file twice.
3. Select the required language.

I.II The Groove Go pedelec

Your Groove Go pedelec is an electrically power assisted cycle EPAC (electrically power assisted cycle). When the assist mode is switched on, the electric motor provides assistance as long as you are pedalling. You can control the degree of assistance, which is adjusted using various assist modes \ref{5.5 Changing assist mode Page EN-33}. The drive assistance is dependent on the force and speed of your pedalling and the speed you are travelling. Motor assist stops as soon as you stop pedalling and when the battery is discharged or if you reach a speed of 25 km/h. So pedalling harder is required if you want to travel faster than 25 km/h.
II.II Component guides

In the component guides you will find important information on using and maintaining the components of your pedelec. They often also provide information on any warranties. If there is no specific user guide included for the particular component you are interested in, look on our 'Original User Guide | General' CD or on the manufacturer’s website.


II.III Service book

In the accompanying service book, you will find the warranty terms, a list of wearing parts, a cycle passport, and forms to use for initial sale, maintenance and owner changes.

DANGER

Keep the service book appropriately up-to-date and adhere to the maintenance intervals. Components can fail if wear and damage are not identified in good time. If this happens whilst you are cycling, you could injure yourself very seriously or even die. Replace any worn, damaged or bent components before using the bike again.
II.IV EU declarations of conformity

EU declarations of conformity confirm that we have complied with all of the safety requirements of the regulations applicable to the pedelec and the battery charger.

II.V Guarantee card*

Since model year 2014 we have been offering you a guarantee of 10 years for all pedelec and S-pedelec frames – exclusively for Kalkhoff and Raleigh brands. You will find the terms of the guarantee on the guarantee card.

III. Cycle dealers

Ask our cycle dealers for advice. On page 52 you will find a link to the brand website with all cycle dealers in your region.

IV. Legal regulations for pedelecs

IV.I International

**DANGER**

*Never ride "hands free".* You could fall off and seriously injure or even kill yourself – and also be liable for prosecution. You must always have at least one hand on the handlebars.

*Always observe the relevant national traffic regulations.* Otherwise you run the risk of a serious accident. Before using your pedelec abroad, find out about the regulations applicable in that country.

*Like all bicycles, the pedelec must comply with the respective national road traffic regulations and applicable standards.* If you carry out any technical modifications, bear in mind the relevant national traffic regulations and applicable standards. If the cut-off speed exceeds 25 km/h, the pedelec will become liable to mandatory registration and insurance. Technical modifications can impair the function of your pedelec, resulting in damage to components. If this happens while you are riding the bike you could be severely injured or killed. Furthermore, it will invalidate the manufacturer’s liability, warranty and guarantee (where applicable).

*Observe the respective national regulations regarding the disposal of the drive unit, pedelec battery and charger.* Otherwise you will be committing an offence and run the risk of a fine.

*dependent on model
**IV.II Germany**

The following regulations (not exhaustive) were applicable in Germany when this guide was compiled (11/2016):

» The motor may only be used as an aid to pedalling, i.e. it may only "help" when the rider is actively pedalling.
» The average motor power must not exceed 250 W.
» The motor power must continue to fall as the speed of the bike continues to increase.
» The motor must cut out automatically at 25 km/h.

What this means for you:
» There is no obligation to wear a helmet.

**DANGER**

*In the interests of your own safety, a suitable helmet should always be worn.* A bicycle helmet can protect you from severe head injuries. Make sure that the helmet fits properly.

» You do not require a driving licence.
» There is no requirement for compulsory insurance.
» The use of cycle paths is regulated as for normal bicycles.
» The use of children trailers and cycle trailers is generally permitted for pedelecs.

**DANGER**

*Before you use a trailer bike or trailer make sure you read Chapter 6.3.2 Trailer bikes and trailers Page EN-38.* Otherwise there is a risk of serious injury or death.

**IV.II.I Lights**

In Germany, the requirements for lights on bicycles is regulated in Section 67 of the Road Traffic Licensing Regulation (StVZO) and in the Technical Requirements for vehicle parts. Lighting includes both battery and dynamo-powered lights, and includes reflectors that work without a power supply and simply reflect external light.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Position</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front light</td>
<td>1</td>
<td>Front</td>
<td>White light</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The illuminance must be at least 10 lux at the centre of the beam at a distance of 10 metres.</td>
</tr>
<tr>
<td>Reflector</td>
<td>At least 1</td>
<td>Front</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The reflector can be integrated into the front light.</td>
</tr>
<tr>
<td>Rear light</td>
<td>1</td>
<td>Rear</td>
<td>Red light</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The lowest point of the illuminating surface must not be lower than 250 mm above the road surface.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A parking light function is also permitted.</td>
</tr>
<tr>
<td>Reflectors</td>
<td>At least 1</td>
<td>Rear</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The highest point of the illuminating surface must not be higher than 600 mm above the road surface.</td>
</tr>
<tr>
<td>Large reflector</td>
<td>1</td>
<td>Rear</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The large reflector is marked with a Z.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>It can be integrated in the rear light.</td>
</tr>
<tr>
<td>Type</td>
<td>Number</td>
<td>Position</td>
<td>Characteristics</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Reflector</td>
<td>2 per pedal</td>
<td>Pedals</td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effective forwards and backwards.</td>
</tr>
<tr>
<td>Reflector (or reflective wheel stripe)</td>
<td>At least 2</td>
<td>Per wheel</td>
<td>Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Attached to the spokes at 180° to each other.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effective sideways on.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Per wheel</td>
<td>Ring-shaped reflecting white stripe.</td>
</tr>
</tbody>
</table>

**IV.II.I.I Replacement bulbs**

The replacement bulbs you will need depend on the type of lights fitted on your bike. The table below tells you what type of bulb you need:

<table>
<thead>
<tr>
<th>Type</th>
<th>Power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front light (LED, incandescent)</td>
<td>6 V 2.4 W</td>
</tr>
<tr>
<td>Front light halogen</td>
<td>6 V 2.4 W</td>
</tr>
<tr>
<td>Rear light</td>
<td>6 V 0.6 W</td>
</tr>
<tr>
<td>Rear light with parking light</td>
<td>6 V 0.6 W</td>
</tr>
<tr>
<td>Lighting with LED lamps</td>
<td>LED lamps are not replaceable</td>
</tr>
<tr>
<td>Hub dynamo</td>
<td>6 V 3 W</td>
</tr>
</tbody>
</table>

**IV.II.II Disposal**

Do not dispose of the drive unit, pedelec battery and charger in the household waste. Hand them in at the designated places (such as a recycling centre, battery collection point or cycle dealer).

Electrical devices marked with this symbol must not be disposed of in household waste.
V. Intended use

V.I Pedelec

This bicycle is designed and equipped for use on public roads and paved paths. It can also be used on non-challenging terrain. The manufacturer and dealer accept no liability for damage resulting from any use beyond this definition and/or failure to comply with the safety information and instructions in the user guide. This applies particularly to off-road use, overloading and failure to properly rectify faults. Intended use also includes conformance with the specified operating, service and repair conditions in the user guides and service book ⇒ II.III Service book Page EN-6. Fluctuations in consumption and battery power, and a reduction in capacity due to the cycle's age, are commonplace and technically unavoidable - and as such do not represent material defects.

VI. Pedelec weights

Pedelecs are heavier than normal bicycles. The exact weight depends on the equipment fitted. If you want to know the precise weight of your pedelec, we recommend having it weighed by a cycle dealer. Most dealers have a professional and accurate cycle weigher.

VI.I Overall weight

DANGER

Do not exceed the overall weight of the pedelec because parts important for safety might fracture or fail. If this happens while you are riding the bike, it can lead to severe falls – with fatal consequences.

Overall weight = Weight of the bike + weight of the rider + weight of the trailer bike or trailer + weight of luggage and/or child

<table>
<thead>
<tr>
<th>Bike type</th>
<th>Overall weight permitted</th>
<th>Weight of rider*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groove Go pedelec</td>
<td>130 kg</td>
<td>Max. 106 kg</td>
</tr>
</tbody>
</table>

* for a pedelec weighing 24 kilograms.
VII. The pedelec and its components

1. Rear light
2. Luggage rack
3. Saddle
4. Saddle post
5. Saddle clamp
6. Seat tube
7. Down tube
8. Down tube battery
9. Handlebar stem
10. Shifter
11. Brake lever
12. Handlebars
13. Front luggage rack
14. Front light
15. Fork
16. Disc brake
17. Drop-outs (fork)
18. Front wheel hub
19. Reflective stripes
20. Wheel
21. Pedal
22. Pedal crank
23. Motor
24. Chain
25. Drop-outs
26. Wheel rim
27. Tyre
28. Axle nut
1. General safety information

Comply with the safety and user instructions at the start of the following sections.

**DANGER**

We discourage allowing children under the age of 14 years to ride pedelecs. They may not be able to cope with the speed. Serious accidents and falls might result.

**Wear a cycle helmet.** While there is no legal obligation to wear one, you should always wear a suitable cycle helmet for your own safety. A cycle helmet can protect you from severe injuries. Make sure that the helmet fits properly.

Keep your hands and other body parts and clothing away from moving parts, otherwise you can become ensnared, have a serious fall and injure yourself.

**Adapt your riding style to the prevailing traffic conditions,** otherwise you could fall off and involve yourself and others in a serious accident. Take into consideration the longer braking distances needed on wet or icy roads. Think ahead, anticipating the actions of other road users and reduce your speed. Avoid sudden jerky movements of the handlebars and braking actions. Dismount if you ever feel unsafe.

**Only use the bicycle for its intended purpose** ⇒ **V. Intended use Page EN-10**, otherwise component failure may result. If this happens whilst you are cycling, you could injure yourself very seriously or even die.

**DANGER**

Inspect your pedelec before every trip, and after each time it has been transported anywhere or has been left unattended ⇒ **4. Before every trip Page EN-30**. Components might fail if wear and damage are not detected early enough. If this happens whilst you are cycling, you could injure yourself very seriously or even die. The additional power means higher loads are applied to wearing parts on a pedelec than on a normal cycle. Replace any worn, damaged or bent components before using the bike again.

Do not exceed the total weight of the pedelec, because it can lead to the fracture or failure of safety-relevant parts ⇒ **VI.I Overall weight Page EN-10**. If this happens while you are riding the bike, it can lead to severe falls – with fatal consequences.

Contact your cycle dealer when it is necessary to replace wearing parts and other ⇒ **II.III Service book Page EN-6** components. We recommend asking your cycle dealer to assemble and adjust the bike. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something yourself, a full list of torque settings is in Section ⇒ **10. Torque settings Page EN-51** (strict adherence to which is a requirement).

Only use original replacement parts. Replacement parts from other manufacturers can impair the function of your pedelec. Serious accidents can result.
IMPORTANT

Always park your pedelec so that it cannot tip over. Components can be damaged if the bike tips over. If your bike is not equipped with a kick stand, one can be fitted if required. Please contact your cycle dealer.

Do not clean the pedelec with a water hose or high pressure washer. Although the components are sealed, damage to the cycle may still result. Clean the pedelec with a soft damp cloth.

2. Protection from theft, manipulation and loss

DANGER

Protect your pedelec from unauthorised access. Serious injury may result if third parties modify components (e.g. the brakes) without your knowledge. Inspect your pedelec before every trip, and after each time it has been transported anywhere or has been left unattended ⇒ 4. Before every trip Page EN-30. If your bike is damaged, only ride it again once the damage has been rectified. If your bike is lost or stolen it will not be replaced under the warranty.

The following measures can help you to protect your pedelec from theft and manipulation and to recover it if it has been stolen:

DANGER

Ask your cycle dealer to show you how to use, and explain, the special features of the components. Please also follow the component guides ⇒ II.II Component guides Page EN-6. We recommend asking your cycle dealer to assemble and adjust the bike. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something yourself, a full list of torque settings is in Section ⇒ 10. Torque settings Page EN-51 (strict adherence to which is a requirement).

WARNING

Do not ride in unfavourable lighting conditions (fog, rain, dusk, darkness) without adequate lights ⇒ IV.II.I Lights Page EN-8. Failure to do so can lead to accidents and serious injuries.

Always remove the battery before starting to work on the pedelec. The pedelec could switch on unexpectedly and you could be seriously injured.

CAUTION

Do not open up the motor, battery or charger as you could injure yourself. Parts might also be damaged beyond repair, invalidating the warranty. Contact your cycle dealer when problems arise.
Always lock the bike and battery even if you leave it for a short while. Ideally, the lock(s) should block the wheel powered by the motor. Do not leave the key in. To be on the safe side, you can also remove the battery. The pedelec must also be secured with a lock when it is parked outside the home (e.g. sheds, basement).

Do not park your pedelec in deserted locations – especially for long periods. If possible, park your pedelec in private or communal garages or individual bike lockers which have surveillance.

Attach your pedelec to a fixed object (such as a tree, street lamp or fence) so that it cannot be carried away.

Quick-release wheels should be attached to a fixed object together with the frame. This prevents the wheel from being stolen. Alternatively, the quick-release skewers can be replaced by an anti-theft device. Contact your cycle dealer if you have questions on this.

Use a high-quality bike lock. Invest about 10 % of the purchase price of the bike in locks. Your cycle dealer will be able to fit a suitable frame lock if your bike does not already have one. You can also use other types of bike lock. Ask your cycle dealer for advice.

Make a note of the important details of your pedelec (e.g. in the service book ⇒ II.III Service book Page EN-6, bike passport) and have it registered by the police. This makes it easier to describe and identify if stolen.

Have the police code your pedelec; the address and initials of the owner are engraved on the frame in an encrypted form. Coding makes the illegal resale of a bike more difficult and deters thieves. A coded bike also makes it easier to identify the owner.

Bicycle theft is often covered by household contents insurance. Check the terms of your insurance policy as soon as possible.
3. Before your first ride

Make sure that your pedelec is adjusted to your height and ready to use. Familiarise yourself with the basic functions of your pedelec.

**DANGER**

*Adjusting the pedelec to your height.* If the bike is not correctly adjusted to your height, you can lose control of the bike and fall badly.

Ask your cycle dealer to show you how to use, and explain, the special features of the pedelec and its components. Please also follow the component guides ⇒ II.II Component guides Page EN-6. We recommend asking your cycle dealer to assemble and adjust the bike. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something, you will find a complete list of the required torque settings in Section ⇒ 10. Torque settings Page EN-51, which must be strictly followed.

*Practise braking and riding with the assist function in a safe place before venturing into traffic.* If you do not familiarise yourself with the operation and higher speed of your pedelec, you could cause a serious accident. Ride in the lowest mode until you feel confident enough to try the higher modes ⇒ 5.5 Changing assist mode Page EN-33. Dismount if you ever feel unsafe.

3.1 Attaching the pedals

1. Screw the right-hand pedal (marked ‘R’) into the right-hand pedal crank in a clockwise direction.

2. Screw the left-hand pedal (marked ‘L’) anticlockwise into the left-hand pedal crank.

**DANGER**

*Screw the pedals in straight,* otherwise you could damage the thread on the pedal crank; if this happens when you are cycling, a severe fall could result.

3. Tighten both pedals towards the front wheel with a torque setting of 40 Nm.
3.2 Adjusting the saddle height

3.2.1 Determining the correct saddle height

1. Sit on the pedelec and at the same time lean against a wall.
2. Turn the pedal crank on the side away from the wall to its lowest point.
3. Place your heel on the pedal. Your leg should be fully extended.
4. If your leg is not fully extended when your heel is on the pedal, raise the saddle. Lower the saddle if you cannot reach the pedal. The following sections explain how to adjust the saddle height on your bike. The seatpost can be fastened using the saddle clamp bolt  3.2.2 Adjusting the saddle height: Saddle clamp bolt(s)* or quick-release skewer  3.2.3 Adjusting the saddle height: Quick-release skewer*.

**WARNING** The seatpost is marked to indicate how far you may pull it out from the frame. Never pull the seatpost further out than the marking. This could cause it to bend or break, and cause you to fall.

3.2.2 Adjusting the saddle height: Saddle clamp bolt(s)*

1. Undo the saddle clamp bolt(s) by turning it/them anticlockwise with an Allen key.
2. Move the seatpost into the right position.
3. Tighten the saddle clamp bolt(s) again by turning it/them clockwise ⇒ 10. Torque settings Page EN-51.
4. Test the tightness of the saddle by trying to move it.
3.2.3 Adjusting the saddle height: Quick-release skewer*

**DANGER**

The quick-release skewer must be correctly closed before you set off. Otherwise the seatpost can loosen or fracture – if that happens while you are riding the bike you could fall off, resulting in serious injuries.

1. Open the quick-release skewer by swinging the lever by 180°. You will now usually be able to see the word ‘OPEN’ on the inside of the lever.

2. Close the quick-release skewer by swinging the lever by 180°. You will now usually be able to see the word ‘CLOSE’ on the outside of the lever.

3. Try to twist the saddle to check that it is firmly fixed.

---

**Quick-release skewer is too easy to close**

1. Turn the adjustment nut clockwise.
2. Swing the quick-release skewer closed again.

**Quick-release skewer is too stiff to close**

1. Turn the adjustment nut anticlockwise.
2. Swing the quick-release skewer closed again.

---

*dependent on model
3.3 Shifting and tilting the saddle

DANGER

Never clamp the saddle in the curve of the saddle rail; always do it in the straight section. Only shift the saddle within the straight section (fig. 1). Saddles that stay clamped outside this area can fail (fig. 2).

![Correct and wrong clamping](Fig. 1 and Fig. 2)

Use a torque wrench to tighten the clamping screws. Observe the specified torque setting. If no value is shown on the component, use the torque settings from the following table:

<table>
<thead>
<tr>
<th>Thread</th>
<th>Tightening torque [Nm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>M5 / M6 / M8</td>
<td>M5: 5.5 / M6: 5.5 / M8: 20</td>
</tr>
</tbody>
</table>

Failure to comply can result in screws/bolts becoming loose, tearing away or fracturing. If that happens while you are riding the bike, components may come off and you could have a severe crash. If screws are overtightened, components can also be damaged.

3.3.1 Screw supports: Shifting and tilting the saddle*

1. Loosen the clamping screw by turning it anticlockwise. Turn the screw completely two to three times at most or the whole mechanism could fall apart.

2. Move the saddle backwards or forwards as required.

3. Tilt the bicycle saddle to the desired angle.

4. Tighten the clamping screw by turning it clockwise with a torque wrench.

5. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.

*dependent on model
### 3.3.2 Twin-screw supports: Shifting and tilting the saddle*

**DANGER**

Screw the clamping screws fully in a straight position in the nuts. Failure to do so can result in the screws tearing out of the nuts.

![Correct](correct.png)  
![Wrong](wrong.png)

1. To move the saddle, loosen the front and rear screws by turning them anticlockwise. Turn the screws completely two to three times at most or the whole mechanism could fall apart.

2. Move the saddle backwards or forwards as required.

3. Tighten the screws using a torque wrench to turn them clockwise.

4. To alter the angle of the saddle, loosen the front screw by turning it anticlockwise. Turn the screw completely two to three times at most or the whole mechanism could fall apart.

5. Tighten the front screw by the same number of turns.

6. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.

### 3.3.3 Clamp attachment: Shifting and tilting the saddle*

1. Turn the clamping nut clockwise to loosen it. You may need to keep the nut on the other side in place with a second key.

2. Move the saddle backwards or required.

3. Tilt the bicycle saddle to the desired angle.

4. Turn the clamping nut clockwise to tighten it. You may need to keep the nut on the other side in place with a second key. Observe the correct torque setting.

5. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.
3.4 Adjusting the sprung seatpost*

DANGER

It is best to ask your cycle dealer to adjust the suspension elements of the seatpost.

1. Remove the saddle post ⇒ 3.2 Adjusting the saddle height Page EN-17.
2. Tighten the suspension adjustment screw with an Allen key (6 mm AF) in the clockwise direction to reduce the suspension or loosen anticlockwise to increase the suspension.

DANGER

The suspension adjustment screw must not protrude from the seatpost, otherwise the screw-seatpost can loosen – if this happens while riding you could fall off, resulting in serious injuries.

3.5 Adjusting the height and angle of the handlebars

DANGER

Ask your cycle dealer to perform these adjustments. You can otherwise run the risk of loosening the handlebars which could lead to a fall causing severe injuries.

3.6 Switching the lights on and off*

A slider control is located on the rear of the front light. Depending on which way you move it, the front and rear light will be on or off when you are riding.

*dependent on model
3.7 Braking

Make sure that you can always reach the brakes comfortably and that you are familiar with their operation and position. Note which brake lever operates the front and rear brakes. If your pedelec is fitted with a back pedal or coaster brake you can operate it by pedalling backwards.

**DANGER**

Practise braking in a safe place before venturing into road traffic. In some instances, the braking effect can be different or stronger than what you are used to. If you do not take the time to familiarise yourself with the braking effect, you could cause a serious accident. Practise until you feel safe. Dismount if you ever feel unsafe.

Rim brakes: Avoid continual, uninterrupted braking on long downhill stretches because it causes the braking effect to diminish and/or tyre damage. Brake intermittently with intervals in between to allow the airflow to cool the braking system. If necessary, make regular stops to ensure adequate cooling.

Replace the brake pads when they reach the safe wear limit. Using worn brake pads can result in serious injuries with fatal consequences.

**CAUTION**

Disc brakes: Avoid touching the brake discs after intensive use of the brakes – they can become very hot. You could burn yourself if you touch them.

3.8 Chain

**WARNING**

Always remove the battery before starting to work on the pedelec. The cycle could switch on without warning and you could be seriously injured.

**CAUTION**

Check the chain for signs of wear before every trip. A worn or damaged chain can break. If this happens while you are riding the bike, you can easily injure yourself.
3.8.1 Measuring and adjusting the chain tension

Measuring the chain tension

1. Remove the pedelec battery.
2. Press the chain up or down at its tautest point. The tension is correct if you can move the chain up and down by about 5 mm.
3. Check the chain at four or five points over a complete revolution of the crank.

Adjusting the chain tension

1. Remove the pedelec battery.
2. Undo the rear wheel nuts.
3. Remove the brake anchor as required.
4. Pull the rear wheel back in the drop-outs until the chain just has the permissible amount of play.
5. Carefully tighten all bolts in a clockwise direction to a torque setting of 35 – 40 Nm. Make sure the wheel is refitted straight.

3.8.2 Checking for chain wear

1. Remove the pedelec battery.
2. Check chain wear with a chain wear indicator or a vernier calliper.
3. Replace the chain if it is worn.

3.8.3 Chain cleaning and maintenance

1. Remove the pedelec battery.
2. Brush the chain coarsely with a hand brush.
3. Then remove the old chain oil with a dry cloth.
4. Now you can oil the chain. How you lubricate the chain depends on the product you have chosen.
5. When you have finished, turn the crank to distribute the chain oil.
3.9 Gears

The gears are operated by controls on the handlebars (gear lever, twist grips, …). The gear shift allows you to adjust the gear of your bicycle and the transmission to the current situation. On a straight level stretch, a higher gear is sensible to achieve and maintain a higher speed without having to pedal too much. As soon as you start going uphill, a lower gear is beneficial because it is important to be able to climb the hill with little effort. Select the gears so that your legs are always moving at a steady pace.

Derailleur

This system lifts the chain on to a sprocket when the gear is changed. The chain must continue moving so that the teeth of the sprocket can engage with the chain links easily and smoothly. For a successful gear change, therefore, you must keep pedalling forwards, never backwards – but at the same time pedal lightly without force.

3.10 Wheel

3.10.1 Changing the wheel

3.10.1.1 Axle nut*

Removing the rear wheel

1. Remove the pedelec battery.
2. Switch the chain to the smallest sprocket.
3. Then disconnect the cable between the motor and battery.

If your pedelec is fitted with a rim brake, unhook the brake cable on the brakepad before removing the front wheel. Otherwise you may not be able to remove the front wheel.

If your pedelec is fitted with a disc brake, please read the “Original User Manual | General” Page EN-5 about the handling of this brake.

4. Undo the axle nuts using an 18 mm spanner, turning anticlockwise.
5. Take off the chain.
6. Then remove the rear wheel from the frame. Turn the gears slightly to the rear, so that it is easier to guide the sprocket.

*dependent on model
Replacing the rear wheel

1. Attach the chain.
2. Insert the rear wheel centrally in the drop-outs as far as it will go.
3. Tighten the axle nuts using an 18 mm spanner, turning clockwise and tighten to a torque of 40 Nm. Make sure that your wheel is correctly centred.

If your pedelec has disc brakes, make sure that the brake disc is placed exactly in the middle between the brake shoes.

4. Reinsert the battery.

3.10.1.2 Quick-release wheels*

DANGER

Front wheel: The quick-release skewer must be positioned on the opposite side to the brake disc (where fitted). If the quick-release skewer is on the same side as the brake disc, there is a risk that they can clash and lock the front wheel (see diagram), which can cause a serious accident.

All quick-release systems must be correctly tightened before you set off. Otherwise the components can loosen – if that happens while riding you could fall off, resulting in serious injuries.

Removing the front wheel

1. Remove the pedelec battery.
2. Open the quick-release skewer by swinging the lever by 180°. You will now usually be able to see the word ‘OPEN’ on the inside of the lever.
3. Undo the adjustment nut by turning it slightly anticlockwise.

*D dependent on model
### IMPORTANT

**Detach all cables from the wheel (e.g. lighting cables), otherwise you could tear them.**

If your bike is fitted with a rim brake, unhook the brake cable on the brakepad before removing the front wheel. Otherwise you may not be able to remove the front wheel.

4. Remove the front wheel.

#### Replacing the front wheel

1. Insert the wheel into the front fork ends.

2. Gently turn the adjustment nut on the quick-release skewer in a **clockwise** direction. Make sure that your wheel is correctly centred.

3. Close the quick-release skewer by swinging the lever back 180°. You will now usually be able to see the word ‘CLOSE’ on the outside of the lever.

### DANGER

**It should be so hard to close the quick-release skewer that you need to use the balls of your hands (120 N: corresponds to a weight force of 12 kg). You should have the mark of the lever imprinted on your hand. Otherwise it could open when you are cycling, which could lead to the wheel becoming loose and cause you to fall.**

<table>
<thead>
<tr>
<th>Quick-release skewer is too easy to close</th>
<th>Quick-release skewer is not easy to close</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Open the quick-release skewer.</td>
<td>1. Open the quick-release skewer.</td>
</tr>
<tr>
<td>2. Turn the adjustment nut <strong>clockwise</strong>.</td>
<td>2. Turn the adjustment nut <strong>anticlockwise</strong>.</td>
</tr>
<tr>
<td>3. Swing the quick-release skewer closed again.</td>
<td>3. Swing the quick-release skewer closed again.</td>
</tr>
<tr>
<td>4. Repeat if necessary.</td>
<td>4. Repeat if necessary.</td>
</tr>
</tbody>
</table>

Quick-release skewers cannot be closed by simply turning the lever.

**DANGER**

If you have released the rim brakes to remove the wheel, you must close them again, otherwise you will not be able to brake and run the risk of serious injury.
**WARNING**

Reattach any cables disconnected before (such as light cables), otherwise they can get caught in the spokes. If that happens while you are riding the bike you could be thrown off and seriously injured.

### 3.10.1.3 Quick-release axle*

**Removing the front wheel**

1. Remove the pedelec battery.
2. Open the quick-release skewer on the front wheel by turning it down 180°.
3. Hook the quick-release skewer into the slot and turn it anticlockwise until the quick-release axle protrudes from the axle hole about 1 cm.
4. Lift out the front wheel and remove the quick-release axle.

**IMPORTANT**

Detach all cables from the wheel (e.g. lighting cables), otherwise you could tear them.

**DANGER**

It should be so hard to close the quick-release skewer that you need to use the balls of your hands (120 N: corresponds to a weight force of 12 kg). You should have the mark of the lever imprinted on your hand. Otherwise it could open when you are cycling, which could lead to the wheel becoming loose and cause you to fall.

---

*dependent on model

---

**If your bike is fitted with rim brakes you must release them.** Alternatively, you can deflate the front tyre. Otherwise you may not be able to remove the front wheel.

5. Remove the front wheel.

**Replacing the front wheel**

1. Apply a thin layer of grease to the quick-release axle.
2. Push the wheel into the front forks and align with the axle holes.
3. Reinsert the quick-release axle.
4. Move the quick-release skewer to the open position.
5. Hook the quick-release skewer into the slot and turn it clockwise. This will screw the axle in the thread. Make sure that your wheel is correctly centred.
6. Close the quick-release skewer by swinging the skewer back 180°.
### 3.10.2 Rims

#### Wear

**WARNING**

Look out for deep grooves on both rims. The rims could fracture and cause a fall. Replace rims as soon as you detect signs of wear. Many rims have a wear indicator. If it can no longer be felt at a certain point, the rim is worn.

#### Cleaning

1. Remove the pedelec battery.
2. Brush the rims with a hand brush. Heavier soiling can be removed with a soft, damp cloth.

**IMPORTANT**

When you are cleaning the rims, make sure that no water gets into the motor. Water ingress can damage the motor.
3. Leave to dry.

### Quick-release skewer is too easy to close

1. Open the quick-release skewer.
2. Hook the quick-release skewer into the slot and turn it clockwise. This will screw the axle in the thread. Make sure that your wheel is correctly centred.
3. Close the quick-release skewer.
4. Repeat if necessary.

### Quick-release skewer is not easy to close

1. Open the quick-release skewer.
2. Hook the quick-release skewer into the slot and turn it anticlockwise until the quick-release axle protrudes from the axle hole about 1 cm.
3. Close the quick-release skewer.
4. Repeat if necessary.

**WARNING**

Reattach any cables disconnected before (such as light cables), otherwise you could tear them.
3.10.3 Tyres

**DANGER**

Do not either overinflate or underinflate the tyres. If the air pressure is too high, this could lead to a worst-case scenario of the tyres bursting and you could fall. On the other hand, if the air pressure is constantly too low, the tyre can wear prematurely. The maximum permissible pressure is marked on the side of the tyre in bar and psi (pounds per square inch). You can measure the tyre pressure yourself by using a tyre gauge. Alternatively, you can contact your cycle dealer.

3.11 Suspension fork*

The suspension forks support the front wheel.

The distance travelled by the wheel between its unloaded and fully loaded positions is called the total suspension travel.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Fork type</th>
<th>Total suspension travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fox</td>
<td>32 Float Evo</td>
<td>120 mm</td>
</tr>
<tr>
<td>Fox</td>
<td>32 F CTD</td>
<td>120 mm</td>
</tr>
<tr>
<td>Postmoderne</td>
<td>HG141</td>
<td>45 mm</td>
</tr>
<tr>
<td>RST</td>
<td>Pulse</td>
<td>50 mm</td>
</tr>
<tr>
<td>RST</td>
<td>Verso 3</td>
<td>50 mm</td>
</tr>
<tr>
<td>Sram</td>
<td>Recon Silver</td>
<td>100 mm l 120 mm</td>
</tr>
<tr>
<td>Sram</td>
<td>Reba RL</td>
<td>100 mm l 120 mm</td>
</tr>
</tbody>
</table>

*dependent on model

3.11.1 Lockout system

If your suspension forks are fitted with a lockout system, it is possible to lock the suspension. There are some riding situations where that can be useful: for example, if you are riding up a hill or if you are standing up from the saddle when accelerating. To switch the suspension to fixed, turn the rotary control on the right-hand side of the fork to ‘LOCK' (or alternatively: 🗝️). To reactivate the suspension, turn the control to the ‘OPEN' position.

LOCK/🗝️ Suspension locked
OPEN Suspension activated

Model year 2015/2016 Version 18/12/2015
4. Before every trip

**DANGER**

Replace any damaged (e.g. cracks, grooves) or bent components **before using the bike again**. Not doing so can lead to essential parts failing and cause a serious fall.

**DANGER**

Do not ride the pedelec if it is not in a technically satisfactory condition. If you are unsure, ask a cycle dealer to check it over.

**We recommend asking your cycle dealer to assemble and adjust the bike.** Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die.

Inspect your pedelec before every trip, and after each time it has been transported anywhere or left unattended. Use the following checklist to help you.

**Checklist**

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame / forks</td>
<td>Check the frame and forks for visible warping, cracks and damage.</td>
</tr>
<tr>
<td>Handlebars / front stem</td>
<td>Check they are seated securely.</td>
</tr>
<tr>
<td></td>
<td>Check that the bell is working and attached correctly and securely.</td>
</tr>
<tr>
<td>Saddle / seatpost</td>
<td>Check that the quick-release skewers / through-axles (if available) are secure.</td>
</tr>
</tbody>
</table>

*dependent on model
5. Quick-start guide

5.1 Charging a battery

DANGER

Read and follow the information on the charger specification plate, otherwise there is a risk of misuse resulting in serious injuries.

Damaged batteries must not be charged.

If you only want to go for a quick test run, you do not need to charge the battery. You should charge it before your first longer cycle ride however, because the battery is only partially charged (production regulations dictate that batteries are supplied partially charged – by approx. 50%).

1. Connect the power cable to the battery charger.
2. Insert the mains plug into a power socket. The LED on the charger lights up green.
3. Connect the charging cable to the battery charging socket (it clicks into place). The LED on the charger lights up red continuously. The LEDs on the battery light up blue first, then green. The number of LEDs illuminated provides information on the charge level.
Display Description Battery charge level

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Description</th>
<th>Battery charge level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5 LEDs light up and no LED flashes</td>
<td>100 – 97%</td>
</tr>
<tr>
<td>4</td>
<td>4 LEDs light up and the 5th LED flashes</td>
<td>80 – 96%</td>
</tr>
<tr>
<td>3</td>
<td>3 LEDs light up and the 4th LED flashes</td>
<td>60 – 79%</td>
</tr>
<tr>
<td>2</td>
<td>2 LEDs light up and the 3rd LED flashes</td>
<td>40 – 59%</td>
</tr>
<tr>
<td>1</td>
<td>1 LED lights up and the 2nd LED flashes</td>
<td>20 – 39%</td>
</tr>
<tr>
<td></td>
<td>1 LED flashes</td>
<td>0 – 19%</td>
</tr>
</tbody>
</table>

Battery display during charging

4. The charger switches off once the battery is fully charged. The green LED on the charger is continually on.

5. Remove the charging cable from the battery charging socket.

5.2 Inserting the battery

**IMPORTANT**

Grasp the battery firmly, so that it does not fall out of your hand. It can be damaged if you drop it.

**Down tube battery**

1. Turn the battery key clockwise. The battery is now locked.

2. Hold the battery with both hands with the discharge plug down on to the docking station.

3. Push the battery against the docking station whilst simultaneously pushing downwards. The locking pin clicks once. Push the battery further downwards until it engages. The battery is fully engaged when the docking station and battery from the top are nearly flush.

**Seat tube battery**

1. Turn the battery key clockwise. The battery is now locked.

2. Push the battery against the docking station whilst simultaneously pushing downwards. The locking pin clicks once. Push the battery further downwards until it engages. The battery is fully engaged when the docking station and battery from the top are nearly flush.
### 5.3 Display panel

On the outside of the battery are a button and a display panel with five LEDs. The LEDs light up when you press the battery button. The number lighting up, and how, provides information on the battery.

### 5.4 Switching on the pedelec

Do not switch on the pedelec when you are riding. Otherwise the motor can stop and you will not be provided with the full assist level.

1. Press the battery button for one second. a) The assist mode is displayed. All LEDs on the display panel light up blue. The assist level is 100%. b) After four seconds, the battery charge level ⇒ 5.6 Battery charge level Page EN-34 is displayed automatically. The LEDs now light up green.

### 5.5 Changing assist mode

1. If the LEDs on the battery display panel light up green, press the battery button for one second. The LEDs now light up blue and display an assist mode.

2. If the LEDs on the battery display panel light up blue, you can change the assist mode by briefly pressing the battery button. The number of LEDs which are illuminated blue gives information on how much assistance the motor is providing.

### IMPORTANT

The recommendation is to remove the key now and keep it in a safe place so it does not break off and is not lost.

Make a note of the key number on the sales receipt or proof of purchase. You can order a replacement with this number if you lose the key ⇒ 9. Faults Page EN-49.
5.6 Battery charge level

1. If the LEDs on the battery display panel light up blue, please wait for a short period. After a few seconds the LEDs light up green and display the battery charge level.

2. If the LEDs on the battery display panel light up green, the number of LEDs which are illuminated green give information on how much the battery is charged.

3. Assist starts working as soon as you start pedalling. Assist cuts out as soon as you stop pedalling or when you have reached a speed of 25 km/h.

The sequence of the assist modes is predetermined. At first, five LEDs (_five_) light up, then three LEDs (_three_) and then one LED (_one_). Then the display starts again from the beginning - with five blue illuminated LEDs.

The value displayed can change quickly when the circumstances change, such as when riding up an incline after a long, flat stretch.
5.7 Switching off the pedelec

1. Press the battery button for four seconds.

If you are having difficulty pulling the battery out of the docking station, you can also stand in front of the handlebars against the direction of travel and remove the battery from there. The pulling direction in this position is optimal. You also have more strength in your hands. If you are still unable to remove the battery, please contact your cycle dealer.

5.8 Unlocking and removing the battery

**Seat tube battery**

1. Put the key into the lock and turn anticlockwise. The battery is unlocked.

2. Stand next to the pedelec.

3. Use your upper body to lean against the saddle.

4. Grip the battery with both hands.

5. Pull the battery parallel to the seat tube and pull out of the docking station upwards with a jerk.

**Down tube battery**

1. Put the key into the lock and turn anticlockwise. The battery is unlocked.

2. Stand next to the bike against the direction of travel.

3. Grip the battery with both hands.

4. Pull the battery parallel to the down tube and pull out of the docking station with a jerk.
## 6. Drive unit

### 6.1 Safety information

**CAUTION**

*Do not open the drive unit.* There is a risk of electric shock. It will also invalidate any warranty claim. Only have repairs to the drive unit carried out by trained cycle dealers.

*Do not touch the motor after a long downhill ride* – it can become very hot. You could burn yourself if you touch it.

**IMPORTANT**

All components mounted on the drive unit, and all other drive components, may only be replaced with identical components or those approved specially for your pedelec by the manufacturer. Otherwise it may result in overloading and damage.

**WARNING**

*Do not attempt any modifications to the drive unit.* For example, it is not permitted to raise the cut-off speed above 25 km/h. Pedelecs with modified drive power may no longer comply with the legal requirements of their relevant country. You may be liable to prosecution if you ride on public roads with a 'tuned' pedelec. There is also the risk of a technical failure. Modified bikes of this type are excluded from the warranty and guarantee.

*Always remove the battery before starting to work on the pedelec.* Accidental activation of the battery button can result in serious injuries.

**IMPORTANT**

*Hold the battery tight* so it does not fall. It can be damaged if you drop it.

The recommendation is to remove the key now and keep it in a safe place so it does not break off and is not lost.
6.3 Tips

6.3.1 Transporting your pedelec

**WARNING**

Remove panniers and other attachments during transport, as they can come off and cause serious accidents.

Always remove the battery before transporting the pedelec. There is a risk of injury due to accidental activation of the battery button. The battery could also fall from the docking station and be damaged. Use a special battery bag that protects the battery from heat, shocks and impacts.

By car: The bike rack must be designed for the higher weight of the pedelec ⇒ VII.1 Overall weight Page EN-10, otherwise it can break and cause a serious accident. It is imperative to follow the guidance of the bike rack manufacturer.

**IMPORTANT**

Pedelecs carried on a rear-mounted bike rack must have suitable weather protection. This applies particularly to the docking station, which must be protected from water ingress. Water ingress can damage the motor and its components. Suitable covers are available from your dealer and online.

Bus, train and plane: Find out from your travel company well in advance if their regulations allow you to take your pedelec with you.

---

6.2 Technical details

**Drive unit**

<table>
<thead>
<tr>
<th>Type</th>
<th>Rear wheel motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free-wheel</td>
<td></td>
</tr>
<tr>
<td>Tyre size</td>
<td>28 inch</td>
</tr>
<tr>
<td></td>
<td>20 inch</td>
</tr>
<tr>
<td>Nominal power</td>
<td>250 W</td>
</tr>
<tr>
<td></td>
<td>250 W</td>
</tr>
<tr>
<td>Nominal torque</td>
<td>20 Nm</td>
</tr>
<tr>
<td></td>
<td>15 Nm</td>
</tr>
<tr>
<td>Max. torque</td>
<td>35 Nm</td>
</tr>
<tr>
<td></td>
<td>35 Nm</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>36 V</td>
</tr>
<tr>
<td></td>
<td>36 V</td>
</tr>
<tr>
<td>Cut-off speed</td>
<td>25 km/h</td>
</tr>
<tr>
<td></td>
<td>25 km/h</td>
</tr>
<tr>
<td>Permissible ambient temperature in operation</td>
<td>-10 to +40 °C</td>
</tr>
<tr>
<td></td>
<td>-10 to +40 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-10 to +50 °C</td>
</tr>
<tr>
<td></td>
<td>-10 to +50 °C</td>
</tr>
<tr>
<td>Recommended storage temperature</td>
<td>18 to 23 °C</td>
</tr>
<tr>
<td></td>
<td>18 to 23 °C</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 54</td>
</tr>
<tr>
<td></td>
<td>IP 54</td>
</tr>
<tr>
<td>Weight</td>
<td>3400 g</td>
</tr>
<tr>
<td></td>
<td>3400 g</td>
</tr>
</tbody>
</table>
6.3.2 Trailer bikes and trailers

The use of trailer bikes and trailers is generally permitted for the Grove Go pedelec, but please observe the following safety instructions:

DANGER

Do not exceed the overall weight of the pedelec because parts important for safety might fracture or fail. If this happens while you are riding the bike, it can lead to severe falls – with fatal consequences ⇒ VI.I Overall weight Page EN-10.

Trailer bikes and trailers alter the riding characteristics. Adapt your riding style accordingly. If you do not adapt your riding style, you could seriously injure or kill yourself or the child in the trailer. The braking distance becomes longer, so you have to start braking earlier, and the steering response becomes more sluggish. Practise starting, braking, going round corners, and up and down hills, starting with an empty trailer bike or trailer.

Only use trailer bikes and trailers that conform to the relevant national regulations. In addition, they should be designed and tested in accordance with DIN EN 15918. Otherwise components could break while you are riding the bike; resulting in serious or even fatal injuries for you and/or your child. Please consult your cycle dealer if you want to purchase a trailer bike or trailer.

6.3.3 Luggage rack

<table>
<thead>
<tr>
<th>Position</th>
<th>Over the rear wheel</th>
<th>Over the front wheel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum carrying capacity</td>
<td>25 kg*</td>
<td>10 kg*</td>
</tr>
<tr>
<td>Tested</td>
<td>in accordance with DIN EN 14872</td>
<td></td>
</tr>
</tbody>
</table>

6.3.3.1 Safety information

DANGER

*Check for different specifications on the luggage rack itself or in the luggage rack manufacturer’s installation instructions. Otherwise it may result in the luggage rack fracturing. If this happens while you are riding the bike, you can seriously injure yourself. The maximum carrying capacity is specified on the luggage rack carrier or on the mounting of the rear light.

Attach any luggage securely and regularly check it. If it is not secure, straps etc. can get caught up in the spokes and/or rotating wheels. Serious falls can result.

Do not exceed the overall weight of the pedelec because parts important for safety might fracture or fail. If this happens while you are riding the bike, it can lead to severe falls – with fatal consequences. ⇒ VI.I Overall weight Page EN-10.

Modifying the luggage rack in any way is not permitted. otherwise it may result in the luggage rack fracturing. If this happens while you are riding the bike, you can seriously injure yourself.
DANGER

The maximum carrying capacity of the luggage rack must not be exceeded, otherwise it may result in the luggage rack fracturing. If this happens while you are riding the bike, you can seriously injure yourself.

Luggage alters the handling characteristics of the bike. Adapt your riding style accordingly. If you do not adapt your riding style, you could seriously injure or kill yourself. The braking distance becomes longer, so you have to start braking earlier, and the steering response becomes more sluggish.

With a loaded front luggage rack, steering becomes more difficult. Adapt your riding style accordingly.

WARNING

Make sure that the luggage does not obscure the view of the reflectors and lights, and that they are easily visible to other road users. Otherwise there is a risk of not being seen in unfavourable lighting conditions (fog, rain, dusk, darkness), which could result in you being seriously injured.

6.3.3.2 Installing the front luggage rack

6.3.4 Storage

1. Remove the battery from the pedelec.
2. Store the battery in a dry, not excessively warm room. The battery should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.

Carry your luggage in side-mounted panniers. Distribute the weight evenly to ensure safer riding characteristics.
6.3.5 Cleaning

**WARNING**

Remove the battery before cleaning the pedelec. Accidental activation of the battery button can result in serious injuries.

**IMPORTANT**

Do not clean the pedelec and its components with a water hose or high pressure washer. Damage may still result even though the components are sealed. Clean the bike with a soft damp cloth.

Do not immerse the drive unit or components into water. Damage may still result even though the components are sealed.

Do not use any cleaners which contain alcohol or solvent, or which scour. No coarse sponges or brushes may be used either. They leave scratches and cause the surface to become matt. Clean the bike with a soft damp cloth.

1. Remove the battery from the pedelec.
2. Clean the outside of the drive unit with a soft, damp cloth.

**CAUTION**

Do not clean the drive unit when it is warm (e.g. straight after a ride). You may burn yourself otherwise. Wait until the drive unit has cooled down.

**7. Battery**

**7.1 Safety information**

**DANGER**

People (including children) who, because of their physical, sensory or intellectual capabilities, or because of their lack of experience or knowledge, are unable to use batteries, are prohibited from using them unless supervised or under the instruction of a responsible person. Otherwise there is a risk of mishandling with consequential very serious injuries.

**WARNING**

Only operate your pedelec with a suitable original battery. The use of other batteries can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of approved batteries in *7.2 Technical details Page EN-42*.
**WARNING**

**Only use the correct original battery charger to charge your battery.** The use of other battery chargers can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a description of permitted chargers in ➔ 8.2 Technical details Page EN-47.

**Always remove the battery before starting to work on the pedelec.** Accidental activation of the battery button can result in serious injuries.

**Keep batteries away from sparks and fires. Prevent batteries from heating up too much.** They can explode and cause serious burns and fires. Further consequences can include malfunctions and a limited battery life. Keep batteries away from sources of heat (e.g. direct sunlight and radiators). When charging the battery, ensure there is adequate ventilation and observe the permitted ambient temperature range: 0 to +40°C. Do not extinguish a burning battery with water, only the surrounding burning material. Fire extinguishers with metal fire powder (Class D) are more suitable. If it is possible to take the battery safely outside, smother the fire with sand.

**Batteries must not be short-circuited.** They can explode and cause serious burns and fires. Further consequences can include malfunctions and a limited battery life. Do not store batteries in a box or drawer where they can be short-circuited by contact with each other or with conductive materials (screws, paper clips, keys, coins, nails or other small metal objects).

**WARNING**

**Batteries must not be destroyed, shredded, taken apart, opened up or repaired.** They can explode and cause serious burns and fires. Contact your cycle dealer for help if you have problems with the battery.

**Damaged batteries must not be charged, used or transported.**

» They can explode and cause serious burns and fires.

» Gases can be released and irritate the airways. Ensure there is a supply of fresh air and consult a doctor in the event of discomfort.

» Liquid can escape and cause skin irritation. Prevent contact with it. In the event of accidental contact, wash off the liquid with water. If the liquid gets into the eyes, flush out with plenty of water and seek medical help.

**Do not send batteries by post.** Batteries are dangerous goods that under certain conditions may explode, causing severe burns and fires. Only trained personnel may prepare and transport batteries. If you have a complaint about a battery, please always go through your cycle dealer. Dealers are able to have batteries collected free of charge under hazardous goods regulations.
CAUTION

**Batteries must not be immersed in water.** This presents a risk of explosion. Do not extinguish a burning battery with water, only the surrounding burning material. Fire extinguishers with metal fire powder (Class D) are more suitable. If it is possible to take the battery safely outside, smother the fire with sand. But you need not be afraid of the battery exploding under you when you ride the cycle through rain. The battery is sealed to prevent moisture and spray water from entering.

IMPORTANT

**Batteries must not be subjected to mechanical impact.** This poses a risk of damage. A battery can still be damaged after a drop or impact even if there are no visible signs of damage. A battery which looks fine on the outside should therefore also be subjected to an inspection. Please contact your cycle dealer.

**Only use the battery to operate this pedelec,** otherwise there is a risk of damage to the device.

Batteries are subject to the dangerous goods regulations. Private users are permitted to transport them on the road without further conditions. When transported by commercial third parties (such as by air, freight forwarders and logistics firms), special requirements of packaging and labelling must be observed. Please contact your cycle dealer if you have any questions about transportation.

### 7.2 Technical details

<table>
<thead>
<tr>
<th>Type</th>
<th>7 Ah</th>
<th>7 Ah</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>Down tube</td>
<td>Seat tube</td>
</tr>
<tr>
<td>Nominal capacity</td>
<td>7 Ah</td>
<td>7 Ah</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>36 V</td>
<td>36 V</td>
</tr>
<tr>
<td>Power</td>
<td>252 Wh</td>
<td>252 Wh</td>
</tr>
<tr>
<td>Weight</td>
<td>1900 g</td>
<td>1900 g</td>
</tr>
<tr>
<td>Charge cycles</td>
<td>1,100 full cycles</td>
<td>1,100 full cycles</td>
</tr>
<tr>
<td>Charge time*</td>
<td>Approx. 3.5 to 4 hours</td>
<td>Approx. 3.5 to 4 hours</td>
</tr>
<tr>
<td>Cell</td>
<td>Li-ion (20 cells)</td>
<td>Li-ion (20 cells)</td>
</tr>
<tr>
<td>Range**</td>
<td>45 km</td>
<td>45 km</td>
</tr>
<tr>
<td>Permissible ambient temperature in operation</td>
<td>-10 to 40 °C</td>
<td>-10 to 40 °C</td>
</tr>
<tr>
<td>Permissible ambient temperature when charging</td>
<td>0 to 40 °C</td>
<td>0 to 40 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-10 to +50 °C</td>
<td>-10 to +50 °C</td>
</tr>
<tr>
<td>Recommended storage temperature</td>
<td>18 to 23 °C</td>
<td>18 to 23 °C</td>
</tr>
</tbody>
</table>

*With a 2 A charger, until battery is fully charged (95% battery capacity).

**Measured in the lowest assist mode under optimal conditions and with a fully charged battery of the highest capacity.
7.3 Overview

7.4 Tips

7.4.1 Range

Various factors determine how far you can go with your battery:

- When you go on a long trip it is worth taking a spare battery or battery charger with you.

- Assist mode: You consume the most battery power in the highest assist mode. The range decreases, the higher the selected assist mode.

- Vary the assist modes you use. If there is a tailwind when going downhill or on the level, you can still go fast with a lower assist mode.

- Tyre pressure: If the tyre pressure is too low it is harder for the tyres to rotate. The drive unit needs to provide more assistance and the range decreases.

- Riding style: A low pedalling speed combined with high gears results in high power consumption.

- Change down in good time to maintain constant cadence, especially when starting.

- Your fitness level: The fitter you are, the less assistance you will need.
Total weight: The lower the total weight supported by the bike, the easier it will be to ride ⇒ VI.I Overall weight Page EN-10.

Outside temperatures: The lower the outside temperatures (e.g. cold in winter), the shorter the range.

Insert the battery just before starting off with your pedelec. This way you prevent low temperatures shortening the range.

Battery capacity: A much shorter service life after the charging process indicates that the battery has lost considerable capacity.

The battery may have to be replaced. Discuss how to proceed with your cycle dealer.

Route selected: You need to pedal harder when cycling uphill or against strong head wind. This is registered by the power sensor, which in turn requires the motor to work harder.

7.4.2 Storage

1. Remove the battery from the pedelec.
2. Store the battery in a dry, not excessively warm room. The battery should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.

**IMPORTANT**

The battery should not be stored in a fully charged state. A charge level between 50 and 70 % (▁▁▁▁tin) is ideal. Since the battery loses charge very slowly, you should recharge it when only one or two LEDs come on, but after six months at the latest.

7.4.3 Cleaning

**DANGER**

If you wipe the battery avoid touching the contacts, otherwise there is the risk of an electric shock.

**WARNING**

Remove the battery from the pedelec before cleaning. Unintentionally pressing the battery button represents a risk of injury.

**CAUTION**

Batteries must not be immersed in water. This presents a risk of explosion. Do not extinguish a burning battery with water, only the surrounding burning material. Fire extinguishers with metal fire powder (Class D) are more suitable. If it is possible to take the battery safely outside, smother the fire with sand. But you need not be afraid of the battery exploding under you when you ride the cycle through rain. The battery is sealed to prevent moisture and spray water from entering.
IMPORTANT

**Do not spray the battery with a water hose or wash it with a high-pressure cleaner.** Damage to the battery may still result even though the components are sealed. Clean the battery with a soft, damp cloth.

**Do not use any cleaners which contain alcohol or solvent, or which scour.** No coarse sponges or brushes may be used either. They leave scratches and cause the surface to become matt. Clean the battery with a soft, damp cloth.

**Do not allow dirt to dry out.** It is best to clean the battery immediately after your ride.

1. Remove the battery from the pedelec.
2. Clean the casing with a slightly damp, soft cloth.
3. If the battery terminals are dirty, clean them with a dry, soft cloth.

8. **Battery charger**

8.1 **Safety information**

**DANGER**

Battery chargers are not a toy and must not be used by children under the age of 8 years. Older children must be sufficiently trained on how to use the battery charger. People who, because of their physical, sensory or intellectual capabilities, or because of their lack of experience or knowledge, are unable to use battery chargers, are prohibited from using them unless supervised or under the instruction of a responsible person. Otherwise there is a risk of mishandling with consequential very serious injuries.

**WARNING**

**Only use the correct, original charger to charge the battery.** The use of other battery chargers can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life.

**Only charge the correct, original battery with the charger.** The use of other batteries can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of approved batteries in \( \Rightarrow 7.2 \) Technical details Page EN-42.
WARNING

Check the charger, cable and plug before each use. Do not use the charger if you detect signs of damage. Do not open the charger yourself, and only have it repaired by qualified experts using original spare parts. This poses a risk of fire and explosion. Damaged chargers, cables and plugs also increase the risk of electric shock.

The charger is only intended to be used indoors. Keep the charger away from rain and moisture. If water gets into the charger there is a risk of electric shock. If water has penetrated the casing, unplug the device immediately and have it checked out by your dealer. Condensation might form on the charger when the temperature suddenly changes from cold to warm. When this happens, wait about an hour. This is the time a charger needs to reach the temperature of the warm surroundings. Prevent this happening by storing the charger where it is used.

The charger and battery may not be covered during the charging process. Do not use the charger and battery on materials which can catch fire easily (such as paper and textiles) or within a combustible environment. This also applies when the battery is charged when fitted to the pedelec. In this case, the pedelec must be positioned such that a potential fire cannot spread quickly (exercise caution with carpeted floors). Do not expose the battery and pedelec to direct sunshine above 40°C. The charger heat generated during the charge process represents a risk of fire. When there is smoke or an unusual smell, immediately unplug the mains connector of the charger from the socket and disconnect the battery from the charger. An overheated battery is damaged and may not be used again. Always stay with the charger when it is in use.

WARNING

Keep battery chargers away from sparks and fires. It can explode causing severe burns and fires. Further consequences can include malfunctions and a reduced service life. Ensure there is adequate ventilation for charging.

IMPORTANT

The mains voltage must match the supply voltage of the battery charger, otherwise there is a risk of damage to the device. The supply voltage for the charger is specified on the label on the back of the device.

Do not charge batteries for a long period if they are already fully charged or are not being used. Electrical storms, voltage fluctuations and short circuits can damage the battery.

Keep the battery charger clean. If the contacts are dirty, the dirt can burn during charging, leaving burn marks. The charger may need to be replaced in such cases ⇒ 8.4.1 Cleaning Page EN-48.
8.2 Technical details

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery voltage</td>
<td>36 V</td>
</tr>
<tr>
<td>AC input voltage</td>
<td>100 - 240 V</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 – 60 Hz</td>
</tr>
<tr>
<td>Max. DC output voltage</td>
<td>42 V</td>
</tr>
<tr>
<td>Max. charge current</td>
<td>2 A</td>
</tr>
<tr>
<td>Dimensions (L x W x H)</td>
<td>160 mm x 70 mm x 46 mm (charger)</td>
</tr>
<tr>
<td>Permissible ambient temperature when charging</td>
<td>0 °C to +40 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-10 to +50 °C</td>
</tr>
<tr>
<td>Recommended storage temperature</td>
<td>18 to 23 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>706 g (charger)</td>
</tr>
</tbody>
</table>

> The charger and the charging station is only intended for interior use. Keep the charger away from rain and moisture. If water gets into the charger there is a risk of electric shock.

8.3 Overview

8.3.1 LED

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌟</td>
<td>LED flashes green</td>
<td>Standby</td>
</tr>
<tr>
<td>⚫️</td>
<td>LED lights up red</td>
<td>Battery is charging</td>
</tr>
<tr>
<td>🌟</td>
<td>LED flashes red</td>
<td>Charging fault</td>
</tr>
<tr>
<td>⚫️</td>
<td>LED lights up green</td>
<td>Battery is fully charged</td>
</tr>
</tbody>
</table>
8.4 Tips

8.4.1 Cleaning

**DANGER**

Always unplug the charger from the mains before cleaning and especially before wiping it, otherwise you could get an electric shock if you touch the contacts.

**IMPORTANT**

Do not immerse the charger in water. Damage may still result even though the components are sealed.

Do not use any cleaners which contain alcohol or solvent, or which scour. No coarse sponges or brushes may be used either. They leave scratches and cause the surface to become matt. Clean the charger with a soft damp cloth.

1. Remove the charging cable from the battery charging socket.
2. Unplug the charger from the mains socket.
3. Clean the casing with a slightly damp, soft cloth.
4. If the contacts are dirty, clean them with a soft dry cloth.

8.4.2 Storage

1. Store the battery charger in a dry, not excessively warm room. The charger should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.
9. Faults

9.1 Drive unit, display and easy-reach control

<table>
<thead>
<tr>
<th>Description</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No motor assist</td>
<td>a) Battery is in Sleep mode.</td>
<td>a) Wake battery from Sleep mode. If the battery does not respond, briefly connect it to the battery charger ⇒ 5.1 Charging a battery Page EN-31.</td>
</tr>
<tr>
<td></td>
<td>b) Battery is defective.</td>
<td>b) Insert a new battery.</td>
</tr>
<tr>
<td></td>
<td>c) The pedelec is OFF. The Groove Go switches itself off after 10 minutes if there is no call for power from the drive (e.g. because the pedelec is stationary).</td>
<td>c) Switch on the pedelec ⇒ 5.4 Switching on the pedelec Page EN-33.</td>
</tr>
<tr>
<td>Motor idles.</td>
<td>a) Gear changing is not properly set.</td>
<td>a) Check the gears. Contact your cycle dealer.</td>
</tr>
<tr>
<td></td>
<td>b) Chain has come off.</td>
<td>b) Lift the chain on to the sprocket and adjust the tension. Contact your cycle dealer ⇒ 3.8.1 Measuring and adjusting the chain tension Page EN-23</td>
</tr>
</tbody>
</table>

9.2 Battery

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>The second LED flashes rapidly and green.</td>
<td>Battery is flat and is disabled.</td>
<td>If the battery is flat, it will work again briefly following a short recovery period, then switch off again. It must now be charged ⇒ 5.1 Charging a battery Page EN-31.</td>
</tr>
<tr>
<td>[ ]</td>
<td>The fourth LED flashes rapidly and green.</td>
<td>The battery is overloaded.</td>
<td>If the battery is overloaded, it switches on again after a short recovery and can be used normally.</td>
</tr>
<tr>
<td>[ ]</td>
<td>The third LED flashes rapidly and green.</td>
<td>The battery is too cold or too hot.</td>
<td>The permissible ambient temperature when charging is 0 to +40°C.</td>
</tr>
<tr>
<td>Display</td>
<td>Description</td>
<td>Cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The range appears too short</td>
<td>a) The range depends on:</td>
<td>a) The are many reasons why the range may seem low ⇒ 7.4.1 Range Page EN-43.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Assist mode</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Tyre pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Riding style</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Physical condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Overall weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Outside temperatures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Battery capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>» The route selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery key lost</td>
<td>Order another key. We recommend making a note of the key number on the sales receipt/document. This number can be used to order a replacement key.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Go to website <a href="http://www.trelock.de">www.trelock.de</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Select your language</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Select “Your service”, then “Trelock key service”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Follow the instructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you no longer have the key number, replacing the lock is the only option. Contact your cycle dealer for this.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The battery does not charge.</td>
<td>a) Ambient temperature too high or low.</td>
<td>a) You can charge the battery at ambient temperatures of between 0˚C and 40˚C.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Damaged battery.</td>
<td>b) <strong>Damaged batteries must not be charged or used for any other purpose.</strong> Contact your cycle dealer. The battery may have to be replaced.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Battery charger faulty.</td>
<td>c) Have your charger checked out by your cycle dealer; it may have to be replaced.</td>
<td></td>
</tr>
<tr>
<td>Battery is damaged.</td>
<td>Accident or fall involving the pedelec or the battery has been dropped.</td>
<td><strong>Damaged batteries must not be charged or used for any other purpose.</strong> Contact your cycle dealer. The battery may have to be replaced.</td>
<td></td>
</tr>
<tr>
<td>Battery does not &quot;wake up&quot; from sleep mode</td>
<td>a) Battery is flat.</td>
<td>a) Briefly charge the battery.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Damaged battery.</td>
<td>b) <strong>Damaged batteries must not be charged or used for any other purpose.</strong> Contact your cycle dealer. The battery may have to be replaced.</td>
<td></td>
</tr>
</tbody>
</table>
9.3 Battery charger

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>The red LED flashes continuously.</td>
<td>There is a charging fault.</td>
<td>Unplug the charger from the mains immediately. If the problem reoccurs, a new battery charger is required.</td>
</tr>
</tbody>
</table>

10. Torque settings

**DANGER**

Only use appropriate tools to tighten screws and bolts. Observe the specified torque setting. The component manufacturer's torque settings take precedence (where available). Failure to comply can result in screws/bolts becoming loose, tearing away or fracturing. If that happens while you are riding the bike, components may come off and you could have a severe crash. If screws are overtightened, components can also be damaged. Tighten all screws and bolts that are relevant for safety with a torque wrench. This indicates the corresponding torque in newton metres (Nm).

If no values are shown on the component or component manuals, use the torque settings from the following table.

<table>
<thead>
<tr>
<th>Screw fixing</th>
<th>Thread</th>
<th>Tightening torque (Nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedal crank screw</td>
<td>M6</td>
<td>40</td>
</tr>
<tr>
<td>Pedal</td>
<td>9/16</td>
<td>40</td>
</tr>
<tr>
<td>Front axle nut</td>
<td>General</td>
<td>25 – 30</td>
</tr>
<tr>
<td>Rear axle nut</td>
<td>M12</td>
<td>40</td>
</tr>
<tr>
<td>Ahead stem angle adjustment</td>
<td>M6</td>
<td>8 – 10</td>
</tr>
<tr>
<td>Ahead stem handlebar clamp</td>
<td>M5 / M6 / M7</td>
<td>M5: 5 / M6: 10 / M7: 14</td>
</tr>
<tr>
<td>Ahead stem steerer tube</td>
<td>M5 / M6 / M7</td>
<td>M5: 5 / M6: 10 / M7: 14</td>
</tr>
<tr>
<td>Bar end, external clamp</td>
<td>M5 / M6</td>
<td>M5: 5 / M6: 10</td>
</tr>
<tr>
<td>Saddle clamp bottom</td>
<td>M5 / M6 / M8</td>
<td>M5: 5 / M6: 10 / M8: 20</td>
</tr>
<tr>
<td>Saddle clamp top</td>
<td>M5 / M6 / M7 / M8</td>
<td>M5: 5.5 / M6: 5.5 / M7: 14 / M8: 20</td>
</tr>
<tr>
<td>Rim brake shoe</td>
<td>M6</td>
<td>10</td>
</tr>
<tr>
<td>Sliding drop-outs</td>
<td>M10</td>
<td>16</td>
</tr>
<tr>
<td>Disc brake calliper, Shimano, IS and PM</td>
<td>M6</td>
<td>6 – 8</td>
</tr>
<tr>
<td>Disc brake calliper, AVID, IS and PM</td>
<td>M6</td>
<td>8 – 10</td>
</tr>
<tr>
<td>Disc brake calliper, Magura, IS and PM</td>
<td>M6</td>
<td>6</td>
</tr>
<tr>
<td>Gear lever clamp</td>
<td>M5</td>
<td>5</td>
</tr>
<tr>
<td>Brake lever clamp</td>
<td>M5</td>
<td>Ref. manufacturer's spec.</td>
</tr>
<tr>
<td>Cassette fixing ring</td>
<td>N/A</td>
<td>30 – 40</td>
</tr>
<tr>
<td>Screw-on handlebar plugs</td>
<td>M4 / M5</td>
<td>M4: 3 / M5: 5</td>
</tr>
<tr>
<td>Luggage rack</td>
<td>M5 / M6</td>
<td>M5: 5 – 6 / M6: 8 – 10</td>
</tr>
</tbody>
</table>
Finden Sie Ihren Fachhändler in Ihrer Nähe:
Find dealers:
Trouver un revendeur:
www.kalkhoff-bikes.com/de/service/haendlersuche.html

Anleitungen, Service-Heft und Konformitätserklärungen zum Download als PDF:
User guides, service book and declarations of conformity are available for download in PDF format at:
Manuels, carn,et de maintenance et déclarations de conformité pour téléchargement au format PDF :