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NOX

C Y C L E S

ORIGINAL INSTRUCTIONS



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Contents

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Thank you for choosing a NOX bike!

With a NOX bike, you have not only acquired an exceptional e-bike with high quality and performance, but also a piece of our beautiful company history.

We warmly welcome you to our NOX family – from now on, you'll be helping to write our history!

Your NOX Team

FRAME/SUSPENSION

**Frame**

- A** Top tube
- B** Head tube
- C** Bottom tube
- D** Chainstay
- E** Seat stay
- F** Seat tube

Suspension

- G** Suspension fork
- H** Frame damper

COMPONENTS



- | | |
|--|--------------------------------------|
| 1 Handlebar with operating elements | 8 Pedal drive |
| 2 Handlebar stem | 9 Drive unit |
| 3 Gear cables/hydraulic lines | 10 Derailleur gears |
| 4 Front wheel | 11 Rear wheel |
| 5 Front disc brake | 12 Rear disc brake |
| 6 Front hub | 13 Quick-release of seat post |
| 7 Rechargeable battery | 14 Saddle with seat post |

COMPONENTS OF TOURING EQUIPMENT



1 Handlebar with operating elements

2 Handlebar stem

3 Gear cables/hydraulic lines

4 Front mudguard

5 Front wheel

6 Front disc brake

7 Front hub

8 Battery/cover

9 Pedal drive

10 Drive unit

11 Derailleur gears

12 Kickstand

13 Rear wheel

14 Rear disc brake

15 Rear mudguard

16 Luggage rack

17 Quick-release of seat post

18 Saddle with seat post

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ABOUT THESE INSTRUCTIONS

1 Reading and storing these instructions



These Original Instructions – referred to as the instructions in the following – is part of the pedelec.

Contrary to standard EN 15194, all electrically power assisted cycles (EPACs*) described here are subsumed under the term “pedelec”**.

Whenever these instructions refer to “pedelec” in general, they mean any of the EPAC models described here.

All illustrations in these instructions are exemplary; as a result, individual details on your pedelec may look different from those shown in this manual.

These instructions contain all important information on the safety and use of your pedelec. It is based on the standards that apply in the European Union.

Before using your pedelec for the first time, please read these instructions and all applicable manufacturer's component instructions, especially the safety instructions, carefully and completely.

If you do not follow these instructions and all other applicable manufacturer's component instructions, you may injure yourself and other persons and/or cause damage to property. Always keep these instructions and all other applicable manufacturer's component instructions on hand for further use.

If you pass on your pedelec to a third party, it is essential that you include these instructions and all applicable manufacturer's component instructions.

You can download this manual in PDF format from the manufacturer's homepage.

* Electrically Power Assisted Cycles = EPAC

** Pedal electric cycle = Pedelec

2 Additionally applicable documents

In addition to these instructions, always observe the additionally applicable manufacturer's instructions for the components installed in and on your pedelec.

In addition to these instructions, manufacturer's instructions for other components are always included, which you must observe. e.g.:

- Pedelec: Drive unit, control unit, battery and charger
- Brakes
- Suspension fork and rear suspension
- Gear shift system
- Hubs/quick-release
- Etc.

As a supplement to this manual, these manufacturer's component instructions are an essential part of the scope of the technical documentation for this pedelec.

If you have not received separate manufacturer's component instructions, please contact the manufacturer of your pedelec to request them.

3 Marking and meaning of safety notices and warnings

Safety notices and warnings describe hazards that may occur when handling or using the pedelec and provide instructions on how to avoid such hazards.

The **safety instructions** are summarized in the "SAFETY" section.

Warnings are placed directly at the step or process from which the potential hazard emanates.

For the safe use of the pedelec, both the safety notices and the action-related warnings are essential. You must therefore absolutely read through all safety notices and warnings in a concentrated manner and take care to internalize the contents in order to avoid risks when handling and using the pedelec.

Depending on the possible consequences of non-compliance the safety notices and warnings in this manual are indicated as follows.

3.1 Representation and structure

SIGNAL WORD

Type and source of the danger!

Explanation of the nature and source of the hazard.

» Measures to avert the danger.

3.2 Hazard classification

DANGER

» The signal word "Danger" indicates a hazard with a high degree of risk: Non-compliance with the safety notices and warnings in this category will result in death or serious injury.

WARNING

» The signal word "Warning" indicates a hazard with a medium degree of risk: Non-compliance with the safety notices and warnings in this category can result in death or serious injury.

CAUTION

» The signal word "Caution" indicates a hazard with a moderate degree of risk: Failure to comply with safety notices and warnings in this category may result in moderate or minor injuries.

NOTICE

» The signal word "Note" indicates a hazard that can lead to material damage: Failure to comply with safety notices and warnings in this category may damage your pedelec or cause other material damage.

4 Explanation of symbols and signs

	<p>It is essential to read and follow the instructions.</p>
	<p>This symbol indicates useful additional information for handling and using your pedelec.</p>
	<p>Marking for products that must only be used indoors. WARNING! There is a risk of electric shock if used in a damp environment and in contact with liquids!</p>
	<p>This electrical device corresponds to protection class II: The device has double or reinforced insulation to protect against electric shock.</p>
	<p>Warning against hot surfaces. WARNING! There is a risk of burns and fire on contact with flammable materials.</p>
	<p>Magnetic field warning WARNING! Magnets can affect the function of pacemakers and implanted defibrillators.</p>
	<p>Symbol for direct current (DC).</p>
	<p>Symbol for alternating current (AC).</p>
	<p>Products marked with this symbol meet all applicable European Economic Community regulations.</p>
	<p>Electrical devices with this marking must not be disposed of with household or non-recyclable waste. Consumers are required by law to dispose of electrical devices bearing this mark at suitable collection points for environmentally friendly recycling.</p>
  <p>LI-Ion</p>	<p>Any batteries with this marking may not be disposed of with household or non-recyclable waste. Consumers are required by law to dispose of batteries bearing this mark at suitable collection points for environmentally friendly recycling.</p>
	<p>Marking for recyclable materials. Dispose of the packaging according to material type. Dispose of card and cardboard in your paper container and films in your plastic recyclables container.</p>

5 Product labeling

The nameplate for your pedelec is affixed to the bicycle passport by your specialist dealer > Section "Bicycle passport" on page 108.

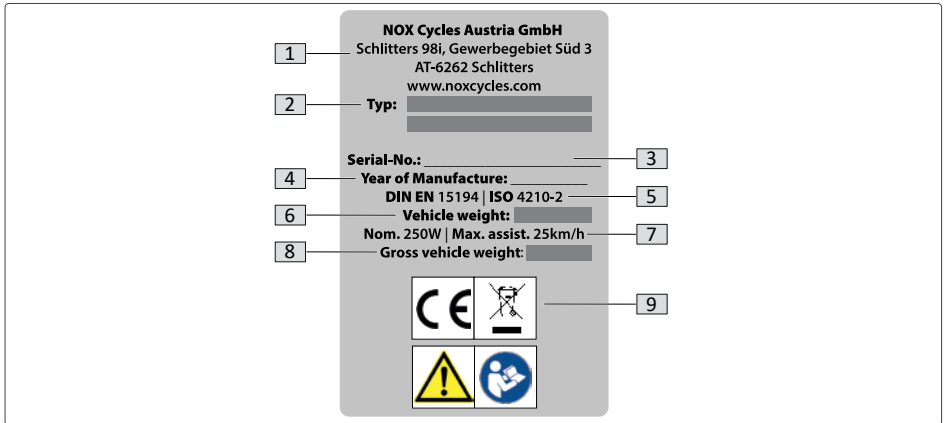


Fig. 1: Symbol illustration product labeling

- 1 Name and address of manufacturer
- 2 Model designation
- 3 Serial number – see the frame
- 4 Year of manufacture/model year
- 5 DIN EN 15194 Cycles – Electrically Power Assisted Cycles – EPAC Bicycles
ISO 4210-2 Cycles- Safety requirements for bicycles
- 6 Weight of pedelec (EPAC)
- 7 Nominal output of motor 250W /
max. assistance speed 25 km/h
- 8 Maximum permitted total weight* > Chap. 11 on page 29
- 9 Symbols > Chap. 3 on page 13 and > Chap. 4 on page 15

* The maximum permissible total weight of the pedelec (sum of pedelec + rider + payload) must not be exceeded under any circumstances.

SAFETY

6 Intended use

Neither the manufacturer nor the specialist dealer will accept liability for damage which occurs due to improper use. Use your pedelec only as described in these instructions. Any other use is considered improper and may lead to accidents, serious injury or damage to the pedelec and its components.

Improper use of the pedelec will void the warranty.

Fundamentally, the following applies:

- Your pedelec is designed for one cyclist.
- The sitting position on the pedelec must be correctly adjusted according to the cyclist's height.
- The maximum permissible total weight for your pedelec may not be exceeded
> Chap. 11 "Maximum permitted total weight" on page 29.
- For the intended use of the pedelec in road traffic, country-specific and regional regulations must be observed
> Chap. 10.3 "Safety instructions for cycling in road traffic" on page 28.
- Your pedelec is fundamentally **not** approved for the use of a child seat and/or trailer (child, load, dog trailer, etc.).

Non-full-suspension models with aluminum frames are excluded, provided that the permissible total weight is not exceeded

> Chap. 11 "Maximum permitted total weight" on page 29.

Please also note the information in the bicycle passport

> Section "Bicycle passport" on page 108.






In addition, the specific specifications for intended use apply to the corresponding category of your pedelec > Chap. 7 "Categorization (use classification)" on page 18.

Possible examples of improper use are as follows:

- Manipulating or modifying the e-drive of a pedelec
> Chap. 8.1 "Prohibition of tuning and manipulation" on page 20.
- Using an unsuitable pedelec with a child seat and/or a trailer.

7 Categorization (use classification)

The categorization corresponds to DIN EN 17406 and international standard ASTM F2043-13.

Category	Description concerns bicycles and EPACs,	Typical range ∅ speed
	<p>Used on common, paved surfaces where the tires are expected to maintain ground contact at average speeds, with occasional drops.</p>	<p>15 km/h to 25 km/h</p>
	<p>To which condition 1 applies and which are also used on unpaved roads and gravel paths with moderate uphill and downhill gradients. Under these conditions, contact with uneven terrain and repeated loss of tire contact with the ground may occur. Drops are limited to 15 cm or less.</p>	<p>15 km/h to 25 km/h</p>
	<p>To which conditions 1 and 2 apply and which are also used on rough paths, uneven unpaved roads, and difficult terrain and undeveloped trails and which require technical skill to use. Jumps and drops should be less than 60 cm.</p>	<p>Not relevant</p>
	<p>To which conditions 1, 2 and 3 apply or which are used for descents on unpaved roads at speeds of less than 40 km/h. Jumps should be less than 120 cm.</p>	<p>Not relevant</p>
	<p>To which conditions 1, 2, 3 and 4 apply and which are used for extreme jumps or descents on unpaved roads at speeds exceeding 40 km/h or for a combination thereof.</p>	<p>Not relevant</p>

If you have any specific questions about your model, please contact your specialist dealer.

Max. drop/jump height	Intended use	Bicycle model (examples)	Recommended cycling skills
< 15 cm	Commuting and leisure travel with moderate effort	City bikes and urban bikes	No special cycling skills required
< 15 cm	Leisure trips and trekking under moderate effort	Trekking and touring bikes	No special cycling skills required
< 60 cm	Sport and competition rides with moderate technical demands of the trails	Cross country and marathon bikes	Technical skills and practice required
< 120 cm	Sport and competition rides with very challenging technical requirements of the trails	Mountain bikes, trail bikes	Technical skills, practice and good wheel control required
> 120 cm	Extreme sports	Downhill, dirt jump and freeride bikes	Extreme technical skills, practice and wheel control required

8 Misuse

In order to use your pedelec safely, avoid the following instances of misuse:

- Use of the pedelec for competitions, jumps, stunts or tricks if the pedelec category (use classification) excludes this use;
- Improper repairs and maintenance;
- Improper use of the rechargeable battery;
- Structural changes to the pedelec as delivered, especially to the tuning, and any other modifications to the pedelec;
- Opening and changing any components on the pedelec;
- Charging outside the temperature range specified by the manufacturer;
- Deep discharge of the battery due to long pauses in charging or improper storage of the battery outside the optimum storage temperature specified by the manufacturer.
- Ambient temperatures below +10°C and above +40°C may reduce the range.
- In the long run, especially high and especially low ambient temperatures can accelerate the wear of the battery or even damage the battery.



INFORMATION

Misuse of the pedelec can lead to the warranty becoming void.

8.1 Prohibition of tuning and manipulation

Possible legal consequences:

- The pedelec is subject to registration and insurance. All legal regulations regarding equipment and local traffic laws apply.
- The manufacturer is not liable for any damages, guarantees or warranties.
- Criminal consequences are not excluded. For example, the criminal offense of negligent bodily injury may apply.
- Loss of coverage under a pedelec/bicycle insurance policy.

Possible technical consequences:

- Modifications by tuning or manipulation impair the function and can lead to defects or the breakage of components.
- Components of the e-drive can heat up considerably and overload. The consequences are irreparable damage and fire hazard.
- Brakes and other components of the pedelec are subjected to greater stress. The consequences are overheating, faster wear and malfunctions, and even total component failure.

9 Residual risks

Unavoidably, certain residual risks will remain when using the pedelec – despite a well-calculated design by the manufacturer and compliance with the specifications for proper use by the user.

You yourself can reduce, but not completely eliminate, these residual risks by observing all safety notices and warnings. It is therefore important that you are aware of the existence of residual risks when using the pedelec.

The unpredictable residual risks when using the pedelec described here may include:

- Unpredictable cycling maneuvers and/or misconduct of other road users;
- Distraction from the road traffic;
- Misjudgments regarding road grip, speed, own driving skills;
- Surprising or sudden changes in road characteristics such as black ice;
- Unexpected material defects or signs of wear that can lead to components of the pedelec breaking or being impaired in their function.

10 Safety information

READ AND KEEP ALL IMPORTANT SAFETY INSTRUCTIONS!

The following important safety instructions must always be observed when using and handling the pedelec.

10.1 General safety information



WARNING

Risk of accident and injury!

If you do not follow the instructions listed below, which are intended to help reduce the general risk of accidents and injuries, you expose yourself and possibly other persons to an increased risk of serious injury.

- » Only use your pedelec if you are familiar with its handling and functions and always follow the instructions for the proper use of your pedelec.
- » When using any permissible special equipment or designs, please note that doing so may alter the handling of your pedelec and adjust your cycling style accordingly. When using a recumbent or aero handlebar, for example, access to controls may be restricted and the stopping distance may be longer than usual.
- » Cycle with foresight in order to recognize events early and be able to react to them.
- » Always adapt both your cycling style and speed to current weather conditions and road characteristics.
- » Please note in particular that the braking distance can be longer and the tires have less grip on icy, wet, slippery or dirty roads.
- » Pay attention to other road users and adopt a defensive cycling style.
- » Always visually inspect your pedelec before using it. Make sure that your pedelec or its components do not show any cracks, scoring, damage or color changes.
- » Make sure that safety-relevant devices on the pedelec (e.g. the brakes) are correctly adjusted and functional.
- » Never use your pedelec if safety-relevant components (e.g. the brakes) are damaged or do not function properly.
- » Under no circumstances should you arbitrarily exchange components on the pedelec or make any changes or repairs to the pedelec or individual components. Have any damage to the pedelec repaired by your specialist dealer and have damaged components replaced exclusively with suitable original spare parts.

⚠ WARNING**Continuation**

- » Contact your specialist dealer if you are unable to carry out work on the pedelec described in the manual yourself (e.g. making certain adjustments or similar tasks), if you feel unsafe or if you do not have the correct tools.
- » After an accident or fall or if your pedelec has been subjected to excessive loads, contact your specialist dealer for a professional inspection of your pedelec.

⚠ CAUTION**Risk of injury when wearing unsuitable clothing!**

Since moving parts of the pedelec are catching points for clothing, you can injure yourself if you wear unsuitable clothing when using your pedelec.

- » When cycling, wear tight-fitting legwear if possible instead of wide trousers, dresses or skirts.
- » Make sure that loose clothing cannot get caught in the moving parts of the pedelec, for example, using trouser clips.
- » Make sure that no loose straps, laces or the like are hanging down.
- » Wear shoes with non-slip soles to prevent your foot from slipping during pedaling.

NOTICE**Risk of damage through improper use!**

If the pedelec is not used in accordance with the specifications for its intended use, components may show signs of wear or break more quickly.

- » Always observe the permissible total weight of the pedelec (including the cyclist and any luggage). The permissible total weight may not be exceeded.
- » Ensure that the tire inflation pressure is set correctly and adjust it if necessary.
- » Do not cycle through deep water points if such use is not explicitly permitted according to the intended use for your pedelec.

10.2 Safety instructions for the electric drive and its components



DANGER

Risk of accident and injury!

Due to its construction and design, an pedelec behaves differently in many ways than a conventional bike without an electric drive. If you underestimate this difference, you could expose yourself and others to an increased risk of serious injury.

- » Be aware of the changed cycling behavior and do not underestimate the risks involved.
- » At the beginning, consciously practice typical cycling situations with your pedelec, such as starting and braking, cornering and turning, etc.
- » Inform yourself about any applicable national regulations for pedelecs and observe them.



DANGER

Risk of electric shock and injury!

Improper handling of the pedelec or electric drive may result in electric shock and/or serious injury.

- » Always remove the battery from its holder on the pedelec before carrying out any work, before transporting it or storing it without using it for a longer period of time in order to prevent you or others from accidentally starting the electric drive.
- » Do not make any changes or manipulations to the electric drive. Never try to increase the power of the electric drive!
- » Under no circumstances may you modify or exchange components of the electric drive on your own.
- » Under no circumstances may you open the components of the electric drive on your own. The components of the electric drive are maintenance-free. Have any necessary repairs to the electric drive carried out exclusively by an authorized specialist dealer.
- » Only have components of the electric drive replaced with approved original spare parts by an authorized specialist dealer.
- » Only use the “Walk Assistance” function when pushing your pedelec: When the “Walk assistance” function is activated, the pedelec must be held securely with both hands and the wheels must have ground contact, otherwise there is a risk of injury. Do not use the sliding support to be propelled while sitting on the pedelec.

 **DANGER****Risk of electric shock!**

Improper handling of electric current and live components may result in electric shock and/or serious injury.

- » Check the charger, mains cable, charging cable and mains plug for damage before each use. Do not use the charger if you discover damage or suspect that it is damaged.
- » If the mains and/or charging cable is damaged, it must be replaced by the manufacturer, its Customer Service or a similarly qualified person in order to avoid hazards.
- » Do not kink the mains and charging cables or lay them over sharp edges.
- » Only connect the charger to a properly installed and easily accessible power outlet whose mains voltage matches the voltage indicated on the charger.
- » Only use the charger in dry indoor rooms.
- » Make sure that the mains voltage at the mains connection corresponds to the specification on the charger.
- » Do not allow the charger and the battery or the connection contacts for the battery on the pedelec to come into contact with water or other liquids.
- » Keep the components of the electric drive (especially the connection contacts on the battery and charger) in clean condition.
- » Do not pull on the power cord or charging cable to remove the respective cable from a socket or outlet, but always grasp the respective plug.
- » Never touch the plugs of the power cord and charging cable with wet or damp hands.

 **DANGER****Risk of explosion!**

If a battery is not handled properly, it may explode.

- » Keep the rechargeable battery away from fire and other heat sources.

 **DANGER****Risk of interference with medical equipment!**

Magnets can interfere with the function of pacemakers and implanted defibrillators.

- » Keep batteries/chargers with magnetic connections and magnetic battery covers away from pacemakers and implanted defibrillators.
- » Warn wearers of such devices not to approach magnets.

**DANGER****Fire hazard!**

Improper handling of the battery and charger may cause a fire.

- » Only use the charger in dry indoor rooms under supervision.
- » The battery and charger may heat up during charging: Keep flammable materials away from the battery and charger, and place the charger on a fireproof surface when charging the battery.
- » Only use the original charger to charge the battery.
- » Only use the charger to charge the original battery. Do not charge other batteries with it.
- » Always pull the mains plug out of the socket after charging.
- » Observe any additional safety instructions on the charger.
- » Do not store the battery near metal objects such as coins, paper clips, screws, etc. Metal objects can short-circuit the battery. The short circuit may cause a fire.
- » Do not short-circuit the battery.

**WARNING****Risk of chemical burns and injury!**

Improper handling of the battery can cause burns and/or injuries to you and others.

- » Have the battery checked by an authorized dealer after a fall or hard impact to ensure that there is no (invisible) damage that could allow battery acid or toxic gases to escape.
- » Do not open, dismantle, drill through or deform the battery or battery housing.
- » Only touch a damaged battery with protective gloves.
- » In case of contact with damaged batteries, wear safety glasses and protective clothing to avoid contact with battery acid.
- » In case of contact with battery acid, immediately rinse the affected area thoroughly under plenty of running water. Consult a doctor after rinsing, especially in case of eye contact and/or if mucous membranes (e.g. nasal mucous membranes) are affected.
- » If the battery has caught fire, proceed as follows: Immediately remove yourself from the burning battery, shield the scene of the fire as much as possible and call the fire department. Do not try to extinguish the burning battery yourself with water!



WARNING

Hazards for certain groups of persons (e.g. children)!

Children or persons who are physically or mentally impaired may be seriously injured when handling the battery and/or charger or when accessing your pedelec as they may not be able to correctly assess certain risks.

- » The charger may not be used by children or persons with impaired physical, sensory or mental abilities unless they are supervised or have been instructed in the safe use of the charger and have understood the resulting risks.
- » Children may not play with the battery or the charger.
- » Cleaning and user maintenance may not be carried out by children without supervision.
- » The battery may not be removed or inserted by children.
- » Keep the battery and charger out of the reach of children.
- » Secure and park your pedelec in such a way that unauthorized persons (especially children) cannot access it.



CAUTION

Burn hazard!

The motor unit heats up during operation. Touching the hot motor unit may cause burns.

- » Be careful when handling the motor unit.
- » Let the motor unit cool down completely before touching it.

NOTICE

Risk of damage!

Improper handling can damage the electric drive or its components.

- » Have all components of the electric drive and pedelec replaced exclusively by identical or other components expressly approved by the manufacturer to prevent damage to other components or the pedelec.

10.3 Safety instructions for cycling in road traffic



WARNING

Risk of accident and injury!

If you do not follow the instructions listed below, which are intended to help reduce the general risk of accidents and injuries, you could expose yourself and possibly other persons to increased risk.

- » Before using your pedelec in road traffic, make sure that it complies with country-specific regulations. In order to travel on the road, pedelecs must be fitted with two independent brakes and a bell.
- » Observe and respect all national and regional road traffic regulations. For information on the applicable road traffic regulations of the country or region, contact the Ministry of Transport, for example.
- » When cycling, wear a suitable bicycle helmet tested according to DIN EN 1078 (with CE mark).
- » Dress in bright colors when cycling and improve your visibility by wearing reflective elements.
- » Do not use your pedelec if you have consumed alcohol, intoxicants or debilitating drugs.
- » Do not use mobile devices such as smartphones or tablets while cycling.
- » Be concentrated while cycling. Do not distract yourself by activities such as switching on the light. Stop for such activities.
- » Never cycle one-handed or with no-hands in road traffic.
- » Cycle on the prescribed cycle paths.

11 Maximum permitted total weight



WARNING

Risk of accident and injury!

Overloading the pedelec can cause safety-relevant components to break or fail, resulting in accidents and injuries.

» Never exceed the maximum permissible total weight of the pedelec.

NOTICE

Risk of damage!

Overloading the pedelec can lead to material damage.

» Never exceed the maximum permissible total weight of the pedelec.

The pedelec has a maximum permissible total weight that must be observed when using the pedelec.

The maximum permissible gross weight can be found on the product label of your pedelec > Chap. 5 "Product labeling" on page 16 and in the vehicle passport > Section "Bicycle passport" on page 108.

The maximum permitted total weight is calculated from the sum of the following weight specifications:

Pedelec + rider + luggage/child seat = maximum permitted total weight.

If you use a trailer, the total weight of the trailer (trailer + payload) counts towards the total weight of the pedelec and must be taken into account with regard to the maximum permitted total weight.

12 Torques



WARNING

Risk of accident and injury!

Incorrectly tightened screw connections can result in material fatigue and eventually cause the screw connections to break.

- » Do not use your pedelec if you notice any loose screw connections.
- » Screw connections must be properly tightened with a torque spanner and the correct torque values.

Observe the relevant torque values to ensure the screw connections are tightened correctly. A torque spanner with a suitable adjustment range is required for this task.

The correct torque value for a screw connection depends on the material and diameter of the screw connection, as well as the material and design of the component.

- If you do not have any experience with using torque spanners or if you do not own a suitable torque spanner, you should ask your specialist dealer to check your screw connections.
- If you decide to tighten the screw connections yourself, check whether your pedelec is fitted with carbon components > Section "Bicycle passport" on page 108.
- Observe the special torque values for components manufactured from aluminum and carbon.

Torque specifications matched to the attachment parts can be found on the components and, if necessary, in the operating instructions for the respective component.

Please ask your specialist dealer for missing torque specifications.

13 Maintenance and wear



WARNING

Risk of accident and injury!

Incorrect or unauthorized assembly and maintenance work can damage your pedelec or its components.

- » Do not overestimate your technical abilities. Have assembly and maintenance work, especially the replacement of components and spare parts, carried out only by an authorized specialist dealer.
- » Never work on or modify your pedelec or its components if you do not have the necessary expertise and tools.

13.1 Wear



WARNING

Risk of accident and injury!

Excessive wear, material fatigue or loose screw connections can cause functional impairments and may lead to accidents or falls.

- » Check your pedelec regularly for wear.
- » Do not use the pedelec if you notice any cracks, distortions or changes in color.
- » Do not use the pedelec if you notice excessive wear or loose screw connections.
- » Have your pedelec checked immediately by your specialist dealer if you notice excessive wear, loose screw connections, cracks, deformation or color changes.

Your pedelec and its components are subject to wear and high stress. The materials used have different wear properties due to their composition.

Wear on components can only be assessed by your specialist dealer.

- Ask your specialist dealer for advice on components that are subject to wear.
- Check the condition of all wear parts at regular intervals.
- Clean and maintain wearing parts regularly.

13.2 Replacing components



WARNING

Risk of accident and injury!

Replacing components with incorrectly selected replacement parts may prevent the pedelec from functioning correctly.

- » Have components replaced only by your specialist dealer.
- » Have components or spare parts replaced only with original parts.

14 Information on carbon components



WARNING

Risk of accident and injury!

Material failure due to non-visible cracks or deformations after a fall or due to an overload.

- » Do not use your pedelec if you suspect damage.
- » Have carbon components checked by your specialist dealer after an overload or fall, even if they show no visible damage.
- » Have components made of aluminum, carbon or composite materials checked at regular intervals by your specialist dealer, even if they have not been subjected to overload.

NOTICE

Risk of damage!

Material damage or increased wear due to incorrect care of carbon components.

- » Avoid contact of carbon components with grease and oil.

For components such as frames, forks, handlebars and wheels made of carbon, hard impacts, shocks and tensions are harmful. This has a detrimental effect on the internal structure of the material without this damage being outwardly visible.

- Make sure to get carbon components checked over by a specialist dealer at regular intervals.

BEFORE COMMISSIONING

Your specialist dealer has fully assembled the pedelec, made all adjustments according to your height and weight, and explained the operation and function of the components to you.

The pedelec is now ready to ride.

15 Getting to know your pedelec

- Take your new pedelec for a test ride away from traffic before taking longer trips with the pedelec and/or riding it in traffic.
 - Get to know the driving characteristics of your pedelec.
 - Try out the brakes by first braking at low driving speed. When you feel confident, increase the driving speed and try different braking maneuvers.
 - Shift through the different gears and familiarize yourself with their driving characteristics. You must be able to operate the gear shift system in such a way that your attention to road traffic is not impaired by shifting gears.
 - Make sure that the adjusted seating position is comfortable even during longer rides and that you can safely operate the brake lever and controls on the handlebars while riding.
- Run in the disc brakes if necessary
> Chap. 25.4 "Running in disc brakes" on page 56.
- If necessary, have your specialist dealer change the assignment of the brake levers if you do not want to keep the preset assignment for the front wheel or rear wheel brake.

16 Checking the pedelec before starting to cycle

Perform the checks described here before each trip.

- Before starting to cycle, check that the components listed below are in good working order, free of play and undamaged.
- Contact your specialist dealer to have the relevant component replaced if you find that:
 - the function of the component is impaired,
 - the component is damaged,
 - the component shows excessive signs of wear.

Brakes:

- Check one after the other whether the front and rear wheel lock securely when you pull the respective brake lever.

Gear shift system:

- Lift the rear pedelec part so that the rear wheel is movable and set the rear wheel slightly in motion using the pedals.
- Shift through all gears: Switching must be easy; there should be no blockages or unusual noises.

Frame, fork and seat post:

- Check the components for damage and signs of wear such as cracks, deformation or color changes (visual inspection).

Quick-release components:

- Check that the quick-releases are securely fastened and locked.
- Check whether the pretension of the quick-releases is sufficiently tight.

Screw and plug connections

- Check whether the screw and plug connections are securely closed (visual inspection).

Pedal drive:

- Lift the rear pedelec part so that the rear wheel is movable and set the rear wheel in motion using the pedals.
- Check whether the pedal mechanism functions smoothly and is secured correctly.

Handlebars and handlebar stem:

- Check that the handlebars and handlebar stem are firmly seated in their respective mounts and do not move within them.
- Check the components for damage and signs of wear such as cracks, deformation or color changes (visual inspection).

Wheels:

- Check whether the tire pressure is sufficient.
- Check whether there are any cracks or foreign objects on the tires.
- Check the rims for damage and signs of wear such as cracks deformation or color changes (visual inspection).
- Make sure that the spokes are evenly tensioned.

Bell:

- Check the bell for function. A clear sound must be heard.

Lights:

- Check headlight and tail light for function.

Electric drive:

- Check the battery and drive for possible damage (visual inspection).
- Make sure that the battery is properly seated and that the battery lock is locked.
- Check the charge status of the battery.

17 Adjusting the optimum seating position

CAUTION

Risk of injury!

An incorrect seating position can cause muscle tension and joint pain. If you have limited access to the controls on the handlebars due to an incorrectly adjusted sitting position, the risk of accidents increases.

» Have your specialist dealer adjust the seating position correctly if you are unsure.

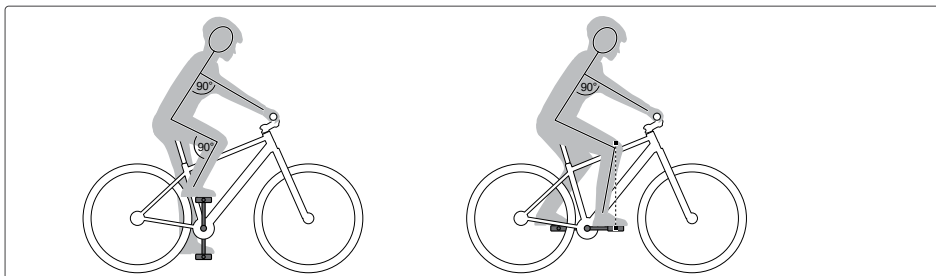


Fig. 2: Reference points for an optimum seating position

Professional measurement of body dimensions and proportions and appropriate adjustment of the pedelec geometry by your specialist dealer are recommended.

Various factors can play a role in setting the optimum seating position, e.g.:

- the height of the cyclist,
- the frame size and geometry of the pedelec,
- the settings of the saddle and handlebars,
- if applicable, the conditions of use (e.g. in the case of predominant use for sporting purposes).

Orientation points for adjusting the optimum sitting position are as follows:

- Arm and knee (upper leg) angles are 90° when one pedal is up. Your lower leg is slightly bent.
- Your knee is above the axis of the front pedal when one pedal is in front.
- Your arms are relaxed and slightly bent outwards.
- Your back is not vertical in relation to the seat post.

Adjust the saddle and handlebars to achieve the ideal sitting position for your needs.

- > Chap. 32 "Adjusting the saddle" on page 70,
- > Chap. 34 "Handlebar settings" on page 74.

PEDAL DRIVE

18 General information

The term "pedal drive" refers to the process, or the associated assembly, with which the pedelec is basically (manually) driven.

The power applied when pedaling is transferred to a wheel via the chain (chain drive). This wheel, driven in this way, in turn sets your pedelec in motion as a whole.

i INFORMATION

As a rule, the driven wheel is the rear wheel.

19 Chain drive

19.1 Functionality and handling

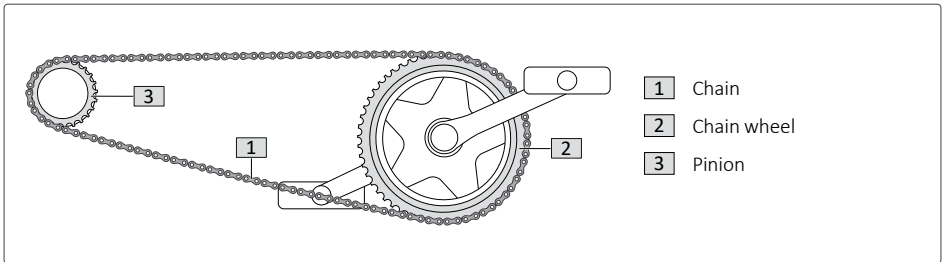


Fig. 3: Chain drive components

The chain of your pedelec runs over two sprockets whose teeth each engage in the free openings of the individual chain links that make up the chain.

The cogwheel at the level of the pedals, which is set in rotation during pedaling, is called a chain wheel. The rotation of the chain wheel is transmitted via the chain to the so-called pinion on the wheel axle. With the help of the rotating pinion, the impeller also rotates, which drives your pedelec as a whole and sets it in motion.

i INFORMATION

It is basically possible to open a chain and then close it again. To achieve the optimum chain length, individual chain links can be inserted or removed.

19.2 Wear and maintenance

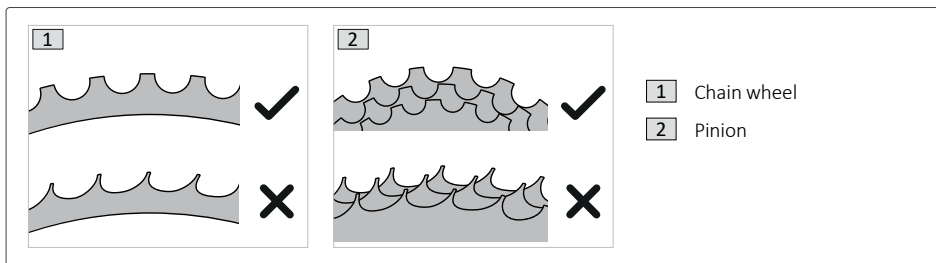


Fig. 4: Possible signs of wear on chain drive components

Chain wheel and pinion

If the teeth on the chain wheel and/or pinion are worn due to material abrasion, the chain is guided less reliably over the corresponding sprocket and can easily jump off it.

Chain or chain links

When the chain links are worn due to material abrasion, the free openings to accommodate the teeth widen. As a result, the chain is guided less reliably over the corresponding sprocket and can easily jump off it. The impression may arise that the chain has widened.

Check chain wheels, pinions and chain regularly for signs of wear.

1. Contact your specialist dealer to have worn chain wheels or pinions replaced.
 - Contact your specialist dealer to have the chain correctly adjusted or replaced if you have the impression that the chain has widened or if you notice signs of wear on the chain links.

19.3 Cleaning and care

Keep the components of the chain drive free of dirt or clean the components regularly to avoid a loss of function of your chain drive.

- Clean the chain using a clean cloth with a dab of oil applied, if required.
- Clean the gears with a soft brush if necessary.
- Grease the chain with universal oil:
 - after you have cleaned the chain,
 - if the chain has become (excessively) wet,
 - regularly about every 15 operating hours.
- Wipe up any excess oil with a clean cloth.
- Contact your specialist dealer if components of the chain drive show more persistent soiling or if you notice that components of the chain drive are damaged.

SPECIAL FEATURES OF THE ELECTRIC DRIVE

i INFORMATION

This section provides information that you need to consider for a pedelec as opposed to a conventional bicycle.

Detailed descriptions of the model-specific electric drive and its components including all relevant details, as well as the model-specific safety and warning instructions, can be found in the separate manufacturer's instructions for the electric drive.

- In addition to these instructions for the pedelec, you must also observe the separate manufacturer's instructions for the e-drive.

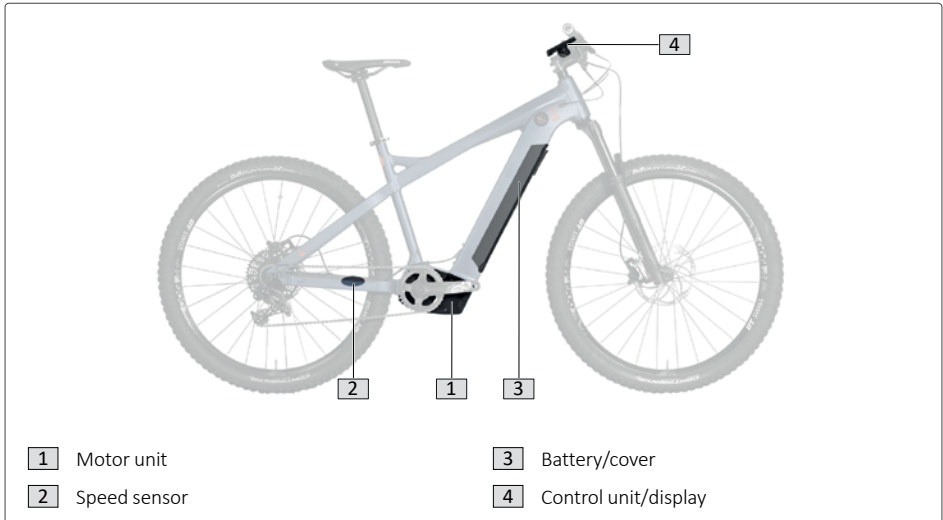
20 General information/components

Fig. 5: Electric drive components on the pedelec

Pedelecs – unlike conventional bicycles – have an electric assist motor that helps the cyclist propel the pedelec or relieves the rider when pedaling.

In this manual, the term “electric drive” is used to refer to the components used to operate and control the electric motor assistance system. This includes:

- the auxiliary electric motor (as a motor unit),
- the battery (for the power supply of the electric auxiliary motor),
- the charging socket (for charging the battery on the pedelec)
- the charger (for charging the battery),
- the control unit (for operation/control of the e-drive),
- the display (for showing driving parameters, setting options, etc.).

Due to the additional components of the electric drive, a pedelec differs fundamentally in several respects from a conventional bicycle without an electric drive.

- The significantly higher weight of a pedelec and the correspondingly different weight distribution have an effect on the driving behavior.
 - The electric drive significantly influences the braking behavior.
 - Due to the higher braking forces, the wear of the brake components can be more pronounced on a pedelec.
 - You are likely to travel at a higher average speed on a pedelec and you may dare to take more challenging routes.
- Be sure to familiarize yourself with your pedelec when using it for the first time.
 - Do not underestimate the basic differences between a bike without an electric drive and a pedelec, especially if you have no previous experience with pedelecs > Chap. 15 "Getting to know your pedelec" on page 33.

21 Information on use

i INFORMATION

The operating steps for use are described in detail in the separate manufacturer's instructions for the electric drive.

In it you will find, among other things, the information:

- to operate the e-drive
- (e.g. on how to switch the electric drive on and off, adjust/change the pedal assistance strength, make settings, etc.),
- for handling the battery,
- (e.g. how to insert/remove the battery from the pedelec, how to charge the battery, charging times, protective devices, etc.).
- on the indications on the display and/or control element(s),
- on the warning and indicator lights (e.g. on the battery, display).

i INFORMATION

Depending on the model, the pedelec has a charging socket for charging the battery on the pedelec.

- Always close the cover of the charging socket to prevent water or dirt from entering. The ingress of water or dirt can lead to malfunctions.

21.1 Functionality

When the electric drive of your pedelec is switched on, the electric assist motor assists you in propelling the pedelec. From a speed of 25 km/h, the electric pedal assistance switches off so that you can pedal without assistance from the motor using only your own muscle power. The speed is determined with the help of speed sensor and spoke magnet on the rear wheel.

How much pedaling assistance you get from the motor depends on how hard you pedal yourself. If you do not pedal, there is no assistance from the electric drive.

The only exception to this is the "push assist" function: If you activate the push assist, the motor will assist you in pushing the pedelec up to a speed of 6 km/h. The push assist must explicitly not be used to propel the pedelec when a cyclist is sitting on the pedelec, but only for pushing. Your pedelec must be held securely with both hands and all wheels must be in contact with the ground.

21.2 Removing and inserting the battery

 DANGER**Risk of interference with medical equipment!**

Magnets can interfere with the function of pacemakers and implanted defibrillators.

- » Keep batteries/chargers with magnetic connections and magnetic battery covers away from pacemakers and implanted defibrillators.
- » Warn wearers of such devices not to approach magnets.

 CAUTION**Burn hazard!**

The motor, battery and battery cover can become very hot during operation.

- » Always let the components cool down first before working on or near them.

 CAUTION**Risk of injury!**

If the drive system is started up while you are working on the pedelec, you may be injured.

- » Always switch off the battery and the drive system before inserting the battery into or removing it from the holder.

NOTICE**Risk of damage!**

Improper handling can lead to damage.

- » Be careful not to damage the fixation on the bottom of the battery.
- » Only place the battery on clean surfaces.
- » In particular, avoid soiling the charging socket and the contacts of the rechargeable battery, e.g. by sand or soil.

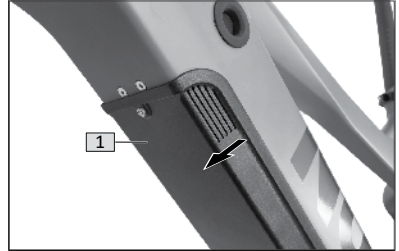
21.2.1 Removing the battery (Brose Battery 630)

NOTICE**Risk of damage!**

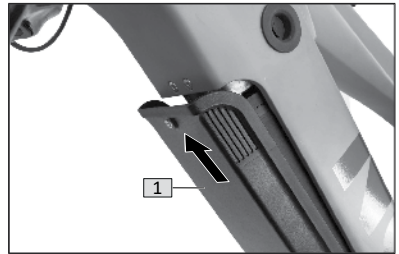
If you remove the battery while the drive system is switched on, the battery may become damaged.

» Always switch off the drive system first before removing the battery.

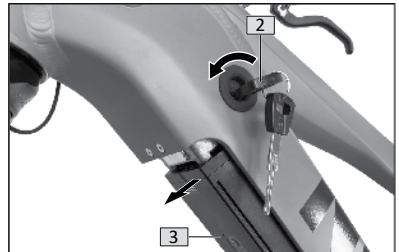
1. Press the battery cover (1) firmly forward on one side until the magnet releases.



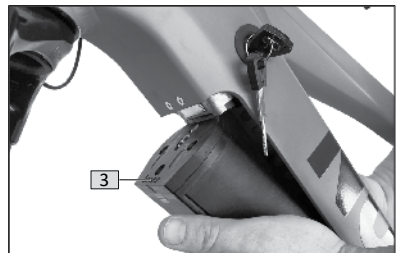
2. Remove the battery cover (1) upwards.



3. Insert the key (2) into the battery lock.
4. Turn the key (2) counterclockwise until the battery lock unlocks.
The battery (3) slides out of the holder a little.



5. Carefully remove the battery (3) from the frame with both hands facing forward.



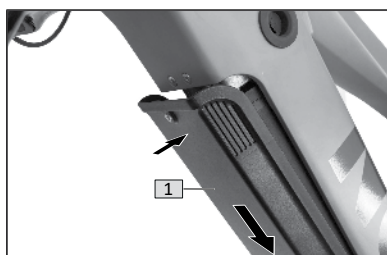
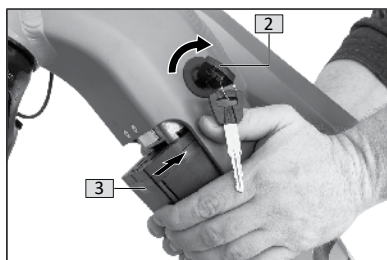
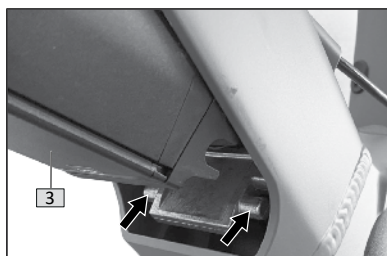
21.2.2 Inserting the battery (Brose Battery 630)

NOTICE**Risk of damage!**

If the battery is not locked correctly, the battery lock may open and the battery may fall out of the holder.

» Only when the key can be removed is the lock bolt properly engaged and the battery secured.

1. Insert the key into the battery lock, otherwise the battery lock cannot engage automatically.
2. Place the battery (3) with the means of fixation in the lower holder in the frame. Make sure that the means of fixation is correctly seated in the holder on the frame.
3. Press the battery (3) back into the down tube with both hands. The battery (3) must engage audibly.
4. Then lock the battery with the key (2).
5. Check the battery (3) for a tight fit.
6. Remove the key (2).
7. Install the battery cover (1).
8. Check the battery cover (1) for a tight fit.



21.2.3 Removing the battery (BMZ UR-V10)

NOTICE**Risk of damage!**

If you remove the battery while the drive system is switched on, the battery may become damaged.

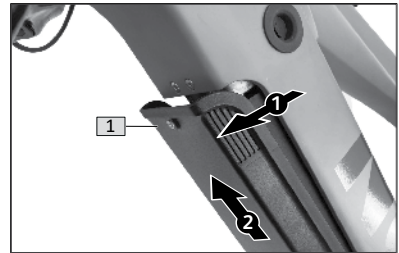
» Always switch off the drive system first before removing the battery.

NOTICE**Risk of damage!**

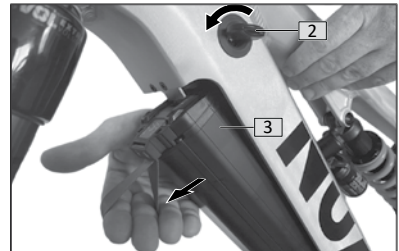
The pull tab on the battery is not suitable for carrying the battery. Due to the weight of the battery, the pull tab can tear during carrying and the battery can fall.

» Only use the pull tab to check the battery locking mechanism and to remove the battery.

1. Press the battery cover (1) firmly forward on one side until the magnet releases.
2. Remove the battery cover (1) upwards.



3. Insert the key (2) into the battery lock.
4. Turn the key (2) counterclockwise until the battery lock unlocks. Use the pull tab to safely remove the battery (3) from the holder.



5. Carefully remove the battery (3) from the frame with both hands facing forward.



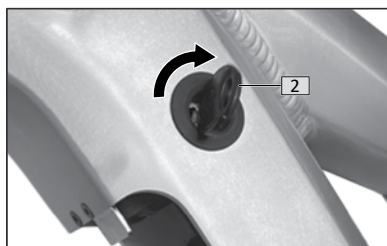
21.2.4 Inserting the battery (BMZ UR-V10)

⚠ CAUTION**Risk of injury and damage!**

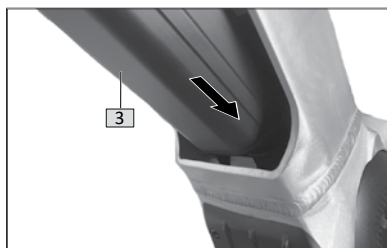
If the battery is not correctly engaged in the holder in the pedelec frame with the lock when it is inserted, it can come loose from the holder and fall out of the pedelec frame.

» Make sure that the battery is correctly seated by pulling firmly on the pull tab after each insertion.

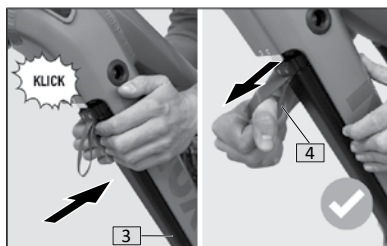
1. Insert the key (2) into the battery lock.
2. Turn the key to the vertical position, otherwise the battery lock cannot engage automatically.



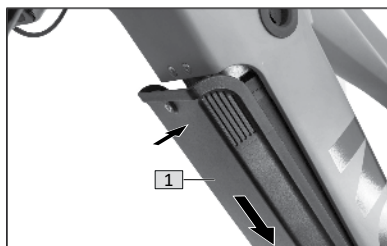
3. Place the battery (3) with the means of fixation in the lower holder in the frame.



4. Press the battery (3) back into the holder with both hands. The battery (3) must engage audibly.
5. Check the battery (3) for a tight fit by pulling firmly on the pull tab (4).



6. Remove the key (2).
7. Install the battery cover (1).
8. Check the battery cover (1) for a tight fit.



21.2.5 Removing the battery (FAZUA ENERGY 430)

NOTICE**Risk of damage!**

If you remove the battery while the drive system is switched on, the battery may become damaged.

» Always switch off the drive system first before removing the battery.

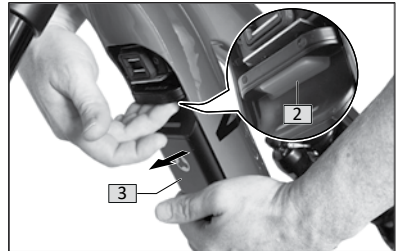
1. Unlock the FIDLOCK PINCLIP fastener on the battery cover (1) in the direction of the arrow.



2. Remove the battery cover (1) forwards.



3. Secure the battery (3) with one hand. Grasp it in the cutout on the battery (3).
4. Press the elastic pushbutton (2) in to the maximum limit stop.
5. Keep the pushbutton (2) pressed and swing the battery (3) forward out of the battery holder.



6. Remove the battery (3) from the interface in the down tube.



21.2.6 Removing the battery (FAZUA ENERGY 430)

NOTICE**Risk of damage!**

If the battery is not locked correctly, the battery lock may open and the battery may fall out of the holder.

» The battery is only correctly locked and secured when the battery and battery cover are audibly engaged.

1. Check the battery (3) for visible damage before insertion (visual inspection).
2. Place the battery (3) bottom first on the corresponding interface in the down tube.



3. Swing the upper end of the battery (3) into the down tube.

The battery (3) is automatically locked in place when the two interfaces on the battery (3) and frame are correctly interlocked and the battery (3) is fully swiveled into the designated holder on the down tube.

An audible click is heard when the device engages. Contact an authorized specialist if the battery (3) cannot be inserted / if the battery (3) does not (audibly) engage in the down tube.



4. Place the battery cover (1) on the down tube from below until the FIDLOCK PINCLIP lock audibly engages (clicks).
5. Check the battery cover (1) for a tight fit.



21.3 Driving without an electric drive

You can use your pedelec as a conventional bicycle without e-drive without any problems if, for example, the battery charge is used up during a longer tour, if you deliberately switch off the electric drive or select the support level "none".

If you use your pedelec **without the battery inserted***, make sure that the battery holder or the connection contacts are protected against dirt and damage, e.g. by a suitable cover.

21.4 Range/trip planning

How long or far you can ride your pedelec before the battery charge is depleted depends on several factors. Relevant here is, among other things:

- which assistance level is set,
 - at what (cycling) speed you are moving,
 - the cycling style.
 - the type of tire and the set tire pressure,
 - the road conditions on the selected route,
 - the weather conditions,
 - the total weight of the pedelec, cyclist and luggage,
 - the condition and age of the rechargeable battery.
- Familiarize yourself with your pedelec gradually and away from roads and heavy traffic.
 - Test the maximum range of your pedelec under different external conditions before planning longer trips and calculate carefully. You cannot determine the exact range of your pedelec either before or during a tour.

21.5 Storage and operating temperatures

- When using and storing your pedelec, pay attention to the operating and storage temperatures for the components of the electric drive. Do not park your pedelec in the blazing sun with the battery inserted, for example, as the battery can be damaged by extreme temperatures and may even explode.

* Pedelecs with Sachs or Brose drive from model year 2022 may only be operated with the battery inserted.

21.6 Cleaning and care

DANGER

Risk of electric shock and short circuit!

There is a risk of electric shock and short circuit during cleaning and maintenance work. Water can penetrate the electrical system or the drive and damage the pedelec.

- » Disconnect the mains plug of the charger from the socket.
- » Remove the battery.
- » Do not clean components of the e-drive with running water or other liquids.
- » Do not use a steam jet, high-pressure cleaner or water jet.
- » Do not allow the charger and the battery or the connection contacts for the battery on the pedelec to come into contact with water or other liquids.

CAUTION

Burn hazard!

The motor and battery can heat up considerably during operation.

- » Always let the components cool down first before working on or near them.

Keep the components of the e-drive free from contamination or clean the components regularly.

- Clean the components with a damp cloth.
- Use a mild detergent.
- Avoid moisture or dirt getting to the contacts.

BRAKES

22 General information

Your pedelec is equipped with at least two brakes that act independently on the front wheel (front wheel brake) or on the rear wheel (rear wheel brake).

With the help of the brakes, you can slow down or stop your pedelec using a brake that brakes the corresponding wheel, which in turn brakes your pedelec as a whole.

You operate the brake for the respective wheel using a brake lever mounted on the handlebar.

23 Brake lever configuration

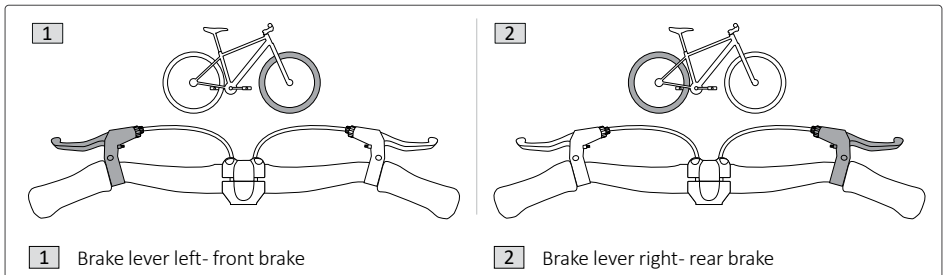


Fig. 6: Brake lever assignment

The brake lever assignment shown here applies to pedelecs that have two brake levers on the handlebars.

- Familiarize yourself with the brake lever arrangement before starting to cycle.
- Consult your specialist dealer if you wish to change the brake lever configuration.

24 Warnings for using the brakes

The following warnings always apply to the use of the brakes, regardless of the type or types of brakes with which your pedelec is equipped.



WARNING

Risk of accident and injury!

When you cycle on icy, wet, slippery or dirty roads, the tires have less grip. This lack of grip reduces the braking power, your stopping distance increases and your pedelec can swing out during sudden braking.

» Always adapt both your cycling style and speed to current weather conditions and road characteristics.



WARNING

Risk of accident and injury!

If you brake the front wheel abruptly, you could roll over or fall with the pedelec.

» Use the front brake very carefully when cycling at high speed.

» Always brake simultaneously with front and rear brakes. Especially when cycling at high speed, make sure that your pedelec is not braked abruptly with the front brake alone.

» Adjust the intensity with which you brake your pedelec – i.e. the braking force – according to the cycling situation.



WARNING

Risk of accident and injury!

If you brake the rear wheel abruptly during certain riding maneuvers, it may lock and you may fall.

» Use the rear brake carefully when cornering.

**WARNING****Risk of accident and injury!**

If your pedelec is equipped with unsuitable or incorrect brake pads, the braking power may be too low or too strong or the brake may lose its function almost completely and fail completely.

» Have any brake components (e.g. in case of repair) replaced exclusively with original spare parts.

**WARNING****Risk of accident and injury!**

If your pedelec is equipped with a so-called power modulator, this modifies the braking power of the front brake. If the power modulator is set incorrectly or braking with power modulator is unfamiliar to you, the risk of losing control and/or falling during braking increases.

» Familiarize yourself with the function and operation of the brake and power modulator off the road.

25 Disc brake

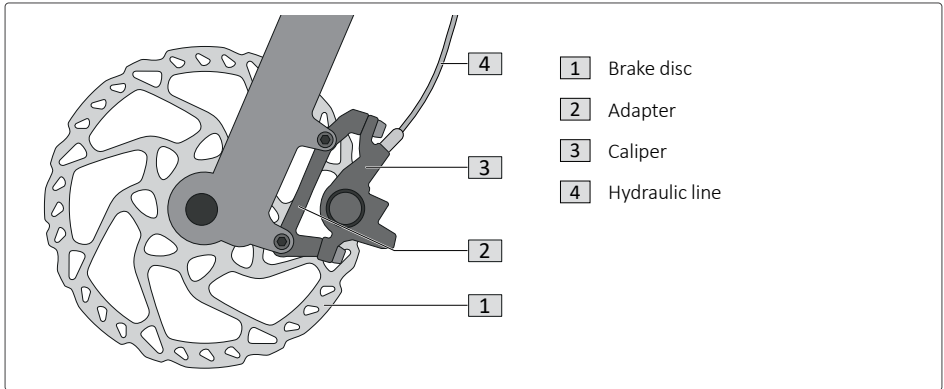


Fig. 7: Disc brake components

25.1 Functionality

The braking effect of a disc brake is created by braking the brake disc when you pull the brake lever.

The braking of the brake disc takes over the brake caliper attached to the fork or to the chainstays. The brake caliper contains brake pads that are pressed against the brake disc from both sides when the brake lever is pulled.

The power transmission is usually hydraulic. When the brake lever is pulled, pressure is built up on the brake fluid in the hydraulic line. The brake fluid transmits this pressure to the brake caliper and presses the brake pads against the brake disc – the wheel is braked.

Depending on the model, the transfer of braking force from the brake lever to the hydraulically controlled brake caliper can also take place mechanically by means of a brake cable.

25.2 Warnings for the use of disc brakes

**WARNING****Risk of accident and injury!**

If components of the disc brake wear out without you noticing it, a loss of function of the disc brake can result.

- » Contact your specialist dealer regularly to have your disc brake(s) checked and, if necessary, worn components replaced.

**WARNING****Risk of injury from rotating brake discs and sharp edges!**

Brake discs have sharp edges and can lead to serious cuts. Rotating brake discs can sever body parts.

- » Do not reach into a rotating brake disc.
- » Wear protective gloves when working on or near the brake disc.

**WARNING****Risk of accident and injury!**

The braking force of the hydraulic braking system decreases.

- » Have the brake fluid checked and adjusted regularly by your specialist dealer.

**CAUTION****Risk of burns from contact with hot brake discs!**

Brake discs can become very hot due to solar radiation and during operation, especially when the brake is used intensively (e.g. when cycling downhill or during emergency braking).

- » Always let the brake disc cool down first before working on or near the brake disc.

NOTICE

Risk of damage!

Depending on the intensity of use, the brake pads of the disc brake can “glaze” over time, possibly reducing the braking effect and causing annoying noises (squeaking). Glazing can also occur if you make a full braking with new brake pads. When installing or removing the corresponding wheel, you can also damage the components of the disc brake.

- » When descending longer gradients, regularly brake abruptly and relatively hard to release glazed brake pads. Always make sure that you can perform the cycling or braking maneuver in question without risk.
- » Brake your disc brake away from road traffic before using your pedelec regularly when the disc brake and/or your pedelec is new or after the brake pads have been replaced > Chap. 25.4 "Running in disc brakes" on page 56.
- » Always contact your specialist dealer to remove or install a wheel with a disc brake fitted to its hub.

25.3 Operating the disc brake



INFORMATION

If you brake almost simultaneously and evenly with the front and rear brakes, you can usually control your pedelec better when braking and reduce your braking distance.

- Pull the brake lever towards the handlebar grip to brake the corresponding wheel.
 - Pull the brake lever harder or to the maximum to increase or maximize the braking force (emergency braking).
 - Pull the brake lever less strongly or release it to reduce the braking force or to stop braking.

25.4 Running in disc brakes

Run in a new disc brake or a disc brake equipped with new brake pads before you use your pedelec regularly.

- In the process, make sure that:
 - the disc brake is run in away from road traffic,
 - any additional manufacturer's instructions for running in your disc brake are followed,
 - you always remain seated on the saddle during the braking process for safety reasons and
 - Do not bring your pedelec to a complete stop during braking, but only reduce the speed to walking speed as described below.
- Accelerate your pedelec to a speed of about 24 km/h and then brake strongly and evenly down to walking speed. The wheels may not lock in the process!
- Repeat this process up to 50 times. You will notice an increasing braking effect.
- Allow the brake discs and brake pads to cool down after braking or before the first journey.
- After engaging the disc brake, check the grip width and adjust it if necessary:
- The distance between the handlebar grip and the brake lever must be at least 1 cm and you must be able to operate the brake lever safely while riding without taking your hand off the handlebar.
- Contact your specialist dealer if the effect of your disc brake is insufficient after braking in or if you hear unusual noises when braking.

25.5 Checking the disc brake

- Make sure that the brake lever and brake components are securely fastened.
 - Tighten loose screw connections if necessary.
 - Contact your specialist dealer to have the brake adjusted if you notice or have the impression that components have become loose.
- Make sure that the brake lever is mounted and aligned on the handlebar grip so that you can operate it comfortably while cycling.
 - If necessary, loosen the fastening of the brake lever and correct the alignment. Then tighten the brake lever fastening again.
- Check the distance between the fully tightened brake lever and the handlebar grip: The distance must be at least 1 cm.
 - Contact your specialist dealer to have the brake adjusted if the gap is less than 1 cm.
- Check whether the wheel locks when the corresponding brake lever is tightened.
 - Contact your specialist dealer to have the brake adjusted if the wheel is not braked or blocked sufficiently when the brake lever is tightened.
- Check how the brake pads move toward and away from the brake disc when you pull and then release the brake lever: The brake pads should move evenly and symmetrically.
- Check the wear on the brake pads: The brake pads should wear or deteriorate equally on both sides of the brake disc.
 - Contact your specialist dealer to have the brake checked if the brake pads wear unevenly or at an angle.
- Check the visible range of the hydraulic lines for damage. Pull the brake lever as far as possible towards the handlebar grip and check whether brake fluid leaks from the hydraulic lines or the connection points to other components.
 - Contact your specialist dealer to have the brake checked and, if necessary, serviced and readjusted correctly if you determine the hydraulic lines are damaged or if brake fluid leaks out.

25.6 Settings



WARNING

Risk of accident and injury!

Loss of braking power due to an improperly adjusted brake system.

» Have your specialist dealer make adjustments to the brake system.

The adjustment of the brake system requires expertise.

If you do not have the necessary expertise or the required tools, contact your specialist dealer.

25.6.1 Adjusting the brake lever

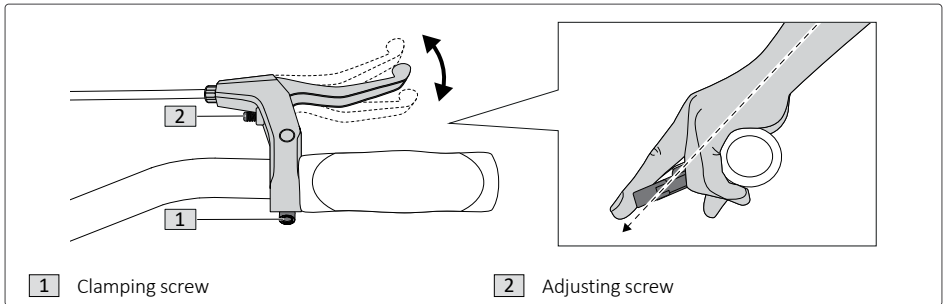


Fig. 8: Adjusting the brake lever

The position and reach of the brake lever should be aligned with the rider in order to achieve the optimum braking effect at all times.

Brake lever position

1. Loosen the clamping screw.
2. Adjust the position.
3. Tighten the clamping screw.

Grip width of brake lever

Increase the grip width:

- Turn the adjusting screw clockwise.

Reduce the grip width:

- Turn the adjusting screw counterclockwise.

25.7 Wear and maintenance

According to the mode of operation and design of the disc brake, the following components in particular are subject to wear:

- Brake pads,
 - Brake discs,
 - Brake fluid (hydraulics),
 - Any disc brake hydraulic lines, if present.
- Check the brake pads, the brake discs and, if necessary, the hydraulic lines regularly for signs of wear.
 - Contact your specialist dealer:
 - if you are unsure or do not know how to recognize or comply with the wear limit of the components.
 - in order to have the hydraulics of your disc brake checked and serviced if necessary.
 - in order to have wear parts replaced and the disc brake subsequently readjusted.



INFORMATION

Have components or wear and spare parts replaced only with original parts.

25.8 Cleaning and care

Keep the components of the disc brake free of dirt or clean the components regularly to avoid a loss of function or a reduction in the braking performance of your disc brake.

- Clean the components with a damp cloth.
- In particular, keep the brake discs free of (coarser) dirt by washing them regularly using warm water.

GEAR SHIFT SYSTEM

26 General information

**WARNING****Risk of accident and injury!**

Due to inattention in road traffic.

- » Familiarize yourself with the function of the gear shift before your first ride.
- » Shift through the different gears to familiarize yourself with their driving characteristics.
- » Operate the gear shift only when it does not impair your attention to road traffic.
- » Stop if you cannot operate the gear shift safely, e.g. in the event of malfunctions.

NOTICE**Risk of damage!**

Damage to the gear shift caused by improper use.

- » Do not pedal with force when changing gears.
- » Do not pedal backwards when shifting.
- » Downshift in time before going uphill.
- » Switch only in acceleration-free/load-free phases.

With the gear shift, the pedaling rate and the amount of power required to propel the pedelec can be adjusted according to the riding situation. A model-dependent switching mechanism acts here, which you control with the associated control(s).

27 Control element

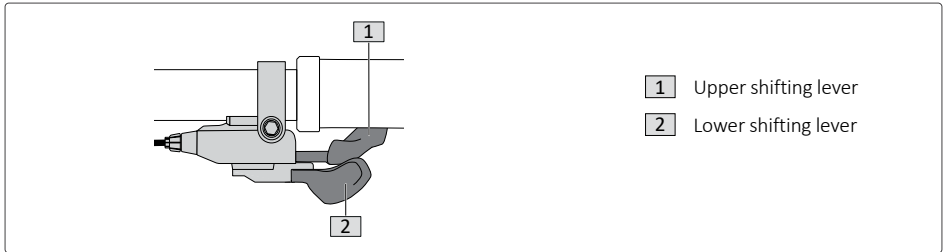


Fig. 9: Gear shift control

28 Derailleur gears

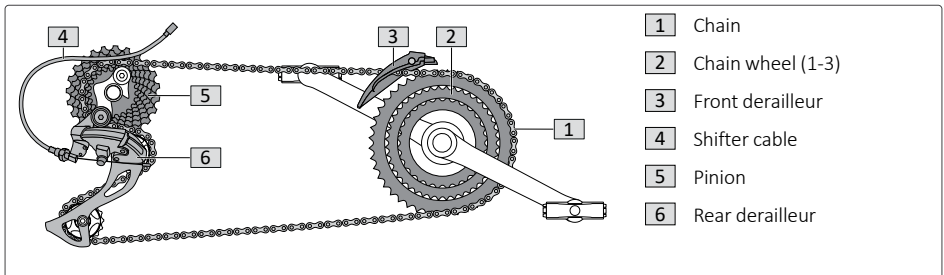


Fig. 10: Derailleur gear components

28.1 Functionality

Depending on the model, a pedelec with derailleur gear has 1-3 different sized chain wheels at the height of the pedals and 7-12 different sized pinions on the rear hub.

The different gears result from the different chain wheel/pinion combinations over which the chain can run ("gear ratio" of the chain).

High gear ratio (high effort/low pedaling rate):

If the chain runs over one of the smaller pinions, pedaling becomes more difficult, but the pedelec covers a greater distance per pedal revolution.

Low gear ratio (low effort/high pedaling rate):

If the chain runs over one of the larger pinions, pedaling becomes easier, but the pedelec covers a shorter distance per pedal revolution.

The setting of the desired gear is controlled with 1 or 2 control elements on the handlebars, depending on the equipment.

28.2 Operating the derailleur gear

Control element for the front derailleur:

The front derailleur pushes the chain onto the desired chain wheel during shifting.

For uphill routes, a small chain wheel is recommended, while for flat or downhill routes, a larger chain wheel is recommended.

Control element for the rear derailleur:

The rear derailleur pushes the chain onto the desired pinion during shifting.

> Chap. 28.1 "Functionality" on page 61.

Operation:

- Always select the optimum gear and maintain a pedaling rate of 60-100 rpm.
- Use low gears for starting.
- As soon as the pedaling rate becomes too high, shift to the next higher gear.
- As soon as the pedaling rate becomes too low, shift to the next lower gear.

28.3 Check the derailleur gear

- Check the derailleur gear components regularly to avoid loss of function and prevent unnecessary wear.
 - Make sure that the chain, chain wheels, pinions, front and rear derailleurs and shift cables are undamaged.
 - Make sure that the chain and rear derailleur have sufficient distance to the rear wheel or spokes.
 - Make sure the rear derailleur is perpendicular to the pinions and not bent.
 - Check the chain tension: The chain may not sag. If you carefully push the rear derailleur forward (in the direction of the pedals), it should independently move back to its original position when you let go.
 - Lift the rear pedelec part so that the rear wheel is movable and set the rear wheel slightly in motion using the pedals.
 - Shift through all gears: Switching must be easy; there should be no blockages or unusual noises.
- Contact your specialist dealer:
 - to replace damaged or worn components of the derailleur gear if necessary and then have it readjusted.
 - to have the derailleur checked and, if necessary, adjusted if you notice irregularities during your test.

28.4 Wear and maintenance

With regular maintenance and care, the components of derailleur gears usually show little signs of wear.

- Note that the chain will wear faster if the angle at which the chain runs is too steep (for example, if the chain runs over the smallest chain wheel and the smallest pinion). Avoid such combinations to prevent unnecessary wear of the chain.
- Check the derailleur gears regularly
> Chap. 28.3 "Check the derailleur gear" on page 62.
- Consult your specialist dealer to service the derailleur gear if:
 - unusual noises occur when shifting gears,
 - Problems occur during switching,
 - the chain repeatedly jumps off.

28.5 Cleaning and care

- Keep the components of the derailleur gear free of dirt or clean the components regularly to avoid a loss of function of your derailleur gear.
 - Clean the controls with a damp cloth.
 - Remove coarse dirt from chain wheels and pinions, as well as front and rear derailleurs, with a slightly damp cloth or soft brush.
 - Oil the chain wheels, pinions and front derailleur after cleaning with universal oil. Afterwards, wipe up any excess oil with a clean cloth.

WHEELS

29 General information

**WARNING****Risk of accident and injury!**

If the wheels do not run centered (concentricity), but instead, for example, oscillate, there is an increased risk of accidents and injuries, the rim can break, rim brakes can block.

» Contact your specialist dealer to have the wheels aligned if they are not running centered or are oscillating.

**WARNING****Risk of accident and injury!**

Dirty or missing reflectors impair your visibility in road traffic. There is an increased risk of accidents.

» Remove dirt from the reflectors and replace worn or missing reflectors immediately.

**WARNING****Risk of accident and injury!**

If damaged tires burst while driving, there is an increased risk of accidents and injuries.

» Check the tires regularly for signs of damage and wear.
» Do not ride the pedelec if the tires are not intact.

**WARNING****Risk of accident and injury!**

Cycling with incorrect tire pressure (too high or too low) increases the risk of accidents and injuries.

» Observe the specifications for maximum and minimum tire pressure for your tires and check the tire pressure before every ride.
» Contact your specialist dealer if you are uncertain about the correct tire pressure for your tires.

NOTICE

Risk of damage!

The function of the pedelec components can be impaired or damaged if the tires are inappropriate.

» Contact your specialist dealer if you have questions about tire size or are unsure.

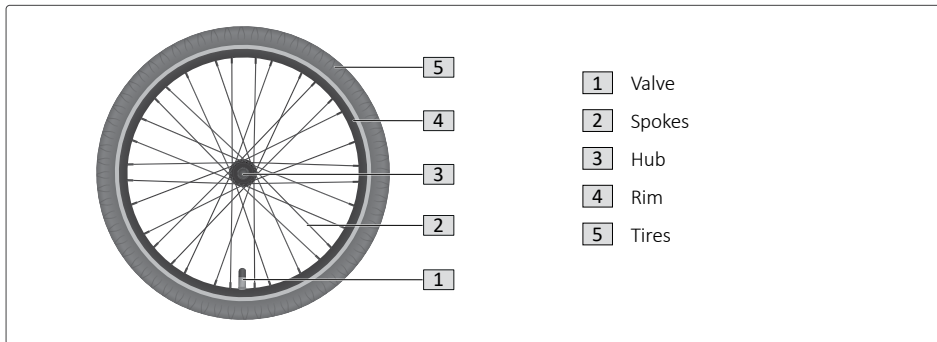


Fig. 11: Wheels

When cycling, the wheels are stressed by the weight of the cyclist and unevenness on the road.

- After run-in, contact your specialist dealer to have the wheels checked and recentered if necessary; depending on which event takes place first, at the latest after:
 - the first 300 km cycled,
 - 15 hours of usage,
 - 3 months.
- Check the wheels for proper condition every six months:
 - The wheels must be free of damage and correctly aligned.

29.1 Rims and spokes

NOTICE

Risk of damage!

When operating in winter, road salt on the roads can cause corrosion on the spoke nipples, spokes and rims.

» Clean spoke nipples, spokes and rims after each ride.

Correct and uniform tensioning of the rims stabilizes the concentricity of the wheels. If the concentricity of a wheel is compromised, this jeopardizes the stability of the rim, which may break as a result.

If you ride over obstacles (e.g. a curb) quickly or if a spoke nipple comes loose, this can affect the tension of the spokes.

29.2 Tire types

The tire and rim are usually not air-tight themselves, but contain a bicycle tube that is filled with air via the valve. The only exceptions here are tubular tires and UST tires, which are airtight systems that do not contain an additional bicycle tube (tubeless). When using tubular or UST tires and rims, always follow the appropriate manufacturer's information and instructions for installation, maintenance and care.

An indication of the tire size (mm or ") is usually located on the tire sidewall.

29.3 Valve types

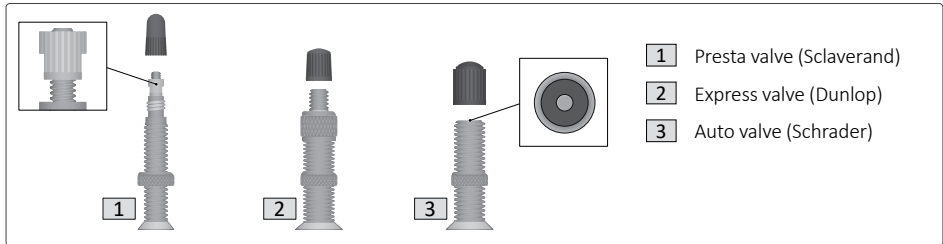


Fig. 12: Valve types

Depending on which valve type the tire or tube has, you will need the appropriate valve plug or adapter to fill the tire with air.

- If necessary, ask your specialist dealer which valve plug or adapter you need for your tire.

Presta valve (Sclaverand)

- To open the valve, turn the valve screw upwards (counterclockwise).
- To release air from the tire, depress the valve screw (without the valve plug/adapter attached).
- To close the valve, turn the valve screw downwards (clockwise).

Express valve (Dunlop)

- To release air from the tire, turn the upper valve nut upwards (counterclockwise).
- To replace the valve insert, unscrew the upper valve nut completely (counterclockwise).
- To close the valve, turn the valve nut completely downwards (clockwise).

Auto valve (Schrader)

- To release air from the tire, push the plunger inside the valve.

29.4 Tire pressure

INFORMATION

The tire pressure affects the rolling resistance and suspension of your pedelec.

As a rule, you will find two values on your tires as a default for the maximum tire pressure.

The lower value applies to:

- Lighter cyclists,
- Cycling over uneven surfaces.

The higher value applies to:

- Heavier cyclists,
- Cycling over even surfaces.
- Check the tire pressure regularly.
 - If necessary, inflate or deflate the tire if the tire pressure does not meet specifications or is not suitable for the intended driving.

30 Pumping up tires

1. Have an air pump with a suitable valve plug/adaptor for your valve at hand.
2. Remove the protective valve from the valve.
3. Check the tire pressure with a pressure gage or an air pump with pressure indicator.
4. Inflate or deflate the tire to achieve the correct tire pressure.
5. Reattach the previously removed protective cap to the valve.
6. Then check whether the lower valve nut is screwed on correctly and tightly. If necessary, tighten them clockwise.

31 Regular inspection

- Check the tires.
 - In the process, check whether:
 - The tires are cracked or damaged.
 - The tire tread is in the correct range or the tire is already too worn and needs to be replaced.
 - Contact your specialist dealer to have damaged or worn tires replaced.
- Check the rims.
 - In the process, pay attention to whether the rims are cracked or damaged.
 - Check with your fingernail or a toothpick to see if you notice the indentations on the rim. If you do not notice these indentations, the wear limit has been reached and the rim must be replaced.
 - Contact your specialist dealer to have the wear on the rims determined.
 - Contact your specialist dealer to have damaged or worn rims replaced.
- Check the spoke tension.
 - To do so, gently squeeze two spokes at a time: the spokes must be evenly tensioned.
 - If you notice that individual spokes have become loose, contact your specialist dealer to have the spokes retightened.

SADDLE

The saddle should have a saddle shape that suits the intended use and your personal preferences and physical characteristics.

When the saddle is optimally adjusted, you can easily reach all the controls on the handlebars in a comfortable sitting position and support himself with his feet on the ground.

32 Adjusting the saddle



WARNING

Risk of accident and injury!

If you do not comply with the minimum insertion depth for the seat post, the seat post may slip, the seat post may break or/and the frame may break.

- » You absolutely must observe the minimum insertion depth for the seat post.
- » Never shorten the seat post on your own.

NOTICE

Risk of damage!

If you do not comply with any specified minimum extension height of the seat post, components on the pedelec may be damaged.

- » When adjusting the saddle height, make sure that no cables, Bowden cables, etc. conducted through the seat tube are damaged.



INFORMATION

Minimum insertion depth of the seat post

There is a mark on the seat post which generally indicates the minimum distance the seat post must be inserted into the seat tube.

If you have set the saddle height correctly, the mark for the minimum insertion depth of the seat post must no longer be visible, but must be located inside the seat tube.

Minimum seat post extension height

Depending on the model, there is an additional indication of the minimum extension height on the seat post.

The corresponding value indicates how far the seat post must protrude at least upwards from the seat tube.

32.1 Adjusting the saddle height

Clamp with quick-release

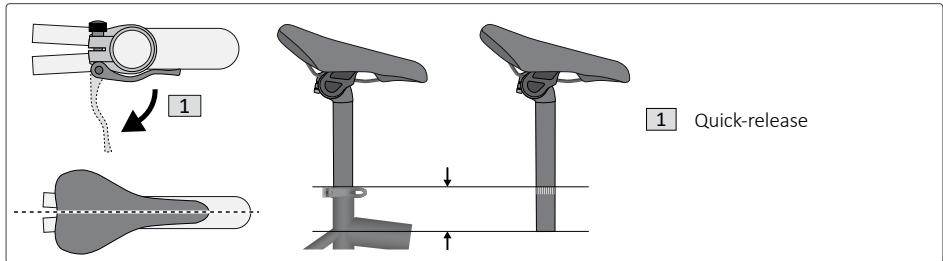


Fig. 13: Adjust saddle height (clamp with quick-release)

1. Swivel the quick-release lever outward.
2. Adjust the saddle to the desired height.
 - In the process, observe the minimum insertion depth for the seat post.
3. Align the saddle in line with the frame when you have brought the saddle to the correct height.
4. To fix the setting, swing the quick-release lever inward until it rests against the seat tube.
 - If the quick-release lever cannot be pivoted up to the seat tube, you can reduce the preload by turning the adjustment screw counterclockwise.
 - Then swing the quick-release lever inward again until it rests against the seat tube to close the seat post clamp.
5. Check if you can rotate your saddle.
 - If you can twist the saddle, increase the preload of the quick-release by turning the adjustment screw clockwise.

Clamping with clamping screw

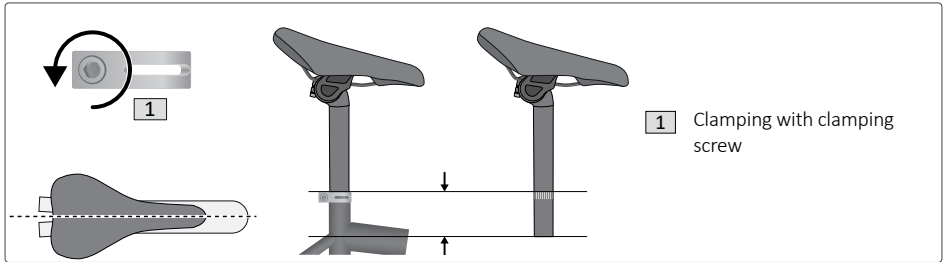


Fig. 14: Adjusting the saddle height (clamp with clamping screw)

1. Loosen the clamping screw counterclockwise until the saddle can be moved in the seat tube.
2. Adjust the seat post to the desired height.
 - In the process, observe the minimum insertion depth for the seat post.
3. Align the saddle in line with the frame when you have brought the saddle to the correct height.
4. To fix the setting, tighten the clamping screw clockwise.
 - Observe the torque of the clamping screw.
5. Check if you can rotate your saddle.
 - If you can twist the saddle, check the seat post clamp.

32.2 Adjusting the saddle position

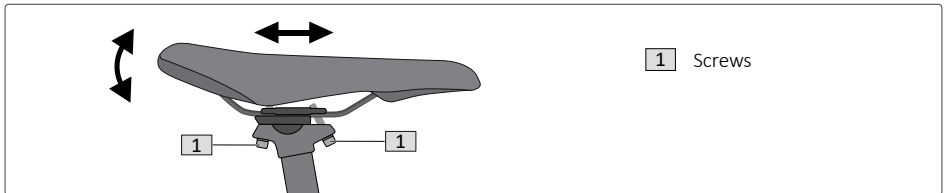


Fig. 15: Adjusting the saddle position

1. Loosen the bolts on the seat post counterclockwise.
2. Tilt and move the saddle to the desired position.
3. To fix the setting, tighten the screws on the seat post clockwise.
 - In the process, observe the torque of the screws.
4. Check whether the saddle can be moved.
 - If the saddle can be moved, contact your specialist dealer.

33 Lowerable seat post



WARNING

Risk of accident and injury!

Sudden and unexpected movements of the saddle can cause you to lose control of the pedelec.

- » Before your first ride, familiarize yourself with how the lowerable seat post works and practice using it.
- » Operate the lowerable seat post only when your attention to road traffic and terrain is not impaired.
- » Stop if you cannot safely operate the lowerable seat post.

The lowerable seat post is operated via a control lever on the handlebars.

- To move the saddle down, put your body weight on the saddle and operate the control lever.
Once the saddle is in the desired position, release the control lever.
- To move the saddle up, operate the control lever and unload the saddle.
Once the saddle is in the desired position, release the control lever.

HANDLEBARS

34 Handlebar settings

NOTICE**Risk of damage!**

In the case of a handlebar stem with external clamping, the headset bearing can be damaged if you adjust the handlebar direction improperly.

» Tighten the upper bolt on the handlebar stem with outer clamp only so that the headset bearing is fixed, but the bearing and handlebars remain free to move.

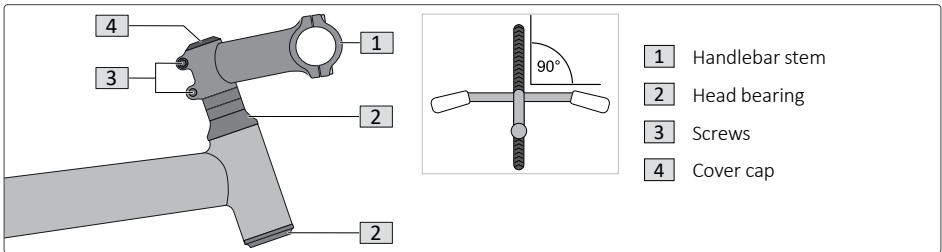


Fig. 16: Adjusting the handlebar stem (clamping with clamping screw)

1. Remove the cover cap on the top of the handlebar stem.
2. Loosen the screw underneath one turn counterclockwise.
3. Loosen the bolts on the stem clamp enough to allow the handlebars to rotate against the front wheel.
4. Adjust the headset bearing as described below.
 - Tighten the screw on the top of the handlebar stem in small increments (about $\frac{1}{8}$ turn clockwise per increment).
 - While doing so, keep the brake for the front wheel pressed.
 - If you now try to push your pedelec back and forth, the headset bearing must be fixed and have no play.
 - Lift your pedelec by the frame. If you now tilt the frame to one side, the front wheel must be movable in this position and move to the left or right by itself.
5. Align the handlebar at a 90° angle to the front wheel.
6. Tighten the screws on the shaft clamp.
 - In the process, observe the torque of the screw.
7. Replace the cover cap on the top of the handlebar stem.

CHASSIS (SUSPENSION/DAMPING)

35 General information

**WARNING****Risk of accident and injury!**

An improperly adjusted suspension can impair the grip of your pedelec (depending on the respective road surface), which may increase the risk of accidents and injuries. Improper handling of the suspension components under tension can result in injury.

- » Ask your specialist dealer to set up the suspension system for you.
- » Have suspension components removed and repaired exclusively by your specialist dealer.

NOTICE**Risk of damage!**

Improper adjustment or handling can impair riding comfort and damage the pedelec as well as the suspension components.

- » Ask your specialist dealer to adjust the pneumatic suspension components.
- » Have the suspension components checked by your specialist dealer if you notice unusual noises or hard jolts when the suspension compresses or decompresses.

NOTICE**Risk of damage!**

Permanent activation of the lock-out function increases wear on the suspension components affected.

- » Only use the lock-out function if it noticeably improves the cycling performance.
- » Be sure to deactivate the lock-out function again if the cycling situation permits.

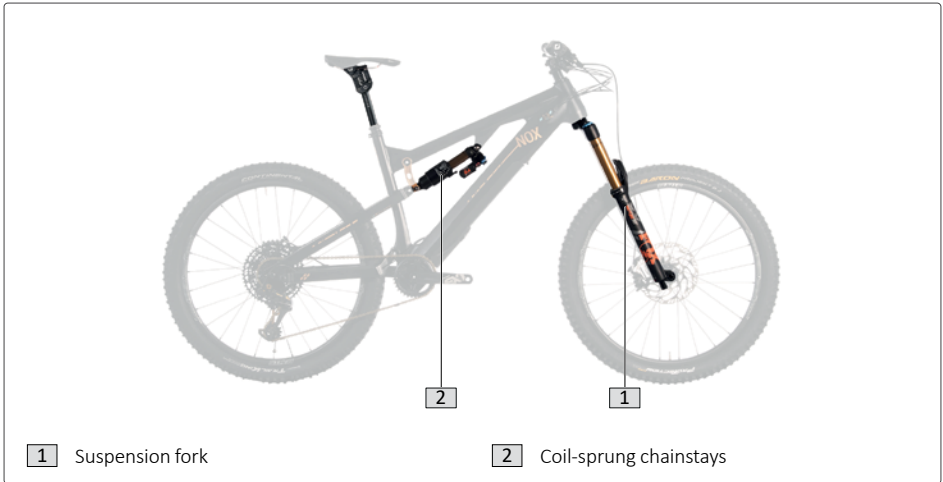


Fig. 17: Suspension components

A chassis that is individually adjusted to the driver increases ride comfort and driving safety on uneven road surfaces.

Depending on the model, the pedelec has:

- a suspension fork > Chap. 36 "Suspension fork" on page 77
- coil-sprung chainstays > Chap. 37 "Coil-sprung chainstays" on page 78

35.1 Functionality and terms

During compression, the immersion tubes of the corresponding suspension sink into their seats and compress the spring inside the suspension component. When the spring is released, the spring inside pushes the immersion tubes back into their original position.

By adjusting the spring tension, you can determine how heavily the suspension fork compresses under load or how strong its resistance to compression is.

Hydraulic dampers provide controlled and adjustable rebound. By adjusting the compression and rebound stages of the dampers, the speed at which the spring compresses or decompresses can be determined.

In general, the following applies:

- The more the compression or rebound damping of the damper is set, the more sluggishly the suspension fork moves;
- The weaker it is set, the smoother/faster the suspension fork moves back to its original position.

Sag refers to the compression of the suspension by the body weight of the rider. As a rule, the optimum sag of a suspension fork is 15-30% of the total spring travel:

The suspension should only compress by a few millimeters when the rider sits on the saddle.

36 Suspension fork

36.1 Spring tension

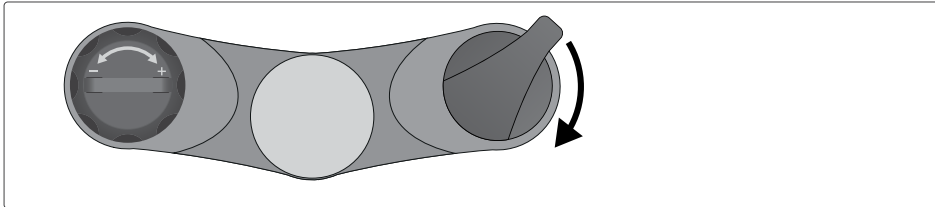


Fig. 18: Mechanical spring tension (left) and lock-out function (right) on the suspension fork

Adjusting the spring tension

You can usually adjust the spring tension on your own if you have the necessary expertise. If you are unsure of how to adjust the suspension or experience problems when doing so, please consult a specialist dealer.

Mechanical suspension:

1. Remove any cover cap on the left standpipe.
2. Turn the rotary knob on the standpipe:
 - clockwise (+) to increase the spring pre-tension.
 - anti-clockwise (-) to decrease the spring pre-tension.

In the process, make sure that the spring tension is adjusted to the same level on both sides.

Pneumatic suspension:

1. Remove any cover cap on the standpipe.
2. Increase or decrease the air pressure to adjust the spring preload.
 - Use a suitable damper pump.
 - Consult the manufacturer's instructions for the permissible air pressures.

36.2 Lock-out and/or platform function

Depending on the model, you can activate or deactivate the lock-out function with a rotary knob on the top of the suspension fork or with a control on the handlebars.

- Turn the knob clockwise a quarter turn to activate the lock-out function.
- Turn the rotary knob counterclockwise by a quarter turn to deactivate the activated lock-out function.

i INFORMATION

With the lock-out function, you can lock the suspension fork completely, e.g. when you pedal hard and/or your progress or cycling comfort is impaired by the suspension.

- Note that even with the lock-out function activated, the suspension can compress by up to 15 mm on uneven road surfaces.

How you activate or deactivate the lock-out function depends on the respective suspension fork type. If the suspension fork installed on your model has different or additional operating options, please refer to the relevant manufacturer documentation or consult your specialist dealer.

37 Coil-sprung chainstays

For detailed descriptions of the suspension installed depending on the model and all adjustment options as well as safety and warning instructions, please refer to the separate manufacturer's manual for the coil-sprung chainstays.

i INFORMATION

If you are unfamiliar or unsure of how to adjust the coil-sprung chainstays, please consult your specialist dealer.

38 Wear and maintenance

- Observe the information in the manufacturer's instructions on specified service intervals.
- Have the suspension checked by your specialist dealer if you notice any unusual noises when compressing or rebounding or if you have the impression that the suspension is malfunctioning.

39 Cleaning and care

- Clean the suspension/damping after each ride.
- Make sure that the sliding surfaces and seals of the suspension are free of dirt.
 - Wipe off any contamination with a clean cloth.
- Follow the manufacturer's instructions for specified cleaning and care instructions.

NOX FLEX PLUS STANDARD (FPS)

Every full-suspension NOX bike from model year 2022 is equipped with the Flex Plus Standard (FPS). This allows the geometry of the NOX bike to be adapted to the cyclist and their riding behavior.

Flex Plus Standard is composed of the Flex Linkage System (FLS) and the Flip Chip Dropout (FCD).

40 Flex Linkage System (FLS)

These assembly instructions describe the steps necessary to make adjustments to the steering angle and bottom bracket height.



WARNING

Risk of accident and injury!

Improper assembly can damage the pedelec or components and lead to accidents and falls.

- » Do not overestimate your technical abilities. Have the following assembly work on the Flex Linkage System (FLS) performed only by an authorized specialist dealer.
- » Never carry out the following assembly work on the Flex Linkage System (FLS) if you do not have the necessary expertise and the required tools.

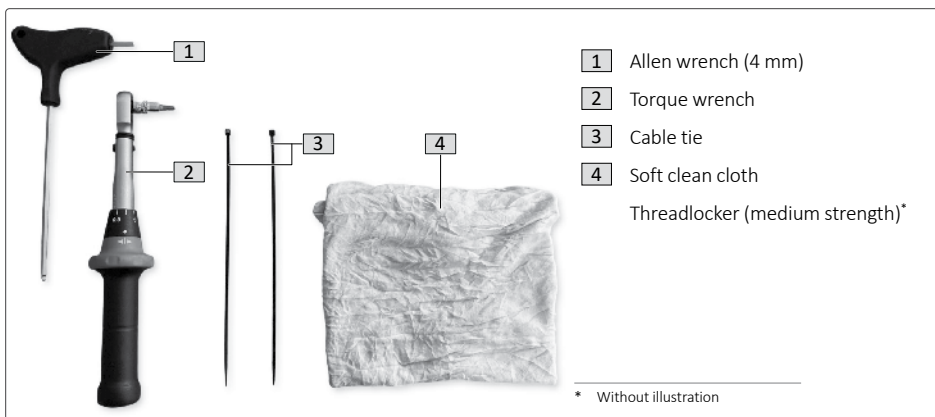
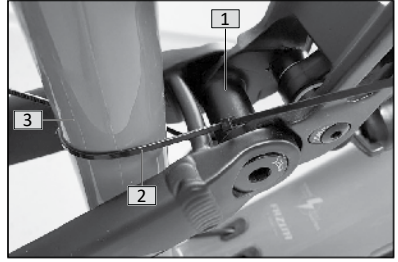


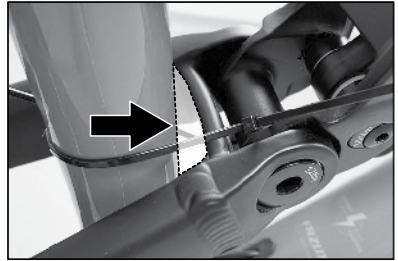
Fig. 19: Overview of required tools

1. Secure the axle (1) of the linkage to the seat tube (3) with cable ties (2) so that the chainstays remain in position when the damper is removed.

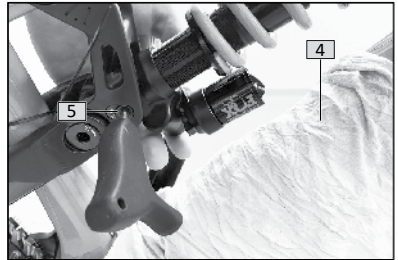


Notice:

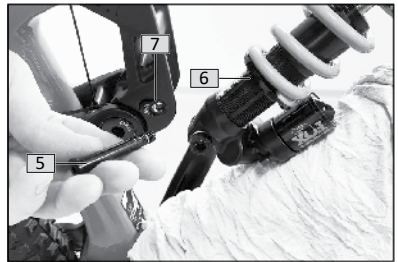
If the rear wheel is unloaded, e.g. when using an assembly stand, the area between the seat tube and seat stay must be padded to prevent damage.



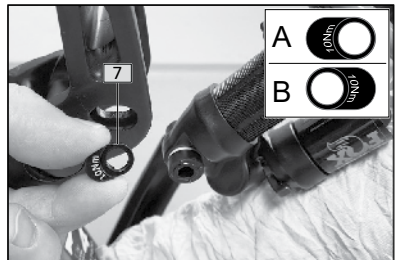
2. Place a soft, clean cloth (4) on the down tube to prevent damage.
3. Loosen the damper bolt (5) (4 mm Allen key).



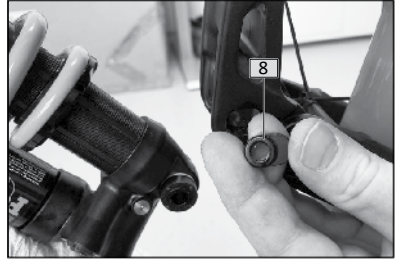
4. Remove the damper bolt (5) and place the damper (6) on the cloth on the down tube.
5. Remove the Flip Chip (7) from the Flex linkage on the drive side.



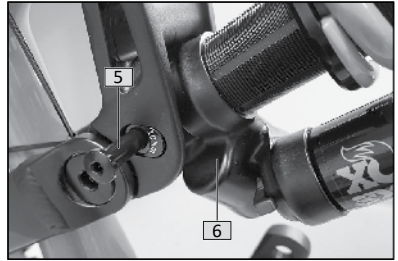
6. Replace the Flip Chip (7) in the desired position.
 - A:** Steering angle steep / bottom bracket high
 - B:** Steering angle flat / bottom bracket low



7. Remove the threaded insert (8) from the Flex linkage on the counter drive side.
8. Replace the threaded insert (8) in the desired position (corresponding to the Flip Chip).



9. Move the damper (6) back into position and reinsert the damper bolt (5). Use medium-strength threadlocker for the damper bolt.
10. Hand-tighten the damper bolt (5).



11. Tighten the damper bolt with a torque wrench (10 Nm).
12. Remove all cable ties and/or padding.



41 Flip Chip Dropout (FCD)

The Flip Chip system allows you to adjust the wheelbase or chainstay length at the dropout to achieve the optimal geometry for 27.5+ or 29 inch wheels.

⚠ WARNING

Risk of accident and injury!

Improper assembly can damage the pedelec or components and lead to accidents and falls.

- » Do not overestimate your technical abilities. Only have the following assembly work on the Flip Chip Dropout (FCD) performed by an authorized specialist dealer.
- » Never carry out the following assembly work on the Flip Chip Dropout (FCD) if you do not have the necessary expertise and tools.

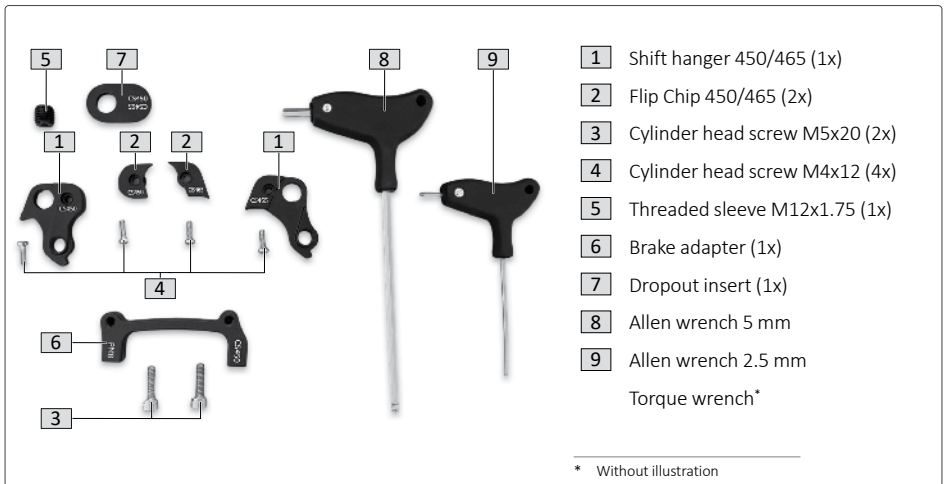


Fig. 20: Overview parts and required tools

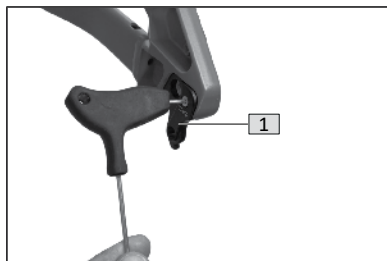
Notice:

The following components must first be dismantled for the conversion:

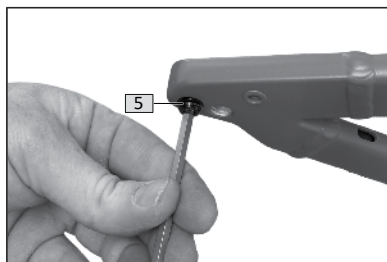
- Rear wheel
- Rear brake caliper
- Rear derailleur



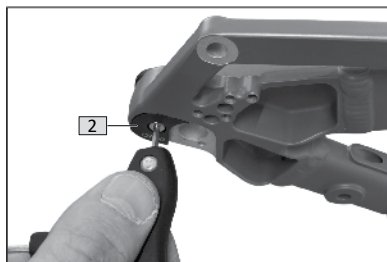
1. Unscrew the cylinder head screw (M4x12) on the derailleur hanger (1) on the inside of the drive side (Allen key 2.5 mm).
2. Remove the derailleur hanger (1) .



3. Unscrew the threaded sleeve (M12x1.75) (5) on the drive side (Allen key 5 mm).



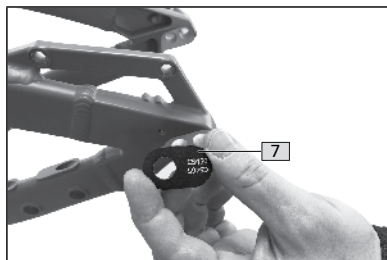
4. Unscrew the cylinder head screw (M4x12) on the Flip Chip (2) on the counter drive side (Allen key 2.5 mm).
5. Remove the Flip Chip (2).



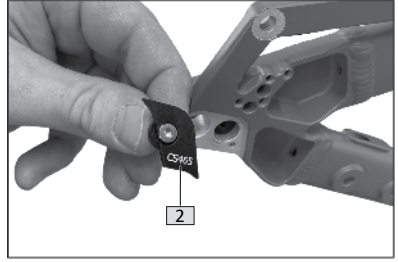
6. Remove the dropout insert (7).
7. Reinsert the dropout insert (7) into the dropout in the desired position.

Notice:

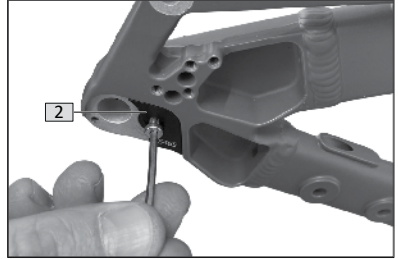
The legible number indicates the selected chainstay length.



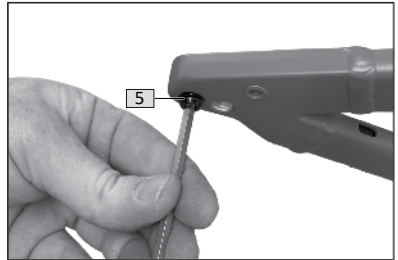
8. Insert the appropriate Flip Chip (2) .



9. Lightly tighten the cylinder head screw (M4x12) on the Flip Chip (2) (Allen key 2.5 mm). Use medium-strength threadlocker for the cylinder head screw.

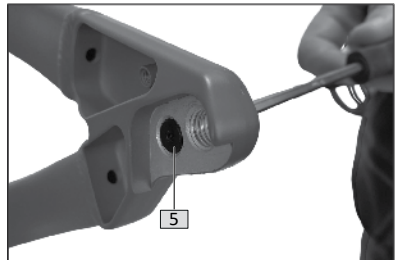


10. Screw in the threaded sleeve (M12x1.75) (5) on the drive side (Allen key 5 mm).

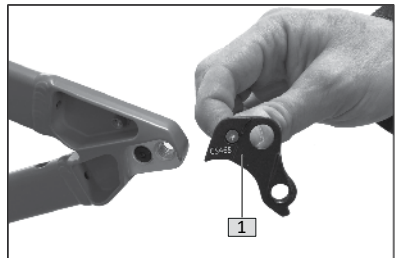


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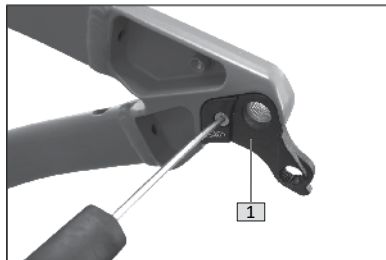
The threaded sleeve (M12x1.75) (5) must be flush on the inside with the unpainted contact surface of the derailleur hanger.



11. Insert the appropriate derailleur hanger (1) . The CS value on the derailleur hanger (1) must match the CS value on the opposite Flip Chip.



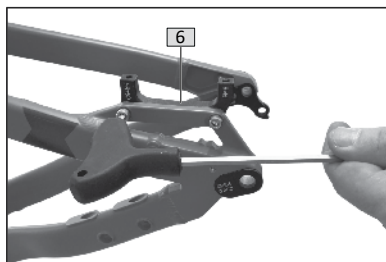
12. Lightly tighten the cylinder head screw (M4x12) on the derailleur hanger (1) (Allen key 2.5 mm). Use medium-strength thread-locker for the cylinder head screw.



13. Mount the brake adapter (6).
The externally readable CS value on the brake adapter (6) must match the CS values on the Flip Chip and derailleur hanger.



14. Lightly tighten the Allen screws (M5x20) on the brake adapter (6) (Allen key 5 mm). Use medium-strength threadlocker for the cylinder head screws.



15. Tighten all cylinder head screws with a torque wrench.
Observe the following torque values:

Brake adapter	M5x20	8 Nm
Flip Chip	M4x12	3 Nm
Derailleur hanger	M4x12	3 Nm

INFORMATION

After the geometry adjustment, the gear shift and brakes must be readjusted. Please contact your specialist dealer.

OTHER COMPONENTS

42 Lights

42.1 General information

For participation in road traffic, a pedelec must have the following lighting components (depending on your local laws):

- Headlight
- Rear light
- Reflectors on the pedals
- Side spotlights or light strips
- White front reflector
- Red rear reflector

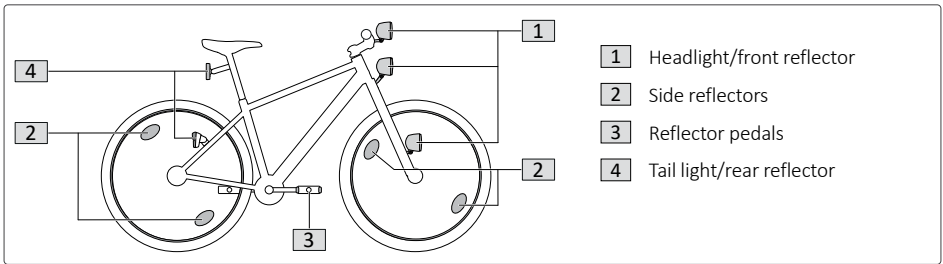


Fig. 21: Lighting components on the pedelec

- Only use your pedelec in road traffic if all lighting components comply with national and regional requirements.
- Find out about national laws and regulations.
- Have defective lighting replaced by your specialist dealer.

Depending on the model, the headlight and tail light are powered by a dynamo or by a separate battery or accumulator in the respective lighting component.

42.2 Mounting locations

Depending on the model, the headlight and tail light are mounted in one of the following locations:

Headlight/front reflector

- on the handlebars
- on the head tube
- on the fork

Rear taillight/rear reflector

- on the luggage carrier
- on the mudguard
- on the seat stay

42.3 Switching the lighting on and off

WARNING

Risk of accident and injury!

When driving with insufficient or no lighting, you may be poorly seen by other road users and you may not recognize hazards (e.g. obstacles).

» Always switch on the lights when driving in poor visibility conditions (e.g. fog, twilight) or in the dark.

WARNING

Risk of accident and injury!

If you are distracted from switching on the lights while driving, there is an increased risk of accident and injury.

» Turn on the lights before you start driving or stop to turn on the lights.

WARNING

Risk of accident and injury!

If the headlight shines too high, oncoming road users may be dazzled. There is a risk of accident and injury.

» Aim the headlight so that oncoming traffic participants are not blinded by its light.

Lighting powered by hub dynamo or separate battery

- The illumination is activated by setting the on/off switch to position I (ON).
- The illumination is deactivated by setting the on/off switch to position O (OFF).

43 Quick-release

**WARNING****Risk of accident and injury!**

Improperly closed or improperly adjusted quick-releases can open while riding so that the corresponding components are no longer securely fixed.

- » Before driving off, make sure that all quick-releases are closed with sufficient pretension and are in contact with the component or frame.
- » Only remove or install wheels that are fixed with quick-release axles yourself if you have sufficient expertise. Please contact your specialist dealer.

**CAUTION****Risk of injury!**

If you carelessly handle a quick release, you can crush your fingers.

- » Be careful when opening and closing the quick release and watch your fingers.

Components fixed with quick-releases can be quickly adjusted or removed or installed without tools.

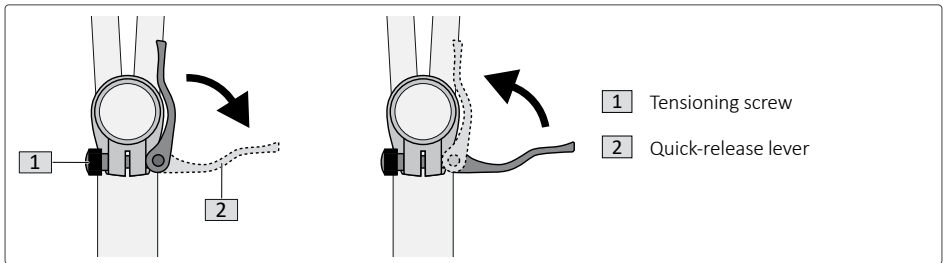


Fig. 22: Quick-release

Opening and closing quick-releases

- To open, pull the quick-release lever outward (away from the component against which it rests when closed).
- To close, fold the quick-release lever against the corresponding component so that it rests against it to the maximum.
- Adjust the quick-release if you notice that the quick-release does not securely fix its component or if the quick-release closes too smoothly.
- Have worn or damaged quick-releases replaced by your specialist dealer with suitable original spare parts.

Adjusting quick-releases

1. Open the quick-release lever.
2. Turn the tensioning screw clockwise one quarter of a revolution.
3. Close the quick-release lever.
4. Check that the quick release now securely fixes its component.
Repeat the process until the quick-release securely fixes its component when closed.

If the component cannot be fixed securely, contact your specialist dealer.

44 Bell

Depending on the model, your pedelec is equipped with a bell on delivery. If your pedelec is not equipped with a bell, you can retrofit one.

- In case of any questions, consult your specialist dealer.

To enable you to give other road users clearly audible acoustic signals while cycling, your pedelec must be equipped with an appropriate bell when participating in road traffic.

- Contact your specialist dealer to have the bell replaced if you cannot produce a clearly audible signal with the bell attached to your pedelec.
- Position the bell on the handlebar so that you can easily reach it without taking your hand off the handlebar grip.

45 Luggage rack

NOTICE**Risk of damage!**

Improper mounting or use of a luggage carrier can damage components of the pedelec.

- » If you want to retrofit your pedelec with an optionally available luggage rack, make sure that your pedelec is suitable for this purpose. Get your specialist dealer to mount your luggage rack for you.
- » Only use luggage racks certified in accordance with EN ISO 11243 for retrofitting or conversion.
- » Do not make any structural modifications to the drive system. This may affect its stability.
- » When loading the luggage rack, observe the specifications for the maximum load capacity of the luggage rack and the maximum permissible total weight of the pedelec.

On the luggage rack, you can carry light luggage; here, the luggage is fixed to the luggage rack with a clamping system, a clamp bracket or lashing straps.

- Use the imprint on the luggage rack to make sure what the maximum load of the luggage rack is, if it is noted there, or contact your specialist dealer.
- Observe the information on the use of the luggage rack.
 - > Chap. 52.1 "Using luggage racks" on page 104.

46 Kickstand

INFORMATION

Depending on the model, your pedelec is equipped with a kickstand on delivery.

- If your pedelec is not equipped with a stand, contact your specialist dealer. This can give you information on whether you can subsequently mount a kickstand on your pedelec.

You can support the pedelec with the kickstand when parking so that it remains upright.

If you want to park your pedelec:

1. Hold the pedelec.
2. Use your foot to unfold the kickstand so that it locks into place.
3. Carefully lean the pedelec on the kickstand.
4. When the pedelec is secure, you can let it go.

If you want to use or move the parked pedelec:

1. Hold the pedelec.
2. Set up the pedelec to relieve the load on the kickstand.
3. Use your foot to fold the kickstand so that it locks into place.

Depending on the model, you can correct the adjustment / alignment of the stand so that your pedelec stands safely on it.

- Make the adjustment of the stand if it does not stand your pedelec safely.
- If you are unsure of how to adjust the kickstand or experience problems when doing so, please consult your specialist dealer.

STORAGE AND TRANSPORT

47 Storage of the pedelec

**WARNING****Risk of accident and injury!**

If the electric drive is started inadvertently or if children or persons who are physically or mentally impaired have access to your pedelec, accidents and serious injuries may result.

- » Always remove the battery before parking or storing your pedelec for an extended period of time.
- » Secure and park your pedelec so that unauthorized persons (especially children) cannot access it.

NOTICE**Risk of damage!**

Improper storage can damage the electric drive or its components.

- » Observe the storage temperatures for the components of the electric drive to avoid damage and functional impairment.
- » Observe the information on storage in the corresponding manufacturer's instructions for the electric drive (especially for the battery) and for any other pedelec components.

1. Clean your pedelec before you store it for a longer period of time
> Chap. 49.3 "Cleaning and caring for your pedelec" on page 97.
2. If your pedelec has a derailleur gear, shift to the small chain wheel at the front and the smallest pinion at the rear to reduce the load on the cables as much as possible.
3. Store your pedelec in a dry room, frost-free and protected from large temperature differences.
4. If necessary, hang your pedelec on the frame to avoid deformation of the tires.
5. Store the rechargeable battery, charger and, if necessary, other components separately from the pedelec and observe the information in the corresponding manufacturer's instructions.

48 Transport of pedelecs

**WARNING****Risk of accident and injury!**

An accidental start of the electric drive can result in accidents and serious injuries.

- » Always remove the rechargeable battery before transporting your pedelec and transport the battery separately. Always use an additional battery compartment cover to prevent dirt and moisture from entering the battery compartment.

NOTICE**Risk of damage!**

Improper transport can damage the electric drive or its components.

- » Secure your pedelec so that it cannot slip or fall during transport.
- » Transport the rechargeable battery carefully and make sure that it is secured against shocks and impacts.
- » If necessary, remove other sensitive components (e.g. display) in addition to the rechargeable battery from the pedelec before transport or protect the components in another way to avoid damage during transport.
- » Observe the information on transport in the corresponding manufacturer's instructions for the electric drive and, if applicable, for other components.

1. If necessary, switch off the electric drive and remove the battery from the pedelec.
2. If necessary, attach the transport safety device if your pedelec is equipped with a disc brake that has a transport safety device.
 - Contact your specialist dealer to have the handling of the transport safety device explained to you.
3. Attach your pedelec to the bike rack for transport. Observe the information in the manufacturer's instructions for the bike rack and, if necessary, for other components.
 - Only use approved bike racks on which you transport your pedelec standing upright.
 - If necessary, contact your specialist dealer for information on suitable bike racks.

If you plan to take or transport your pedelec on the bus, plane, ship or train:

- Before starting your journey, ask the relevant transport company about the transport conditions for the rechargeable battery and the pedelec.

DISPOSAL

Dispose of the packaging according to material type.

- Dispose of card and cardboard in your paper container and films in your plastic recyclables container.


Dispose of lubricants, cleaning agents and care products in an environmentally friendly manner. These agents do not belong in the household waste, in the sewage system or in nature.

- Read the instructions on the packaging.
- Dispose of lubricants, cleaning agents and care products via a collection point for hazardous waste.

Tires and tubes are not residual or household waste.

- Dispose of hoses and tires at a recycling center or collection point in your city or municipality.

Pedelec disposal

	<p>The EU directives for electrical and electronic waste (Directive 2012/19/EU) and for waste accumulators (Directive 2006/66/EC) apply to the disposal of a pedelec, according to which the corresponding components must be collected separately and disposed of in an environmentally sound manner.</p> <p>As a consumer, you are legally obligated to return electrical and electronic devices, as well as rechargeable and conventional batteries, at the end of their service life to the public collection points set up for this purpose or to the specialist trade.</p>
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1. Remove the rechargeable battery for supplying power to the electric drive and, if necessary, remove other rechargeable and conventional batteries installed on the pedelec, as well as all components and operating parts containing rechargeable or conventional batteries, from the pedelec.
2. Dispose of your pedelec (without batteries) as electrical waste.
 - Contact your city or local government for information about free collection points for electrical waste and/or collection points where electrical waste can be recycled.
 - If necessary, delete personal data stored on accessory devices before you hand in your pedelec at the collection point. This task is your responsibility.
3. Dispose of the removed rechargeable battery and any other conventional batteries from the pedelec as hazardous waste at a recycling center or collection point in your city or municipality.

HOW TO HANDLE THE PEDELEC

49 Operating steps at a glance

i INFORMATION

This section summarizes and briefly describes the necessary operating steps for using your pedelec.

Detailed descriptions of the individual functions and operations including all relevant details and warnings can be found in the respective separate sections on the corresponding components.

- Be sure to read the separate detail sections completely before using your pedelec for the first time. It is not enough to read only this section: "How to handle your pedelec"!
- Refer to the separate detailed sections if you are unsure of how to use it or have problems using it.

49.1 Preparation

You are riding your pedelec for the first time

1. Adjust the saddle and handlebars correctly so that you can adopt the correct sitting position on the pedelec while cycling.
 - > Chap. 32 "Adjusting the saddle" on page 70,
 - > Chap. 34 "Handlebar settings" on page 74.
2. Familiarize yourself with your pedelec.
 - > Chap. 15 "Getting to know your pedelec" on page 33.
3. Check the components of your pedelec before you start cycling.
 - > Chap. 16 "Checking the pedelec before starting to cycle" on page 33.

You are already familiar with the pedelec or ride it regularly

- Check the components of your pedelec before you start cycling.
 - > Chap. 16 "Checking the pedelec before starting to cycle" on page 33.

49.2 Using your pedelec

Brakes

> Chap. 25.3 "Operating the disc brake" on page 55

- Pull the brake lever towards the handlebar grip to brake the corresponding wheel.
 - Pull the brake lever harder or to the maximum to increase or maximize the braking force (emergency braking).
 - If you pull the brake lever less strongly or release it, the braking force is reduced or the brakes are no longer applied.

Changing gears

> Section "Gear shift system" on page 60

- Change to a higher or lower gear using the gear shift system.

Transporting luggage

> Chap. 52 "Transporting luggage" on page 103

- Transport luggage on the luggage rack or in a trailer if necessary. Use suitable panniers to store the luggage safely.

Transporting children/taking children with you on the pedelec

> Chap. 51 "Riding with children" on page 99

- Only transport children on the pedelec in suitable child seats or child trailers.

49.3 Cleaning and caring for your pedelec

Regularly clean your pedelec or the components installed on your pedelec.

Pedal drive/components

> Chap. 19.3 "Cleaning and care" on page 37

Electric drive

> Chap. 21.6 "Cleaning and care" on page 49 and manufacturer's instructions for the electric drive

Front and rear brakes

> Chap. 25.8 "Cleaning and care" on page 59

Gear shift system components

> Chap. 28.5 "Cleaning and care" on page 63

49.4 Regular inspection of the pedelec components

Check the condition and function of the components installed on your pedelec every six months:

Pedal drive/components

> Chap. 19.2 "Wear and maintenance" on page 37

Electric drive

> Section "Special features of the electric drive" on page 38 and manufacturer's instructions for the electric drive

Front and rear brakes

> Chap. 25.7 "Wear and maintenance" on page 59

Gear shift system components

> Chap. 28.3 "Check the derailleur gear" on page 62

> Chap. 28.4 "Wear and maintenance" on page 63

50 After a fall

**WARNING****Risk of accident and injury!**

Damaged pedelec components can break abruptly or otherwise fail.

- » Do not use your pedelec if it is damaged or if you suspect damage.
- » Have your pedelec checked by your specialist dealer after falls or accidents.
- » Have damaged components replaced with suitable original parts.
- » Never try to straighten bent parts yourself.

Accidents and falls can cause damage to the pedelec that is not visible at first glance, e.g. hairline cracks.

- Always have carbon components replaced by your specialist dealer with suitable original parts after a fall.
- If the fall happened with the rechargeable battery inserted: Do not use the rechargeable battery anymore, but replace it with a suitable original battery. Please also observe the manufacturer's instructions for the electric drive.
- After a minor fall – e.g. if your pedelec has tipped over – check the condition and function of the components installed on your pedelec yourself.

51 Riding with children



WARNING

Risk of accident and injury!

The risk of injury to children traveling with you is very high in the event of an accident or fall.

» Always make sure that every child you take with you – whether in a child seat or trailer – wears a suitable bicycle helmet.

NOTICE

Risk of damage!

Improper use of child seats and/or trailers can damage pedelec components.

- » When transporting children, observe the information on the maximum load capacity of the child seat or trailer and the maximum permissible total weight of the pedelec.
- » Do not use child seats and/or trailers with unsuitable pedelecs.

If you want to use a child seat or a child trailer with your pedelec, your pedelec must be a category 2 or 3 model

> Chap. 7 "Categorization (use classification)" on page 18.

The following are not suitable for use with child seats/child trailers:

- Pedelecs that do not belong to category 2 or 3.
- Pedelecs with a carbon frame.

51.1 Transporting children in a child seat

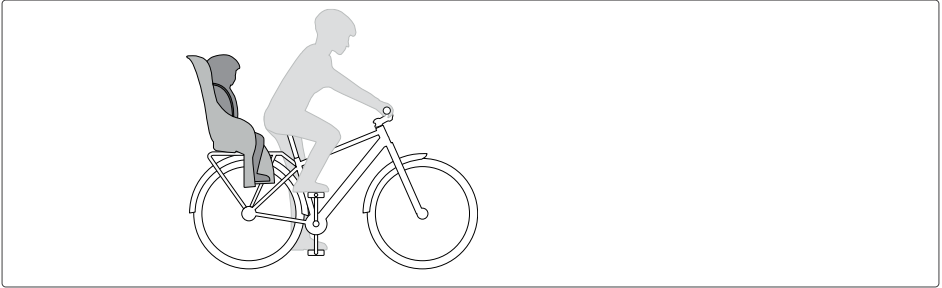


Fig. 23: Transporting children in a child seat

- Use a suitable certified child seat that meets your child's needs.
- Attach the child seat to the frame only, do not attach it to the luggage rack.
- Make sure that the saddle springs, spring seat post and any other moving components are completely enclosed. There must be no risk of the child reaching in and squeezing their fingers or otherwise becoming injured.

51.2 Transporting children in a child trailer

⚠ WARNING**Risk of accident and injury!**

With a trailer, your pedelec is much longer and the additional weight changes the cycling and especially the braking characteristics.

- » With a trailer attached, do not cycle too fast and maintain a steady speed.
- » Bear in mind that your braking distance will increase due to the additional weight and adjust your braking behavior accordingly.

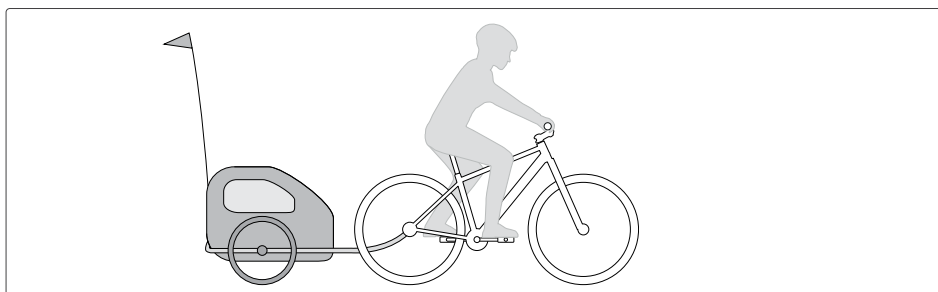


Fig. 24: Transporting children in a child trailer

i INFORMATION

The highest possible safety is provided by child trailers tested according to DIN EN 15918 with a stable passenger cell and safety belts.

- Only use a suitable certified child seat that meets the needs of your child.
 - Make sure that the child trailer has a suitable restraint system that ensures the safety of your child during the ride.
 - Make sure that the child trailer has lighting that complies with country-specific and regional regulations.
- Follow the manufacturer's instructions for the child trailer. In particular, respect the maximum number of children that can be transported in the trailer.

- Observe the following maximum tow loads:
 - 40 kg for unbraked trailers.
 - 80 kg for braked trailers.

The total weight of the trailer (trailer + payload) counts towards the total weight of the pedelec and must be taken into account with regard to the maximum permissible total weight.

> Chap. 11 "Maximum permitted total weight" on page 29.

- Attach a bendable pole with pennant in signal color to the child trailer. The pole should have a length of at least 1.5 m, so that the pennant draws the attention of other road users to the trailer.
- Take a test drive off the road to get used to the change in handling characteristics when cycling with a trailer.

52 Transporting luggage



WARNING

Risk of accident and injury!

Improper transport of luggage endangers traffic safety. There is an increased risk of accident and injury.

- » Do not attach luggage to the handlebars unless suitable special handlebar bags are used.

NOTICE

Risk of damage!

Improper use of luggage carriers and/or trailers can damage pedelec components.

- » When transporting luggage, observe the specifications for the maximum load capacity of the luggage rack or trailer and the maximum permissible total weight of the pedelec.
- » Do not use luggage racks and/or trailers with pedelecs that are not suitable for them.

If you want to use a trailer with your pedelec, your pedelec must be a category 2 or 3 model

> Chap. 7 "Categorization (use classification)" on page 18.

The following are not suitable for use with trailers:

- Pedelecs that do not belong to category 2 or 3.
- Pedelecs with a carbon frame.

52.1 Using luggage racks

**WARNING****Risk of accident and injury!**

Improper loading of the luggage rack endangers road safety. There is an increased risk of accident and injury.

- » Secure your luggage to the luggage rack to prevent it from slipping or falling off. Only use undamaged lashing straps or similar aids for this purpose.
- » Make sure that the center of gravity of the luggage is in the middle.
- » Use only suitable bicycle bags from a specialist dealer.
- » Keep in mind that the extra weight may change the cycling characteristics of your pedelec.

**CAUTION****Risk of injury!**

You can catch your fingers on the clamping brackets, and recoiling lashing straps can hit and injure you.

- » Do not abruptly release the clamps or lashing straps, but carefully guide them into a relaxed position/length.
-
- Load the luggage rack so that no lighting component (headlight, rear light, reflectors) is covered.
 - When loading heavier items of luggage, make sure to place them as far down as possible, e.g. in panniers, to achieve a low center of gravity for the luggage.
 - Always ensure that lashing straps or similar are securely fastened and cannot get caught in moving parts.

52.2 Using trailers



WARNING

Risk of accident and injury!

With a trailer, your pedelec is much longer and the additional weight changes the cycling and especially the braking characteristics.

- » With a trailer attached, do not cycle too fast and maintain a steady speed.
- » Bear in mind that your braking distance will increase due to the additional weight and adjust your braking behavior accordingly.

- Follow the manufacturer's instructions for the trailer.
- Follow the manufacturer's instructions for the child trailer.
 - > Chap. 51.2 "Transporting children in a child trailer" on page 101.
- Load the trailer so that the center of gravity of the luggage is in the middle.
- Secure your luggage to the trailer to prevent it from slipping or falling off. Only use undamaged lashing straps or similar aids for this purpose.
- When loading heavier items of luggage, make sure to place them as far down as possible to achieve a low center of gravity for the luggage.
- Always make sure that luggage, lashing straps, etc. are securely fastened and do not protrude or hang out of the trailer.
- Observe the following maximum tow loads:
 - 40 kg for unbraked trailers.
 - 80 kg for braked trailers.

The total weight of the trailer (trailer + payload) counts towards the total weight of the pedelec and must be taken into account with regard to the maximum permissible total weight.

> Chap. 11 "Maximum permitted total weight" on page 29.

- Take a test drive off the road to get used to the change in handling characteristics when cycling with a trailer.

MAINTENANCE PLAN

1. Inspection

After about 200 km/100 operating hours or 2 months*

Activities performed, parts replaced/repared:

.....
.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

2. Inspection

After about 1,000 km/500 operating hours or 1 year

Activities performed, parts replaced/repared:

.....
.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

3. Inspection

After about 2,000 km/1,000 operating hours or 2 years

Activities performed, parts replaced/repared:

.....
.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

* At the latest within two months after purchase

4. Inspection

After about 3,000 km/1,500 operating hours or 3 years

Activities performed, parts replaced/repared:

.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

5. Inspection

After about 4,000 km/2,000 operating hours or 4 years

Activities performed, parts replaced/repared:

.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

6. Inspection

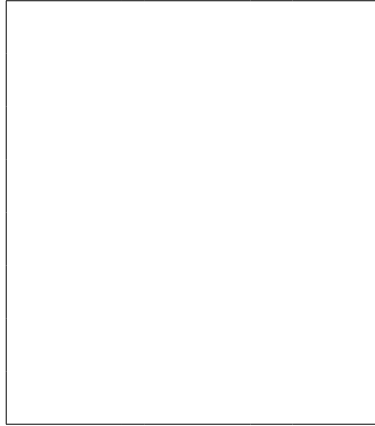
After about 5,000 km/2,500 operating hours or 5 years

Activities performed, parts replaced/repared:

.....
.....
.....

..... Date, stamp/signature of specialist dealer:
.....
.....

Nameplate:



Frame number: _____

Vehicle category > Chap. 7 on page 18: 2 3 4 5

Permissible total weight in kg > Chap. 11 on page 29: _____

Carbon components

- | | |
|------------------------------------|--------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> Frame |
| <input type="checkbox"/> Handlebar | <input type="checkbox"/> |

EPAC drive system

- | | |
|---|--|
| <input type="checkbox"/> BROSE Drive-S Mag Unit | <input type="checkbox"/> FAZUA Ride 50 Trail |
| <input type="checkbox"/> BMZ RS | <input type="checkbox"/> FAZUA Ride 60 |

HMI / remote / display

- | | |
|---|--|
| <input type="checkbox"/> Brose Display Remote | <input type="checkbox"/> Sigma EOX View 1300 |
| <input type="checkbox"/> Brose Display Allround | <input type="checkbox"/> Fazua Remote BX |
| <input type="checkbox"/> Brose Display Central | <input type="checkbox"/> Fazua Ring Control |
| <input type="checkbox"/> Sigma EOX 500 Remote | <input type="checkbox"/> _____ |

Suspension

- Full suspension Hardtail (front suspension)

Wheels

- Quick-release axle Quick-releases
- Front rim size 27.5" 29" Front tire size _____
- Rear rim size 27.5" 29" Rear tire size _____
- Valve type (at delivery) Express valve Presta valve Auto valve

Lights

- Hub dynamo Detachable lights
- EPAC (rechargeable battery) _____

Luggage rack

- None Rear
- Retrofittable Not suitable for luggage racks

Child seat

- Suitable for child seats Not suitable for child seats

Trailer operation

- Only with adapter at the dropout Not suitable for trailer operation

Special features

- The vehicle is **not** approved for public road traffic
- The vehicle is approved for public road traffic; the following equipment was mounted:
- _____
- _____
- _____
- _____

Date, stamp/signature of specialist dealer:

HANDOVER DOCUMENT

Specialist dealer

The handover of the pedelec indicated in the bicycle passport to the customer took place after:

- The final assembly of the pedelec,
- A check of all screw connections,
- A functional check of all components,
- The removal of excess oil and grease,
- A test ride,
- The adjustment of the pedelec to suit the customer,
- The training of the customer on how to properly use the pedelec,
- the notice to the customer to perform an inspection after 200 km or 100 hours of operation, but no later than within two months after purchase,
- The advice to the customer to read the original operating instructions and all related instructions for the components before first use.

Date, stamp/signature of specialist dealer:

Customer

Last name _____

First name _____

Street _____

Zip code/city _____

- The bicycle passport was filled out by the specialist dealer.
- The pedelec has been adjusted to suit me.
- I have received an explanation of the basic operation of the pedelec.
- The original operating instructions and all related manuals for the components were handed over to me.

Place, date _____

Signature of customer _____

