



Ampler Manual Juna / Axel

Model year 2022

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1 About this instruction manual

1.1 Why is an instruction manual necessary?

The instructions will help you to use the Pedelec correctly and safely. This prevents mistakes, damage and above all, the risk of injury due to incorrect use. This applies to the assembly, fitting, and riding, and also for all other aspects, such as the use of components (e.g. battery and charger, rear carrier, lighting system, etc.), cleaning, care and maintenance as well as dismantling and disposal.

This manual was drafted in the English language and is therefore to be considered as the Original instructions. It may have been translated into other languages as applicable.

These instructions are also available at the **Ampler Support Portal** as PDFs as well as being available in other languages.

! These instructions are also available in the **Ampler Support Portal** as PDFs as well as in other languages.



1.2 What can you find in this instruction manual?

This instruction manual contains the necessary information to become familiar with the Pedelec and to use it in a safe manner.

1.3 Symbols and illustrations

1.3.1 Warning notices

This instruction manual includes warning notices to highlight potential hazards (damage to property and personal injury).

- Read and pay attention to the warning notices.
- Follow all precautions indicated in the advisories.
 - Hazard prevention measures are marked with the symbol ►.

Warning symbols	Warnings	Meaning
	DANGER	Hazards with a high degree of risk to persons. Failure to observe this will result in death or serious injury.
	WARNING	Hazards with a moderate level of risk to persons. Failure to observe this may result in death or serious injury.
	CAUTION	Hazards with a fairly low level of risk to persons. Failure to observe this may result in minor or moderate injury.
	ATTENTION	Information on how to avoid property damage. Failure to observe this may result in damage to the product or other property.

1.3.2 Symbols

To ensure clarity, the following symbols are used in this instruction manual:

Symbol	Meaning
→	Symbol that identifies a single required action.
1.	Multiple action steps are numbered.
2.	→ If there are several action steps, observe the correct sequence of actions.
▶	Symbol for taking action in a safety and warning notice
!	Additional information, tip or recommendation

1.3.3 Validity

This instruction manual applies to the following Pedelecs:

Model	Model Year
Juna	2022
Axel	2022

1.3.4 Other relevant documents

! Pedelec component instructions are also available in PDF format on the Ampler Support Portal . To have the instructions available in digital form (e.g. on a smartphone) at any time, it can be downloaded there.	
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Format	Supplied in printed form	PDF on the Support Portal	Explanation
Instructions for LED rear light	—	x	—
Gates Carbon Drive instructions	—	x	—
Charger instructions	—	x	—
Bike Lock instructions	x	x	optional, depending on contents of delivery

2 Safety instructions

- ▶ Read and carefully follow the instruction manual.
- ▶ Keep the instruction manual in a safe place.
- ▶ Read, follow and store all supplied instruction manuals for components and accessories.
- ▶ Please pass on the instruction manual and all user manuals when handing over the Pedelec.

2.1 Pedelec

2.1.1 Intended use

The Pedelec is an Electrically Power Assisted Cycle (EPAC) intended for use on public roads. Its intended use is considered to be limited to urban areas, city and commuting in countryside areas on publicly accessible, paved roads.

- ▶ Only use the Pedelec, components and accessories in accordance with the information in this instruction manual.
 - Please adhere to Ampler's instruction manuals for the Pedelec's components and accessories.
- ▶ Do **not** modify the Pedelec, its components or accessories in an unauthorised manner.
- ▶ Only use approved original spare parts for replacement, exchange, maintenance or repair.
- ▶ Replace, service or repair of components only as specified in this manual and, if necessary, after contacting **Ampler Customer Service**.

2.1.2 Non-intended use

The Pedelec is **not** intended for off-road use or racing.

- ▶ Avoid non-intended uses:
The following are considered as non-intended use and reasonably foreseeable misuse:
 - Using the bike for off-road riding
 - Using the bike for racing
 - Renting the Pedelec at unattended rental stations
 - Exceeding the permissible total weight of the Pedelec
 - Not installing the reflectors as required by national and local regulations
 - Adjusting the seatpost beyond the minimum insertion depth
 - Failure to sufficiently tighten the stem clamping screws by the user
 - Over- or undertightening the headset cap screw by the user
 - Failure to correctly install the pedals by the user

- Inflating the tires above the maximum allowable inflation pressure
- Using the Pedelec with underinflated tires
- Disregarding the required inspection and maintenance schedules
- Overtightening of fasteners during assembly, adjustment or maintenance
- **Not** using genuine replacement parts when replacing spare parts
- Connecting the charger to a damp, wet or metallic contaminated charging port
- Connecting a damp, wet or otherwise contaminated charging plug
- Using the charger outdoors
- Inappropriate disposal of the Pedelec, its components, parts or accessories

2.2 Battery charger

The battery charger is **not** intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the charger by a person responsible for their safety.

- ▶ Do **not** let children play with the battery charger.
- ▶ Use only the charger intended for the corresponding Ampler bike when charging the battery in the Pedelec with the charging connection.

2.3 Hazards

Riding without a bike helmet

Serious injuries and fatalities induced by accidents!

Riding without a bicycle helmet can lead to serious head injuries in the event of a crash or fall.

- ▶ Always wear a correctly adjusted and fitting bicycle helmet when riding.
- ▶ Follow the manufacturer's manual.

Loose components of the Pedelec

Loose components that can lead to hazards include:

- Saddle and seatpost
- Handlebar
- Pedals
- Wheels
- Rear carrier

Falls and very serious injuries can be caused by parts of the Pedelec coming loose!

Loose or under-tightened screws, bolts, nuts and fastenings lead to loose, slipping components (loose handlebars, slipping seatposts, loose saddles, wheels slipping out of the fork or dropouts, loose pedals) and can lead to loss of stability and balance when riding.

- ▶ Always comply with the torque specifications or instructions for the correct tightening of fasteners on the headset, stem, handlebar, saddle and seatpost, wheels and axles.
- ▶ Follow the instructions for the correct installation of pedals.
- ▶ Note the information on the minimum insertion depth of the seatpost.

Using the power button while riding

Falls, crashes and injuries can occur if the power button is operated while the bike is in motion!

If the power button is pressed while riding, the rider's balance can become compromised. Trying to operate the button while riding can cause distractions.

- ▶ Do **not** press the power button while riding.

Distraction through viewing the display while riding

Falls and crashes can occur through distraction when viewing the display while riding!

- ▶ Keep your focus on the road and your surroundings while riding.

Falls and extremely serious injuries result from careless use of a smartphone while riding!

Operating a smartphone while riding can distract you from your surroundings and affect your stability while riding one-handed or with no hands on the handlebar.

- ▶ Do **not** use a smartphone to make phone calls while riding.
- ▶ Do **not** try to operate your smartphone while riding.
- ▶ Attach the smartphone to the handlebar using a suitable holder. Use the **Ampler Bike App** on your smartphone only when it is mounted in a stable holder.
- ▶ Do **not** change settings in the **Ampler Bike App** while riding.
- ▶ Only use the **Ampler Bike App** while riding to read information on the smartphone display.

Overloading the Pedelec

Falls and extremely serious injuries can result from overloading the Pedelec and thereby exceeding the maximum total weight!

Exceeding the max. permissible total weight leads to loss of riding stability and can cause serious injuries.

- ▶ The maximum permissible total weight of the Pedelec includes the mounted accessories, any luggage and the person riding.

Inappropriate use of the Pedelec for offroad riding, for racing

Falls and extremely serious injuries result from using the Pedelec inappropriately!

Using the Pedelec on unsuitable terrain (offroad, unpaved roads) and for unsuitable purposes (cycle racing). This can lead to an overstrain of the components and to serious injuries.

- ▶ Only use the Pedelec for its intended purpose on paved roads in urban and rural settings.
- ▶ Do **not** use the Pedelec as a "racing bike", nor as a "mountain bike".

Hot surfaces on the brakes

Hot components can cause burns to fingers and hands!

Parts of the brake system can become very hot when riding.

- ▶ Do **not** touch the brake caliper and brake discs during or immediately after riding.
- ▶ Allow sufficient cooling time.

Fire hazard!

Parts of the brake disc can become very hot when riding and braking.

- ▶ Never store the Pedelec after riding in such a way that hot components come into close contact with easily flammable surfaces or materials (grass, wood, paper, etc.).

Incompatible accessories and spare parts

Falls and potential injuries could result from installing incompatible accessories!

The installation and use of incompatible accessories that are **not** approved for the Pedelec (pedals, mirrors, rear carriers, fenders, child seats, tires with spikes, etc.) can impair the functionality, riding stability and safety of the Pedelec.

- ▶ Only use accessories approved for the Pedelec.
- ▶ Only install and use accessories in accordance with the respective manufacturer's instructions.

Falls and potential injuries could result from the use of incompatible spare parts!

The installation and use of incompatible spare parts can impair the functionality, riding stability and safety of the Pedelec.

- ▶ Only use original spare parts approved by Ampler for maintenance and repairs.
- ▶ Only carry out maintenance, servicing and repairs in accordance with the information provided by Ampler, or have them carried out by a bicycle workshop.
- ▶ Do **not** modify original spare parts for the Pedelec.
- ▶ Only install and use original spare parts in accordance with the instructions of the manufacturer of the spare parts.

There is a risk of injury from incorrect use of the trailer adapter!

Incorrect assembly and improper use of the trailer adapter and the trailer can lead to accidents and serious injuries.

- ▶ Read and follow the instructions for the trailer adapter.
- ▶ Do **not** modify the Pedelec accessories.
- ▶ Do **not** modify the Pedelec trailer adapter.
- ▶ Only use original components for the assembly and use of the trailer adapter.

Corrosive cleaning agents

Injuries to eyes and skin may result from the use of corrosive cleaning agents!

Cleaning agents can get into the eyes and on to the skin if used carelessly.

- ▶ Adhere to the cleaning agent manufacturer's instructions for use.
- ▶ Do **not** clean the Pedelec with corrosive cleaning agents.

Corrosive hydraulic fluid in the brake hoses

Injuries to eyes and skin may also be caused by the hydraulic fluid in the brake hoses!

- ▶ In case of damaged brake hoses: Avoid contact with any leaking hydraulic fluid.
- ▶ In case of contact with spilled hydraulic fluid: Rinse exposed skin surfaces and eyes immediately with water. Get medical help.
- ▶ Handle hydraulic fluid only according to the manufacturer's instructions.

Irritant lubricants

Injuries to eyes and skin may be caused by exposure to irritant lubricants.

Aerosolized caustic lubricants can get on the skin and in the eyes.

- ▶ Do **not** use aerosol based lubricants.
- ▶ In case of contact with aerosolized lubricants: Rinse eyes immediately with water, rinse affected skin areas with water. Get medical help.

Tools with sharp edges and cutting edges

Cut and puncture injuries can result from sharp edges, spikes and cutting blades of tools!

Improper and unprotected use of tools with sharp edges, spikes and cutting blades can injure hands and other parts of the body.

- ▶ Use personal protective equipment if necessary.
- ▶ Use tools with care.

Damaged rechargeable battery

Danger of fire and explosion!

A damaged battery can self-ignite and explode.

If the electronic safety system fails, the residual voltage in the battery can trigger a short circuit.

- ▶ Do **not** open the Pedelec battery casing.
- ▶ Do **not** remove the battery yourself.
- ▶ Do **not** disassemble or attempt to repair the battery yourself.
- ▶ After a Pedelec has been dropped or subjected to an impact, deactivate the Pedelec for at least 24 hours (do **not** switch on the Pedelec, do **not** use it) and monitor the battery.
- ▶ In the event of visible damage to the frame in the down tube area of the installed battery:
 - Switch off the Pedelec immediately.
 - Do **not** switch the Pedelec on again.
 - Do **not** use the Pedelec.
- ▶ If damage to the battery is suspected, store the Pedelec in a dry area and protect it from heat.
 - Do **not** store the Pedelec near flammable materials.
- ▶ Dispose of a Pedelec with a damaged battery appropriately.

The battery is installed within the frame, but water ingress might cause a short circuit. The battery may self-ignite and explode.

- ▶ Never immerse the frame of the Pedelec, even partially, in water.
- ▶ If there is a suspect of water ingress into the frame:
 - Switch off the Pedelec immediately.
 - Do **not** switch the Pedelec on again.
 - Do **not** use the Pedelec.

High outdoor temperatures can cause fluids to leak from the battery and damage the housing. The battery may self-ignite and explode.

- ▶ Shield a Pedelec with a built-in battery from high temperatures, long and/or strong sunlight and heat exposure.
- ▶ Avoid severe and sudden temperature changes around the frame of the Pedelec in the area of the built-in battery.
- ▶ Do **not** store the Pedelec outdoors in high temperatures.
- ▶ Keep the Pedelec in the shade during the summer.

Unsuitable battery chargers (e.g. ones with too high a voltage) will damage the battery. The battery may self-ignite and explode.

- ▶ Only use the original Ampler charger supplied with the Pedelec.
- ▶ If necessary, label the charger so that it cannot be confused with chargers for other batteries or other Pedelecs.

Metallic objects could cause a short circuit in the charging port on the frame of the Pedelec. This may cause electrical arcing.

- ▶ Do **not** insert or plug any metallic objects (bolts, coins, wires, keys, brushes or similar) into the charging port on the frame of the Pedelec.

Damage to the Battery!

The battery cells can be damaged if they are left permanently undercharged (flat) during prolonged periods of non-use.

- ▶ Check the state of charge of the battery regularly and charge the battery if necessary.

Damaged, overheated charger

Fire hazard!

- ▶ The charger heats up when charging the battery and can become very hot.
- ▶ When charging, do **not** place the charger on easily flammable surfaces or materials and do **not** place it near flammable or explosive materials.
- ▶ Do **not** cover the charger while charging.
- ▶ Do **not** leave the charger unattended while charging.
- ▶ Protect the charger from excessive heat or high temperatures.

Discomfort to the body and hands!

The charger can become very hot when charging the battery.

- ▶ Do **not** touch the charger when the casing is very hot.
- ▶ Place the charger in a well-ventilated location.

Electric shock!

A damaged charger may have defective plugs, power cables and buttons.

- ▶ Only operate the charger if it is in good working condition, and only use it for charging.
- ▶ Before each use, check the external condition of the plugs, sockets, power cables and buttons of the charger. Ensure that the charging socket and the mains plug of the charger are **not** in contact with any metallic objects.
- ▶ Do **not** use a damaged charger.

Electric shock due to a short circuit!

If water enters the charger, a short circuit may occur, which can lead to an electric shock.

- ▶ Store the charger in a cool and dry place.
- ▶ Protect the charger from rain, snow, moisture and humidity.
- ▶ Do **not** immerse the charger in water.

Condensation on the charger and charging ports

Electric shock due to condensation!

If there is a sharp change in temperature, condensation can form on and within the charger and at the charging port.

- ▶ If significant temperature changes occur in the local setting, do **not** use the charger until it has adapted sufficiently to the ambient temperature.
- ▶ Do **not** use the charger and charging port if there is moisture or water on the housing.
- ▶ Check the charger, the plug and the charging port for moisture before use, and wipe dry if necessary.

3 Delivery

The Pedelec will be delivered in a **large shipping carton**.

3.1 Symbols on the packaging

Symbol	Meaning / Description	Explanation
	Recyclable	Packaging can be recycled. Dispose of packaging according to local regulations.
	Laceration Injuries "Caution! Remove all staples after opening the lid!"	Packaging contains sharp-edged parts.
	Protect from Moisture	Protect packaging from moisture.
	Top	Transport and store packaging this way up.
	Fragile Packaged Items	Contents of the packaging are fragile. Handle With Care. Do not throw or overturn.
	Recyclable	Dispose of packaging according to local regulations.

3.2 Contents of delivery

Contents	Juna / Axel
Pedelec , pre-assembled	✓
Accessories kit	✓
• Pedals	✓
• Battery charger	✓
• Reflectors	✓
• Bell	✓
• Operating Instructions	✓
• Bicycle Pass ("Bike Pass")	✓
Accessories	
Bicycle lock with holder and keys	optional
Additional charger	optional
Trailer adapter	optional
Carrier	optional

3.2.1 Transporting the Pedelec in the shipping carton

The shipping carton has 2 grip holes on each of the long sides and 1 grip hole on each of the short sides.

- Transport the shipping carton only when sealed and in an upright position.
- Grasp and lift the shipping carton only by the grip holes.
 - If necessary, enlist the help of a second person for transport.

3.3 Unpacking the Pedelec

► After unpacking, store the packaging for later use.



Unboxing

A video about this is available on the **Ampler Support Portal**.

The video explains the necessary steps for unpacking in detail and contains further tips



1. Check the shipping carton for external damage.
 - In case of noticeable damage, document the damage and contact **Ampler Customer Service**.
2. Place the shipping carton on a flat, stable surface.
 - Do **not** lay it flat or topple it over.
3. Open the shipping carton on the side with the yellow safety label.
 - After opening, remove all visible staples.
4. Grasp the cardboard support in which the Pedelec is housed with both hands and pull it out together with the Pedelec.
 - If necessary, enlist the help of a second person.
5. Park the Pedelec next to the shipping carton.
6. Remove the protective packaging from the Pedelec.
7. Remove the accessory box from the cardboard support stand.
8. Check delivery for completeness.
 - In case of missing parts, contact **Ampler Customer Service**.
9. Check all parts for damage.
 - In case of noticeable damage, contact **Ampler Customer Service**.
10. Keep the shipping carton.

3.4 Transporting the Pedelec

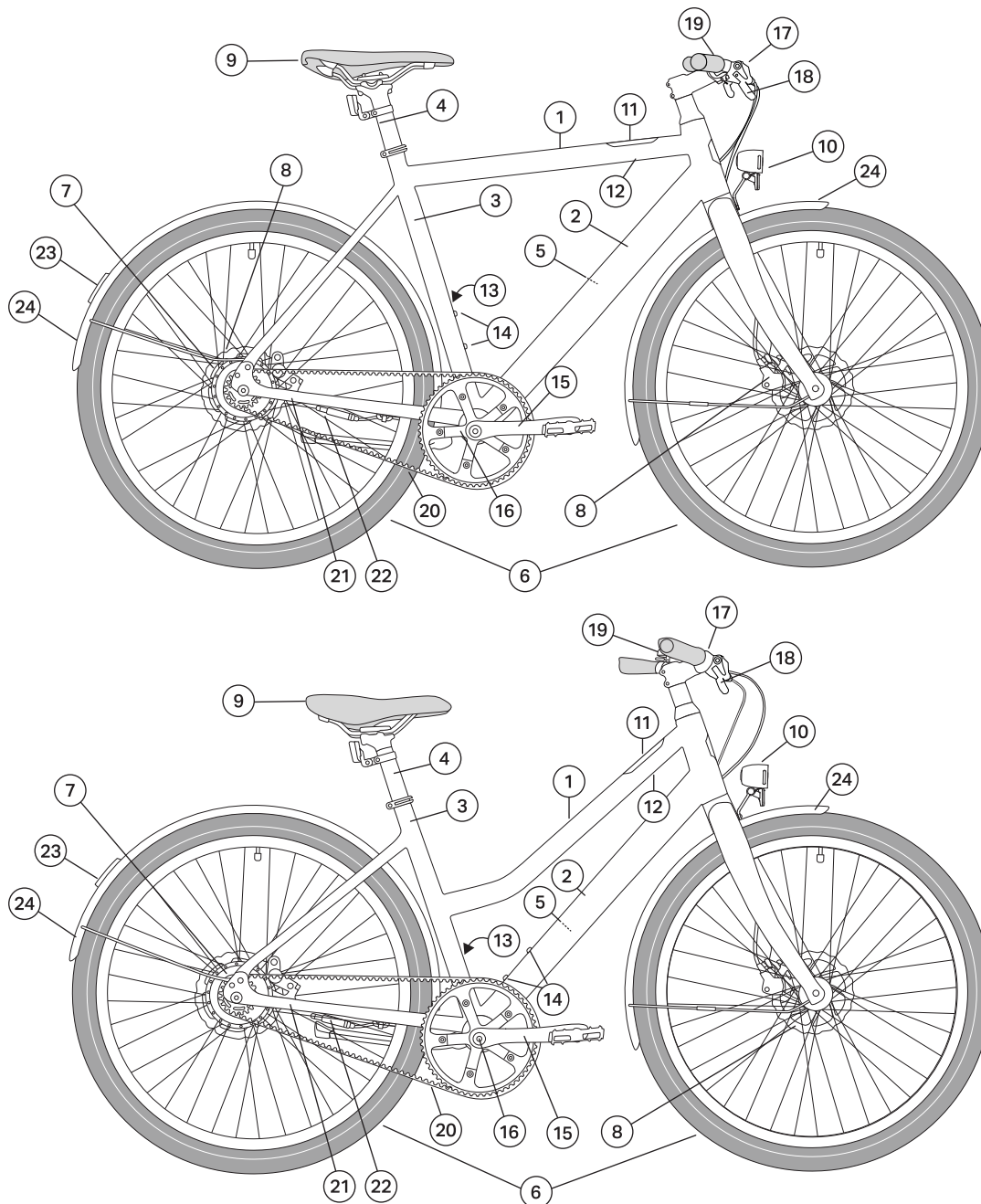
Thanks to its low weight, the Pedelec can be carried easily with two hands.

- Before transporting, remove loose pieces and accessories from the Pedelec.
- When transporting the Pedelec, do **not** grasp or lift it by the wheels or the saddle, except the seatpost.
- Only transport the Pedelec in an upright position.
- Lift and carry the Pedelec by the top frame and, if necessary, by the seatpost.

4 Ampler Pedelec

The Pedelec consists of the **bicycle**, the **charger** and optional **accessories**. The **Ampler Bike App** can also be used with the Pedelec.

4.1 Bicycle - structure and components



Juna / Axel

1 Top tube with integrated display	6 Wheels	13 Charging port	19 Bell
2 Down tube with integrated battery	7 Hub / Electric motor	14 Eyelets for bottle holder, lock	20 Belt drive
3 Seat tube	8 Disc brake	15 Pedals and crank	21 Chainstay
4 Seatpost with reflector	9 Saddle	16 Bottom bracket	22 Motor cable
5 Battery	10 Front light with reflector	17 Handlebar	23 Rear light
	11 Display	18 Brake levers	24 Fenders
	12 Power button		

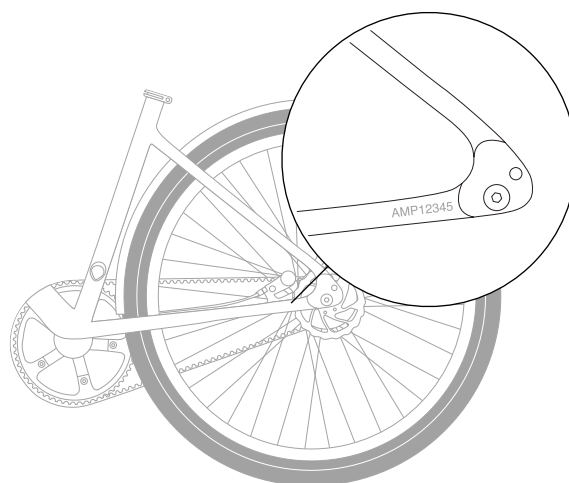
Symbols and notices on the bicycle

There are symbols and notices on the bike in some places. These provide information for the safe use of the Pedelec and its components.

Symbol / Notice	Position	Meaning
10 Nm	Thru-axle front wheel	Max. tightening torque of the axle
50-584 / max. 5.0 bar, 73 PSI	Tire sidewall	Tire dimension / maximum permissible pressure
31.6 mm	Seatpost	Seatpost diameter
MIN INSERT	Seatpost	Minimum insertion depth
6 V DC	Front light	Front light power supply

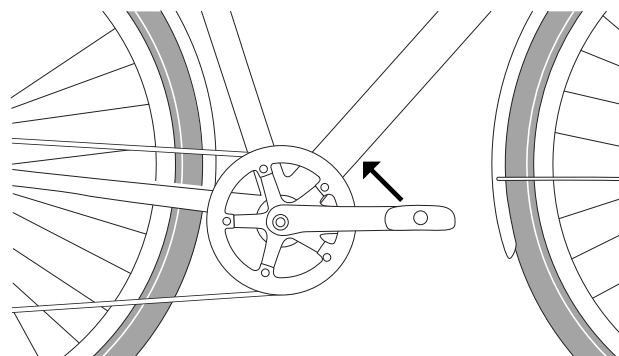
4.1.1 Frame number

The frame number is on the left side dropout/chainstay and in the **Ampler Bike Pass**. The frame number is required, for example, for making enquiries with Ampler customer service and when ordering spare parts.



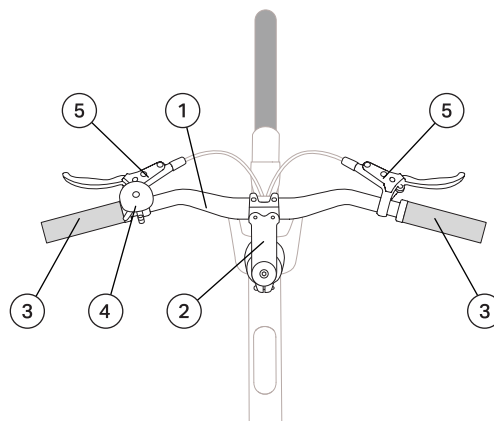
4.1.2 Type label

The type label is located on the underside of the down tube, next to the bottom bracket. You can find information like the manufacturer's contact details, model name, year of manufacture and max. permissible total weight there.



4.1.3 Handlebar

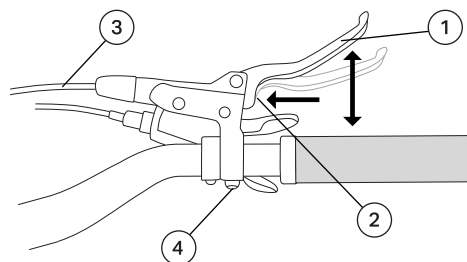
- 1 Handlebar
- 2 Stem
- 3 Grips
- 4 Bell
- 5 Brake levers



4.1.4 Brakes

The Pedelec is equipped with a front wheel brake and a rear wheel brake. Get familiar with your brake system and pay attention to the brake lever designations. Always check which brake lever operates which brake before you start your ride. Both brakes are hydraulically actuated disc brakes. The reach adjustment screw can be used to change the distance of the brake lever blade to the handlebar.

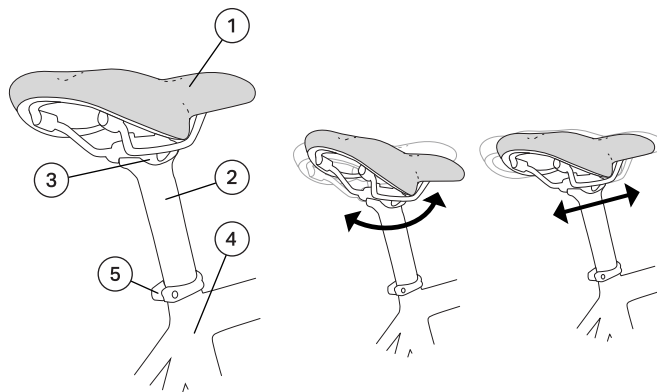
- 1 Brake lever blade
- 2 Reach adjustment screw
- 3 Brake hose
- 4 Clamping screw



4.1.5 Saddle and Seatpost

The saddle is adjustable in height and tilt angle.

- 1 Saddle
- 2 Seatpost
- 3 Saddle clamp (5 mm hex sockets, key **not** included)
- 4 Seat tube
- 5 Seatpost clamp (4 mm hex socket)



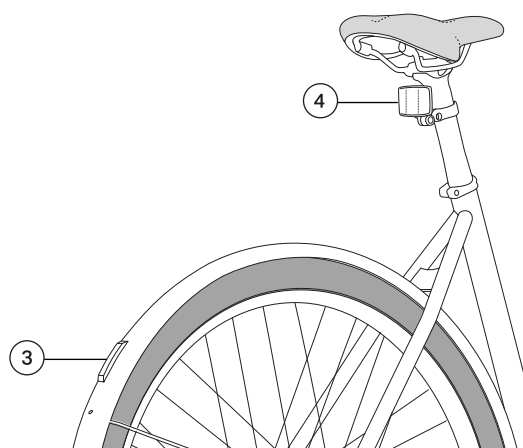
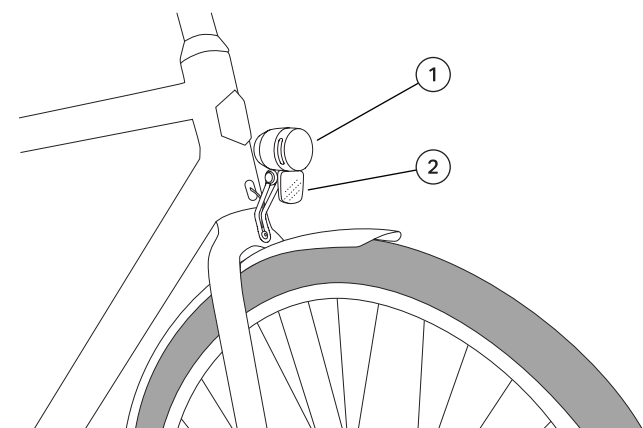
4.1.6 Wheels

The wheels consist of the rim with spokes and hub, the brake discs and the tires, as well as the rear sprocket for the belt drive. The electric motor is integrated into the hub of the rear wheel and transmits its torque via a planetary gears and clutch system. The clutch automatically disengages when the motor is off or when the speed of the rear wheel exceeds that of the motor (above 25 km/h).

4.1.7 Lighting system

The Pedelec is equipped with a front light mounted to the fork crown and a rear light integrated into the rear fender. The front and rear reflector must be attached during assembly. The front and rear lights are powered by the battery.

- 1 Front light
- 2 Front reflector
- 3 Rear light
- 4 Rear reflector



❗ Even if the battery power is low and the electric drive shuts off, the lights remain on for sufficient time to bring you home.

4.1.8 Electric drive

The Pedelec is equipped with an electric drive that assists the ride with 2 selectable assist modes up to the max. Speed of 25 km/h. The power button is used to switch the Pedelec on before riding, to select the assist mode if required, to switch the lights on/off and to switch the Pedelec off after riding. The modes are shown on the display.

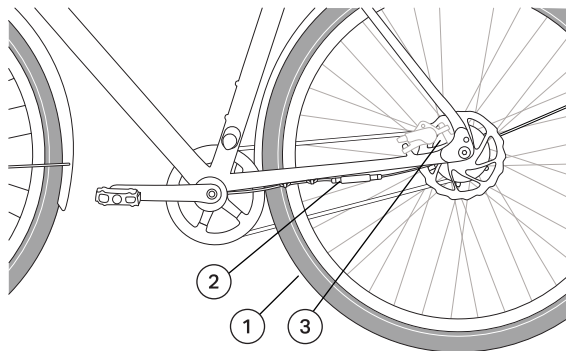
The drive has a Li-ion battery as power source, an electric motor and sensors that measure speed, cadence and torque.

The motor output adjusts accordingly to the selected assist mode and the torque sensor signal.

- ▶ The battery, the electronics and the sensors are integrated into the Pedelec's down tube and bottom bracket.
- ▶ The motor and the hub of the rear wheel form an integrated unit.

The Pedelec can be used with or without motor assist.

- 1 Rear wheel
- 2 Motor cable
- 3 Integrated motor



4.1.9 Rechargeable battery

The battery is integrated into the down tube. The battery supplies power for the motor and the lighting system.

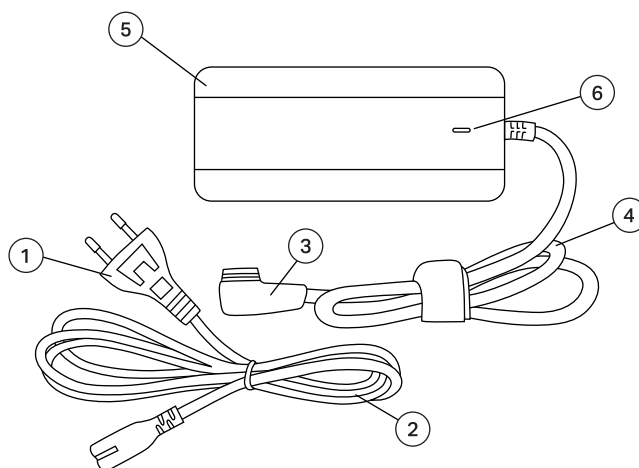
The battery is charged via the charging port on the down tube of the Pedelec. The display on the top tube shows the state of charge of the battery when the Pedelec is switched on.

- ▶ The factory charge level of the battery is between 40% and 90%.
- ▶ The battery capacity cannot fully develop in cold weather. On particularly cold days, this can lead to a shorter range.

4.2 Battery charger

The charger is specced in accordance with the electrical system's requirements.

- 1 Mains plug
- 2 Power cord
- 3 Charging plug
- 4 Charging cable
- 5 Battery charger
- 6 Charging LED



4.3 Accessories

4.3.1 Ampler Bike Pass

The **Ampler Bike Pass** is provided by Ampler and contains essential data about your Pedelec.



This data is required, for example, for enquiries with **Ampler Customer Service**.

4.3.2 Bicycle lock

A **bicycle lock** is an optional extra. When bought with the bike it contains the appropriate holder, which can be attached to the eyelets of the bottle cage mount. These are on the seat tube for Axel and on the down tube for Juna.

4.3.3 Trailer adapter

The **Ampler trailer adapter** is available as an optional extra and is compatible with most bike trailers from Thule, Burley and Croozer. The trailer adapter is used to adapt the Ampler M12 thread of the axle on the rear wheel to a 10 mm mounting point.

4.4 Ampler Bike App

The downloadable **Ampler Bike App** is optionally available.

5 Assembly

The Pedelec is delivered mostly pre-assembled. Some components still need to be attached and adjusted after unpacking.

-  **Assembly**
A video for this is available on the **Ampler Support Portal**. The video explains the necessary assembly steps in detail and contains further tips.



-  **Attach the charger for the first start-up**
The charger must be attached to wake the bike up from its shipping state and to enable the first start-up.

Tools required

- 4 mm hex key (included in delivery)
- 6 mm hex key (included in delivery)
- Cross-head screwdriver

-  **Using a torque wrench**
If applicable, a torque wrench can be used for assembly (**not** included; available from specialist shops).

Tightening torques

Screws	Tightening torque	Explanation
Stem clamping screws	max. 6 Nm	The cap screw is correctly tightened when the steering bearing and the handlebar have no "play" (i.e. do not "wobble" or "judder") and the handlebar can be moved easily in both steering directions.
Headset cap screw	max. 2 Nm	
Pedals	35 Nm	In order to securely attach the pedals, tighten them with proper strength or use a torque wrench for installation.

5.1 Handlebar alignment

ATTENTION

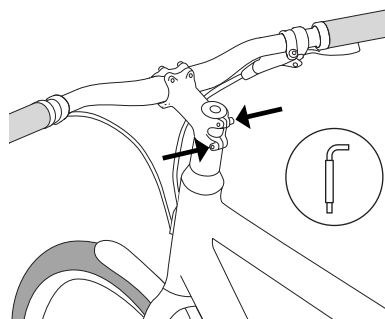
Fasteners can be damaged by over-tightening!

Overtightening fasteners can overload them, damage the thread, leading to a loss of locking force and breakage of fasteners.

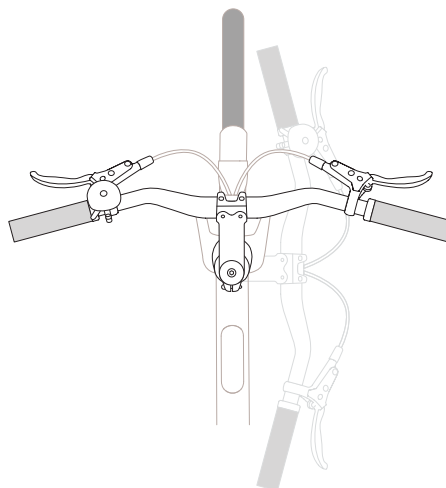
- ▶ Do not exceed the tightening torque of the fasteners.
- ▶ If necessary, use a suitable torque wrench.

1. Slightly loosen both stem clamping screws on the steerer shaft with a 4 mm hex key.

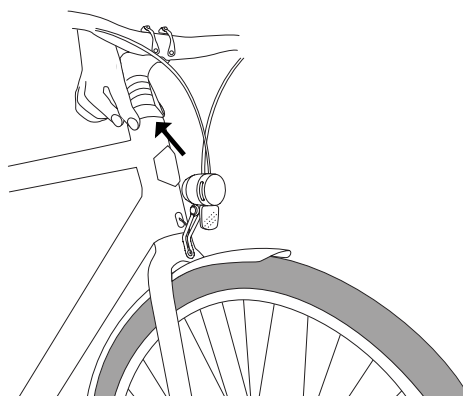
To straighten the handlebar, it is best to stand upright over the top tube, facing the front wheel.



2. Align the stem with the front wheel.
 - Do not tighten the stem clamping screws yet.



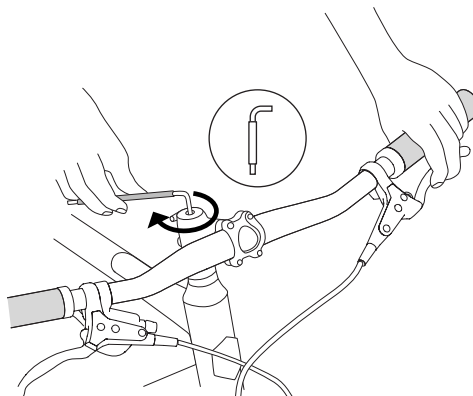
3. Place your fingers on the dust cap between the frame and the stem.



4. Move the wheel

→ If there is noticeable "play" on the headset during movement:

- Loosen the stem clamping screws.
- Tighten the headset cap screw a little tighter.
- Tighten the stem clamping screws again.



5.2 Mounting the pedals

ATTENTION

Incorrectly mounted pedals!

If right and left pedals are mixed up during assembly, the crankset threads may get damaged. Riding stability can be affected by loose pedals.

Ensure correct assignment of the right and left pedals during assembly.

Damaged crank and pedal threads!

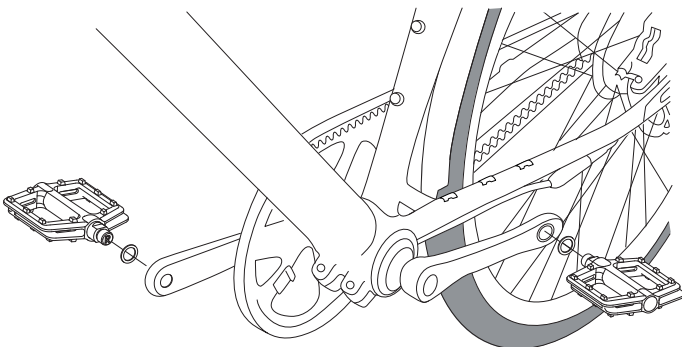
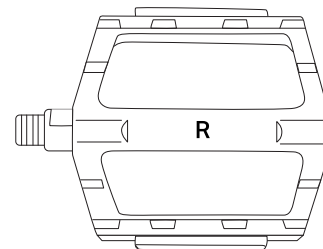
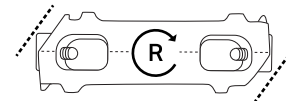
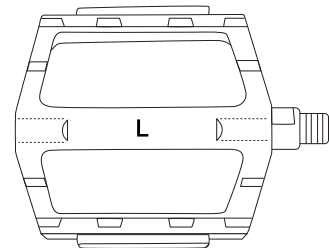
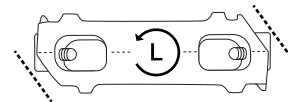
If the pedals are difficult to screw into the thread of the crank during assembly, the threads may be getting damaged.

- ▶ Check the correct assignment of the right and left pedals.
- ▶ The left pedal has a left-hand thread.
- ▶ To begin with, only screw the pedals into the thread by hand.

The pedals are marked R (right) and L (left) in relation to the direction of travel. The chamfered edges indicate on which side the pedal is installed.

- The **R-pedal** will be installed on the side of the drivetrain.
- The **L-pedal** will be installed on the side with the charging port.

1. Place one pedal washer over the thread of each pedal.
2. Screw the pedals, together with the spacer, in. Turn in the first few threads by hand. Mind that the L marked left pedal has a left-hand thread and therefore needs to be screwed in counterclockwise.
 - When doing so, align the thread of the pedal with the crank arm and do **not** tilt or skew it when screwing it in.
 - If it is difficult or impossible to screw in: Check whether the correct pedal is selected for the pedal side. Check whether the thread has been incorrectly set at an angle when screwing it in.
3. When the first threads have been screwed in by hand, insert a 6 mm hex key through the thread in the crank arm into the pedal axle and properly tighten the pedals.
 - Resistance should only be felt at the end stop.
 - You can also use a 15 mm spanner (**not** included; available from specialist shops and tool stores) to tighten the pedals via the spanner flats between pedal thread and pedal body.



5.3 Fitting the reflector

Juna and Axel each require one white reflector on the front light and a rearward facing red reflector on the seatpost. The tires are equipped with reflective sidewalls.

5.3.1 Attaching front and rear reflector

1. The white front reflector under the front light will be installed from factory.
2. Fit the red rear reflector to the bracket.
3. Place the clamp of the bracket around the seatpost and hand-tighten the screw with a cross-head screwdriver.

5.4 Fitting the accessories

5.4.1 Trailer adapter (optional)

- Observe and adhere to the maximum permissible load of the trailer according to the manufacturer's instructions.
- Observe and adhere to the permissible total weight of the Pedelec with trailer.

Mounting the trailer adapter

1. Remove the nut from the left side of the rear dropout.
 - Do **not** remove the black washer from the dropout: the washer must remain on the axle.
2. Attach the trailer adapter to the axle with a 15 mm spanner.
3. Make sure that the adapter is properly attached.
4. Remove the top screw on the trailer adapter with a 13 mm spanner.
 - Both washers remain as they are on the trailer adapter. The finely notched structure points outwards, the coarsely notched structures interlock.
5. Install the axle hitch supplied by the trailer manufacturer, together with the set screw, on the trailer adapter.
 - Hold the hitch securely in place while fastening the screw.

Connect trailer to axle hitch

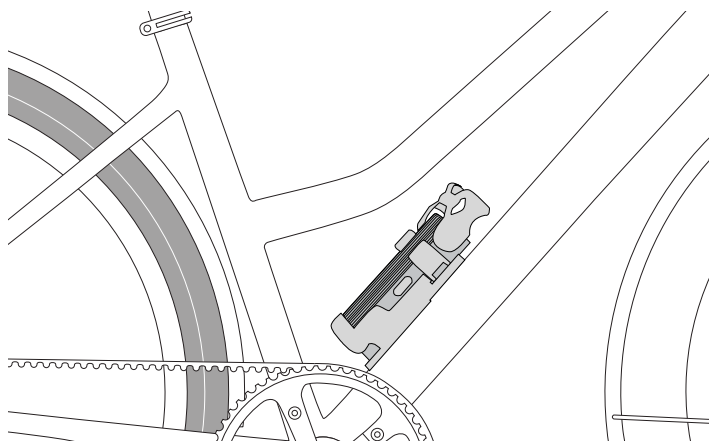
1. Make sure the bike is positioned securely.
2. Connect the trailer to the axle hitch as described in the trailer instructions.

5.4.2 Bike lock (optional)

- Follow the instructions for the bicycle lock.
- Only attach the bicycle lock to your Pedelec by using the provided holder.
- Do **not** allow the bicycle lock to hang loosely on the handlebar, do **not** store or transport it loosely on the rear carrier.

Mounting the holder for the bicycle lock

1. Mount the bicycle lock holder on the eyelets (3 mm hex socket) on the Pedelec according to the manufacturer's instructions.
2. Insert the bicycle lock into the holder according to the instructions.
3. Ensure that the lock is securely held in place.



6 Before the first ride

After assembly, the Pedelec must be checked before it is used for the first time. Some components can be adapted to the user. We also recommend that you familiarise yourself with the basic functions of the Pedelec, such as the operation of the brakes and switching the Pedelec on and off.

6.1 Checking the Pedelec after assembly

- Carry out a visual inspection:
 - Are all components (fenders, bell, pedals, optional accessories) firmly mounted?
 - Are all fasteners (on the handlebar, wheels, saddle) tightened?
 - Are the cables on the frame running in the right order? Are all cable clips and rubber grommets attached?
- Spin the wheels.
 - Do the wheels move smoothly, do they coast freely?
- Check tire pressure e.g. with a suitable bicycle pump.
 - Do the tires have the required tire pressure?
- Test the brakes: Spin the front wheel and rear wheel separately. Operate each brake lever for the front and rear wheel.
 - Do the brakes bite well and do the wheels stop?

6.2 Customising the Pedelec

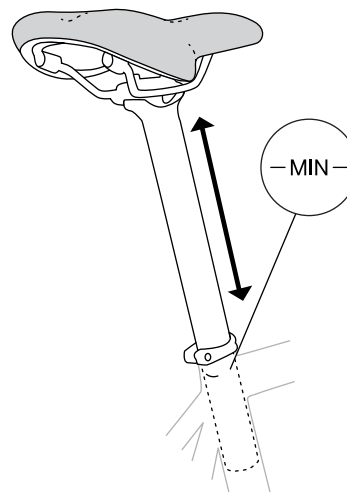
6.2.1 Adjusting the saddle

⚠ DANGER
Risk of injury from falling due to an incorrectly mounted seatpost.
A non-respected required minimum insertion depth can lead to a failure of the seatpost, it can break, slip out the seat tube and lead to serious accidents.

- ▶ When adjusting the saddle height, observe the marking on the seatpost for the minimum required insertion depth and do **not** adjust it beyond this point.

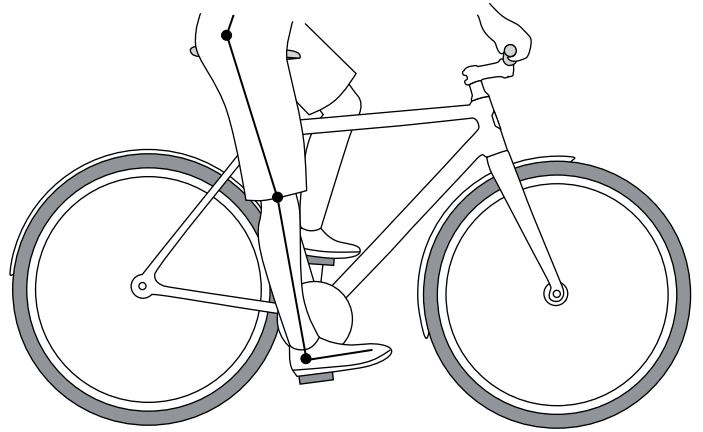
The position of the minimum required insertion depth of the seatpost is 25 cm below the centre of the saddle rails or 10 cm above the lower end of the seatpost.

- 1 Marking for min. required insertion depth



Adjusting the saddle height

1. Slightly loosen the seatpost clamp on the seat tube with a 4 mm hex key.
2. Move the seatpost to a point where the top of the saddle is approximately at the height of your hip joint and tighten the seatpost clamp.
3. Position the Pedelec in such a way that it is possible to sit on it and support you (e.g. leaning against a wall). Do **not** sit on the bike leaning on the kickstand.
4. Move one pedal to the lowest position.
5. Place your heel on the pedal.
6. Your leg should be straight with your knee joint still slightly bent.
7. If necessary, repeat the process and adjust the saddle height so that the leg is almost fully extended but **not** stretched when the heel is on the pedal.
 - Adjust the seatpost height until the position feels right.
 - Do **not** pull out the seatpost further than the minimum insertion mark.
8. Check again for the correct height.
9. Check and tighten the seatpost clamp.



6.2.2 Adjusting the lighting system (light beam of the front light)

The Pedelec's light beam is preset at the factory for proper illumination of the road.

 Two TX20 keys are required to adjust the front light (**not** included; available from specialist shops and tool stores).

6.3 Basic features

6.3.1 Switching the Pedelec on and off



DANGER

Trying to press the power button while riding can cause an impairment of balance

► Stop the ride to operate the power button.

Falls and crashes can occur when concentrating too much on the display operations while riding.

► Keep the focus on the road ahead and your surroundings while riding.



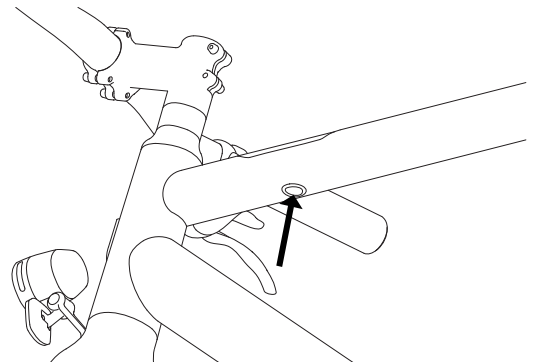
The Pedelec switches on automatically when the **Ampler Bike App** is connected to the Pedelec via Bluetooth, unless it is switched on for the first time after unboxing.

The power button underneath the display is where all **electronic core functions** of your Ampler are operated. The core functions and individual settings can also be set through the **Ampler Bike App**.

Switching on the Pedelec (first start-up)

When you start the pedelec for the first time a special procedure is necessary in order to wake the bike up from its shipping mode. Display is off, Pedelec is off.

1. Go to the left side of the seat tube and lift the charging port cover
2. Insert the magnetic charger plug into the charging socket.
3. Insert the mains plug of the charger into the mains socket.
4. Briefly press the power button 1x.
 - The display shows the Ampler Logo shortly.
 - The display then shows the active state.
 1. Battery state of charge
 2. Range
 3. Assist mode
 4. GPS status
 - The Pedelec is switched on.



Switching on the Pedelec (normal start-up from standby)

Display is off, Pedelec is off.

- Briefly press the power button 1x.
- The display shows the Ampler Logo shortly.
 - The display then shows the active state.
 - The Pedelec is switched on.

Riding the Pedelec

Pedelec is switched on.

As soon as the crank is turned the motor starts to assist the pedaling depending on the selected mode.

The display automatically switches off while riding (screen goes off).

- The display can be lit up by a short press on the power button. We recommend **not** to do this while riding.
- When the Pedelec is moving slowly or standing still for a short while, the display shows the active trip statistics
 1. Distance ridden since last switch-off
 2. Trip duration
 3. Average speed
- The display then shows the active state.



The Pedelec only records odometer data when it is switched on.

Switching off the Pedelec (automatic switch-off)

After about 2.5 minutes of being idle (Pedelec is standing still and the power button was **not** pressed) the Pedelec automatically switches off.

The Pedelec enters standby mode after 3 hours of being idle.

Switching off the Pedelec (manual switch-off)

Pedelec is switched on.

1. Press the power button and hold it.
 - The display shows the power off symbol.
2. Release the power button.
 - The display switches off.
 - The Pedelec switches off.

When the Pedelec is switched off the active trip will stop recording and a trip summary is shown before the display turns off.

1. Trip duration
2. Trip distance
3. Average speed

The trip statistics are automatically uploaded once GSM is active. You can find the trip history in the **Ampler Bike App**.

6.3.2 Selecting the assist mode



DANGER

Trying to press the power button while riding can cause an impairment of balance

- Stop the ride to operate the power button.

Falls and crashes can occur when concentrating too much on the display operations while riding.

- Keep the focus on the road ahead and your surroundings while riding.

The electric drive has two assist modes and a 0% assist mode:

- Standard mode - 70% pedalling assistance
- Max mode - 100% pedalling assistance
- 0% assist mode - motor is off, lights can be turned on or off separately

The assist mode is selected before starting the trip when the Pedelec is switched on. The system remembers the last selected mode.

Selecting assist mode

Pedelec is switched on.

If the display is off then it can be "woken up" by a short press on the power button. We recommend **not** to do this while riding. The display shows the active state.

1. Shortly press the power button to cycle between modes.
2. The display shows the following icons:
 -  for standard mode
 -  for max mode
 -  for 0% assistance mode
3. Select the desired mode. The icon will be shown for approx. 2 seconds and the mode is set.

6.3.3 Switching the lights on and off



DANGER

Trying to press the power button while riding can cause an impairment of balance

- Stop the ride to operate the power button.

Falls and crashes can occur when concentrating too much on the display operations while riding.

- Keep the focus on the road ahead and your surroundings while riding.

The lights (front light and rear light) are powered by the battery. The front and rear lights are switched on and off together. The Pedelec always remembers the last selected setting (lights on or off).

Switch light on / switch light off

Pedelec is switched on.

The display shows the active state.

1. Press and hold the power button.
 - The display shows the lights icon for approx. 2 seconds
2. Release the power button while the icon is displayed.
 - The lights switched on

Repeat the process to switch the lights off.

1. Press and hold the power button for 1 second.
 - The display shows the lights off icon for approx. 2 seconds
2. Release the power button while the icon is displayed.
 - The lights switches off



If you want to ride with lights on but without motor support then turn the lights on and select 0% assist mode.

6.3.4 Charging the battery with the charger

The factory charge level of the battery is between 40% and 90%.

 It is best advised to store the charger indoors.

- Read and follow the safety instructions for the battery and the charger.

Before recharging

 After a ride in the cold, give the Pedelec some time to acclimatise ("warm up") before charging the battery.

- Use the charger indoors only.
- Ensure that the charging port on the Pedelec and the charging plug and mains plug of the charger are clean, dry and free from metallic objects and debris.
- The charging process must be carried out in a dry and **not** too cold environment, but always at least above 0 °C.

Charging the battery

1. Allow the Pedelec and charger to acclimatise to the ambient temperature, if necessary.
2. Lift the charging port cover and insert the magnetic charger plug into the charging socket on the left side of the seat tube.
3. Insert the mains plug of the charger into the mains socket.
 - The display shows active charging
 1. Current state of charge
 2. Remaining charging time until 100%
 - The charger charges the battery, the charger LED is red. The time from empty to fully charged takes approx. 2.5 hours.
 - The charger stops charging automatically when the battery is fully charged.
 - As soon as the display shows 100% and the charger LED is green, the battery is fully charged.
4. Unplug the charger from the mains socket.
5. Unplug the magnetic charger plug from the charging socket on the left side of the seat tube and close the charging port cover.

7 Operation: riding the Pedelec

In order to make the daily use of the Pedelec as problem-free as possible for all journeys, there are a few things to bear in mind:

1. Check the Pedelec before each ride using the "Before the ride" checklist.
2. Use personal protective equipment (e.g. a helmet).
3. Be aware of environmental conditions and special circumstances when riding a Pedelec.

**Braking performance during the first few rides**

The brake pads of the hydraulic disc brakes do **not** perform at their full braking potential at the first use. This means there will be a longer braking distance and that the overall braking power will increase with use in the beginning.

► Note that full braking power is **not** available during the first few rides and that it will increase until the brakes will reach their full potential.

Environmental conditions

You are usually travelling at higher speeds with a Pedelec compared to a normal bicycle. This also means that the Pedelec reacts differently to unfavourable environmental conditions: Wetness, rain, snow and ice, but also sand or dirt on the road as well as different road surfaces can affect the steering when swerving at high speeds. Mind the longer braking distances or influence of the handling of the Pedelec compared to a normal bicycle that you might be used to.

- While riding pay attention to the respective environmental conditions and adapt your riding style accordingly.

Riding a Pedelec: braking and cornering

When riding a Pedelec, braking distances can increase due to typically higher speeds, especially when riding with luggage and carrying weight.

When riding with a trailer, the handling of the Pedelec may change, especially in cornering and when braking.

When cornering, the exerted forces can be higher than what you are normally used to.

- When riding with a trailer, carrying luggage or load and at high speeds, adjust your riding style to suit the conditions.

7.1 Before your ride

7.1.1 Checklist "Before Every Ride"

→ Carry out a visual inspection of the Pedelec and all accessories according to the checklist:

- Are all accessories securely mounted and fastened?

Parts	What to do before each ride?
Brakes	→ Check the function of both brakes. → To do this, lift the front and rear wheels individually, spin them and apply the brakes as a test.
Drivetrain	→ Move both pedals manually.
Rechargeable battery	→ Check the state of charge of the battery.
Lighting system	→ Check the lighting system's functionality. → Check reflectors: Securely attached? Clean?
Tires	→ Check the tire tread. → Check the condition of the sidewalls. → Check tire pressure, inflate if necessary.

7.1.2 Personal protective equipment

When riding a Pedelec, wearing a helmet is an indispensable protection that can prevent serious injuries in case of falls or collisions.

- Wear a helmet while riding.

7.2 Riding the bike

1. Checklist "Before every ride" taken into account.
2. Personal protective equipment is present.



DANGER

Trying to press the power button while riding can cause an impairment of balance!

- Stop the ride to operate the power button.

1. Switch on the Pedelec.
2. If necessary, change the assist mode on the power button: Select standard, max or 0% support.
3. If necessary, use the power button to switch the lights on or off.
4. Get on the Pedelec and start pedaling.
 - As soon as the pedals are engaged, the motor turns on, depending on the selected assist mode, and starts to support the pedalling movement.

7.3 Before the first rides: perform "bedding-in" of the brakes

The brake pads of the hydraulic disc brakes do **not** develop their full braking performance when first used and must be bedded-in. This also means there is a longer braking distance at the beginning and that the stopping power will increase over time until it reaches its full potential.

- Be especially careful when riding for the first time and mind the longer braking distance.
- Try out and get to know the brake system, the brake lever designations and the braking power of the disc brakes in a suitable, safe environment. Perform a disc brake "bed-in" procedure prior to your first ride.

7.4 At the end of the ride

1. Dismount from the Pedelec.
2. Park it, so that it cannot tip over.
3. Switch off the Pedelec at the power button.

8 Cleaning, maintenance and care

Regular cleaning and care of the Pedelec increases the service life of the components.



Cleaning, maintenance and care

Information and a video on this subject are available on the **Ampler Support Portal**.



8.1 Cleaning

8.1.1 After every ride

- Clean the Pedelec of excessive dirt after each ride.
- For damp dirt: Allow the Pedelec to dry before cleaning.
- Remove heavy dirt with a large, soft brush.

8.1.2 Regular cleaning

ATTENTION

Damage may result from incorrect cleaning of the Pedelec!

A jet of water at high pressure (e.g. from a high-pressure cleaner) can remove lubrication that is necessary, e.g. on headset bearings and hubs, impair their function and cause serious damage to the components (nuts, bearings, seals).

A jet of water at high pressure can cause moisture to ingress the frame, cause serious damage to the battery and electronics, and cause the motor to fail.

- ▶ Do **not** clean the Pedelec with a high-pressure washer.

ATTENTION

Injuries to eyes and skin due to aggressive cleaning agents!

Cleaning agents can get into the eyes and on the skin if used incorrectly.

- ▶ Do **not** clean the Pedelec with corrosive cleaning agents.
- ▶ Follow the cleaning agent manufacturer's instructions for use.

- Regularly clean the Pedelec manually with water and mild detergent (washing-up liquid).
- For damp dirt: Allow the Pedelec to dry before cleaning.
- Remove heavy dirt with a large, soft brush.

8.2 Care and maintenance

1. Check the Pedelec regularly, at least monthly, as indicated in the following table.
2. Replace damaged or worn components or have them replaced by a bicycle workshop.

Parts	What must be done on a regular / at least monthly basis?
Brakes	→ Check brakes for function and wear.
Fenders	→ Check fenders for damage and clearance.
Headset	→ Check for headset play.
Drivetrain	→ Check the belt tension. → Check the belt & sprockets for damage.
Wheels	→ Check wheel alignment and true.
• Spokes	→ Check the wheel spokes.
• Front wheel, thru-axle, lock	→ Check the thru-axle of the front wheel.
• Rear wheel, axle, nuts	→ Check the nuts of the rear wheel axle.
Tires	→ Check tire pressure. → Check tire tread and sidewalls for wear and damage.
Screws, nuts, bolts, fasteners	→ Check all fasteners for tightness.
Rechargeable battery	→ Check the state of charge.
Charging port	→ Check the charging port. → Clean the charging port with contact spray and an old toothbrush.

8.2.1 Brakes

After a certain amount of use disc brakes may become less efficient. Dirt and oil on the brake discs and pads become noticeable through noise and reduced braking performance. Switch off the Pedelec.

Check brakes

1. Check brakes for cleanliness and correct adjustment.
 - Applying the brakes should feel smooth.
 - The brake lever blades must **not** touch the handlebar when operated.

Check brake pads

1. Check brake pads regularly for wear.
 - Ensure that there is no dirt or oil or greasy substances on the brake pads, brake calipers and brake discs.
2. Replace worn down brake pads when necessary.

Check the brake hoses

1. Check brake hoses regularly for wear such as kinks and external abrasion.
 - Follow the scheduled inspection interval.
2. In case of abnormalities, heavy wear and visible damage to the brake hoses:
 - Do **not** use the Pedelec.
 - Have the brake hoses checked at a bicycle workshop and repaired if necessary.

8.2.2 Fenders

Switch off the Pedelec.

1. Check fenders for damage and to ensure that they have enough clearance.
2. If the fender is rubbing against the tire, try to readjust the fender stays.
3. Only replace the fenders in consultation with and in accordance to the instructions of the **Ampler Customer Service**, or have them replaced in a bicycle workshop.

8.2.3 Headset



Adjusting the headset

Information and a video on this subject are available on the **Ampler Support Portal**.



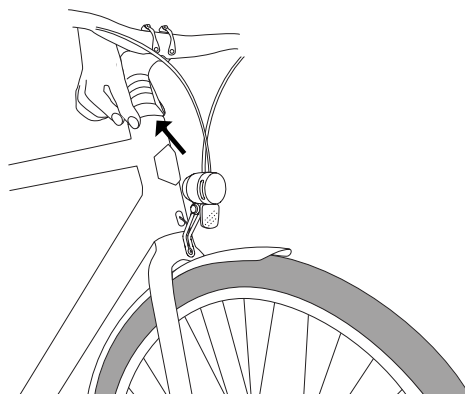
Using a torque wrench

If necessary, a torque wrench can be used for assembly (not included; available from specialist shops).

Switch off the Pedelec.

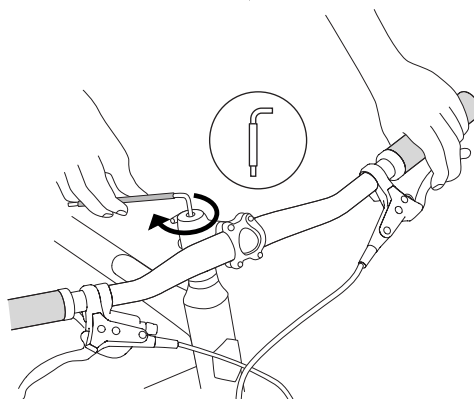
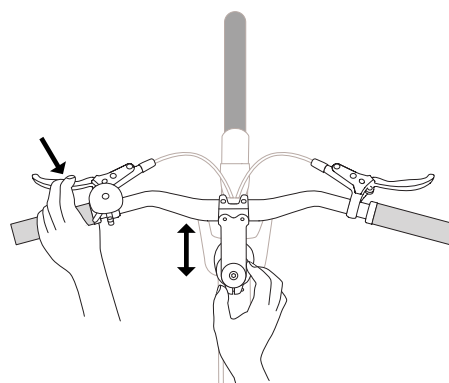
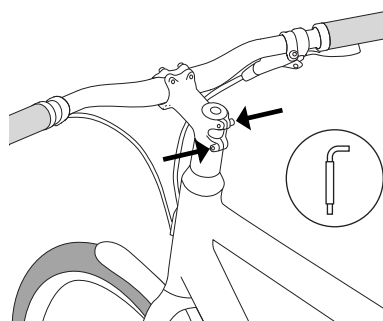
Checking the headset

1. Move the wheel back and forth with the front brake applied.
 - If it is noticeable that the dust cap is moving where the frame meets the headset, proceed as follows.



Adjusting the headset

1. Slightly loosen both side stem clamping screws with the 4 mm hex key.
 2. Slightly tighten the screw of the headset cap until the spacer no longer moves.
 3. Check adjustment: Reapply the front brake and gently move the wheel back and forth again.
 4. Tighten both side stem clamping screws.
 5. Turn the handlebar to the left and right and check whether they move smoothly, the wheel moves evenly in the direction of rotation and the headset has no "play".
- If the movement feels a little too tight:
- Loosen the stem clamping screws.
 - Loosen the screw of the headset cap a little.
 - Tighten the stem clamping screws again.
- If there is noticeable "play" on the headset during movement:
- Loosen the stem clamping screws.
 - Tighten the headset cap screw a little tighter.
 - Tighten the stem clamping screws again.
6. Repeat the check if necessary.



8.2.4 Belt

Switch off the Pedelec.

Checking the belt tension

Any bicycle workshop can check the belt tension. The measurement can also be carried out by yourself.

! **Checking the belt tension**
Information is available on the **Ampler Support Portal**.



Measuring with a belt tension meter:

(available at specialised dealers)

→ Follow the manufacturer's instructions for measuring the belt tension.

Adjust belt and eccentric

! Belts and eccentrics can only be adjusted with the help of information from **Ampler Customer Service**.
► Contact **Ampler Customer Service**.

Changing the belt

The belt can be replaced if worn or damaged. This requires special tools, which are available at bicycle workshops.

! The belt can only be changed with guidance from Ampler's Customer Service.
► Contact **Ampler Customer Service**.

8.2.5 Wheels

Switch off the Pedelec.

Checking the wheels

- Check wheel alignment and true.
- Replace a damaged wheel in consultation with **Ampler Customer Service**, or have it replaced in a bicycle workshop in accordance with **Ampler Customer Service** instructions.

Check spokes

- Check the wheel spokes.
- If the spokes of the wheels are damaged or loose, only have them trued or replaced by **Ampler Customer Service** or by a bicycle workshop.

Check the thru-axle of the front wheel

- Check the thru-axle of the front wheel.
- Tighten the thru-axle. Pay attention to the specified tightening torque.

Check the axle of the rear wheel

- Check the nuts of the rear wheel axle.
- Tighten the nuts. Pay attention to the tightening torque and the instructions for correct tightening.
 - When using a torque wrench: Follow the manufacturer's instructions.

8.2.6 Tires

Switch off the Pedelec.

Check tire pressure

The correct tire pressure leads to low rolling resistance and can prevent punctures. It also leads to a better response between torque sensor and motor.

In general, the specifications on the sidewall of the tire are the maximum allowed pressures in bar or psi. In everyday use, the tire pressure can be set a little lower, but **not** higher.

-  We recommend the use of a floor pump with a pressure gauge, on which the tire pressure is clearly shown.
→ Follow the manufacturer's instructions.

→ Check tire pressure before each ride and approximately once a week.

- max. 5 bar

Check tire tread and sidewall

The sidewall should be uniformly round in shape and free from cracks, sidewall bulges and grooves. The tires should have sufficient, even tread.

1. Check sidewall and tread depth.
2. If the tread depth is too shallow or if there is visible damage to the sidewall: Change the tires.

Changing tires

→ Follow the belt manufacturer's instructions and the safety instructions.

- The instructions are available on the **Ampler Support Portal**.

Switch off the Pedelec.

-  **Removing the rear wheel**
A video about this is available on the **Ampler Support Portal**. The video explains the necessary assembly steps in detail and contains further tips.



ATTENTION

Damage is caused to the motor cable and drive by wrong disassembly!
Make sure that the motor cable is disconnected at the rear wheel.

1. Disconnect the motor cable at the plug.
2. Remove the wheel.
3. Remove the tire from the wheel with a suitable tool.
4. Mount a new tire.
5. Reinstall the wheel with the next steps in mind.
6. Bring the rear wheel approximately into position.
7. Place the belt on the front sprocket and then onto the rear sprocket.
8. When the belt is correctly positioned on both sprockets: Insert the rear wheel into the dropouts and tighten the nuts provisionally.
9. Check that the rear wheel is secure and tight in the dropout.
10. Inflate the tire.
11. Put the wheels on the ground and loosen the rear axle nuts again.
12. Put load on the rear wheel or saddle
13. The rear wheel is pushed firmly into the dropouts.
14. Tighten the nuts firmly. Pay attention to the tightening torque. Where applicable, use a torque wrench.
15. Check the clearance to the fender stays.
16. Check that the brakes do **not** drag.
17. Reconnect the motor cable at the plug.

Replacing tires

- ▶ Only use tires of the same dimension and with reflective sidewalls.
- or
- ▶ When using tires without reflective sidewalls: Install spoke reflectors.

8.2.7 Fasteners

ATTENTION

Fasteners can be damaged by over-tightening!

Overtightening fasteners can overload them, damage the thread, leading to loss of locking force and breakage of fasteners.

- ▶ Do **not** exceed the tightening torque of the fastener.
- ▶ If necessary, use a suitable torque wrench.

- Check all fasteners on the Pedelec regularly.
 - Tighten any fasteners that are loose or have play. Pay attention to the tightening torques according to the table.
 - If necessary, visit a bicycle workshop to have the cause of loosening fasteners checked out.

8.2.8 Rechargeable battery

ATTENTION

Damage to the battery is caused by a permanently low charge level when not in use for a long time.

The battery cells may be damaged.

- ▶ Check the state of charge regularly and charge the battery if necessary.

Check battery

- Check the state of charge of the battery **regularly at least every 4 weeks**.

Charging the battery

- **Charge the battery when the state of charge is too low.**

Check charging port

- Check the charging port, especially the contact pins.
- Check if the charging port cover is securely attached.
- In case of dirt or corroded contacts: Clean the charging port. Do **not** use metal brushes or similar.

Cleaning the charging port

- If necessary, clean the charging port by applying soap water and using e.g. an old toothbrush.

9 Troubleshooting faults and errors

Pedelec Problem	Cause	Solution
Pedelec sluggish	- Tire pressure too low. - Brakes rubbing	→ Inflate tires. → Adjust the brakes.
Pedelec will not switch on	- Battery fully discharged. - Display shows lock, button lock is on. - Power button does not respond to button presses. - Power button not working, damaged or faulty.	→ Charge the battery. → Connect to Ampler Bike App and unlock bike. → Contact Ampler Customer Service. → Contact Ampler Customer Service.
Display is not on	- Bike is in shutdown mode. - Display not working, damaged or faulty. - Display shows an error message.	→ Plug the charging plug into the charging socket. → Press the power button. → Contact Ampler Customer Service. → Contact Ampler Customer Service.
Noise when braking	Dirt, oil on the brake pads.	→ Check and clean brake pads. → Replace if necessary and perform bed-in procedure.
"Creaking noises" when putting load on the pedals	Loose pedals.	→ Tighten the pedals with the correct tools. → Where applicable, unscrew the pedals, apply a little grease, screw them back in.
Rubbing noises when riding	fenders and/or stays rub against the tire.	→ Check the position of the fenders and adjust if necessary.
Motor does not switch on when pedaling.	- Pedelec is not switched on. - Bike is in 0% assist mode. - Motor cable damaged or faulty.	→ Switch on the Pedelec. → Change mode into standard or max. → Contact Ampler Customer Service.
Front light does not light up.	- Cable to the light defective - Lamp defective.	→ Check the light cable. → Contact Ampler Customer Service.
Rear light does not light up.	Rear light is faulty or is defective.	→ Contact Ampler Customer Service.
Charger error		
Charging LED does not light up.	- Connection to mains power not available. - Battery connection not functional. - Battery cannot be charged, battery is defective. - Charger is not charging, charger is defective.	→ Insert the mains plug into the mains socket. → Plug the charging plug into the charging socket. → Contact Ampler Customer Service. → Contact Ampler Customer Service.
Ampler Bike App Error		
Pedelec does not respond to the Ampler Bike App .	Connection is disconnected, dropped or lost.	→ Restart the firmware.

9.1 Restarting the firmware

A firmware restart resets the Pedelec's settings and restarts the Pedelec's electrical system support. It can be triggered through the power button or through the **Ampler Bike App**.

This can help to solve the following issues:

- Minor faults or deviations in the behaviour of the Pedelec
- Issues with the power button
- Communication issues between **Ampler Bike App** and the Pedelec

Restart the firmware

1. Press and hold the power button until the firmware restart symbol is shown.
2. Release the button
 - The Pedelec's software switches off.
3. Press the power button again to switch on the Pedelec.
 - The Pedelec switches on.
4. If this method does **not** work:
Contact **Ampler Customer Service**.

10 Ampler Bike App

! The **Ampler Bike App** is not mandatory for using the Pedelec.
→ Find information on where to download the **Ampler Bike App** and detailed guides on how to use the app in the **Ampler Support Portal**.



10.1 Features

All core features of the power button can also be set through the **Ampler Bike App**.

- Selecting assist mode
- Switching on the Pedelec
- Pedelec turns on automatically on connect
- Switching off the Pedelec by activating the power button lock.

Display and statistics features

The **Ampler Bike App** provides the following general information:

- State of charge, estimated battery range, total mileage, speed
- Trip history and statistics

! The odometer data is only recorded when the Pedelec is switched on. If you want to ride without motor support, we recommend using 0% assist mode instead of switching the Pedelec off, in order for ride distance to be recorded.

Adjustment of the motor power and max. speed

The **Ampler Bike App** allows you to adjust the Pedelec's settings and control functions:

- Adjust assist modes - change percentage strength of standard or max mode.
- Lower maximum speed - lower cut-off of motor support depending on speed.

Activating the power button lock

Through the **Ampler Bike App**, the power button can be blocked from unauthorised use. All Pedelec functions are disabled until the owner unblocks it.

1. Connect your Pedelec to the **Ampler Bike App**.
2. Tap the button lock icon inside the app
 - The display will show the lock symbol for approx. 2 seconds.
 - The button will now be locked and can only be unlocked again through the app.

Authorise ownership and other Pedelec users

Through the **Ampler Bike App**, authorising ownership assures only the owner can lock and unlock the power button and thus the Pedelec functions. An owner can authorise other riders within the App. We recommend using this feature for extra security.

! Read more about the security features on the **Ampler Support Portal**.

10.2 Install and use the Ampler Bike App on a smartphone

! Find more information on installing and registering in the **Ampler Bike App**.



10.3 Updating the Pedelec's firmware

The Pedelec has a software-controlled motor driver integrated into a control unit. The software of the controller is called firmware and is updated occasionally.

- We recommend that you always keep your Pedelec's firmware up to date.

! All information on how to use the **Ampler Bike App** to update the Pedelec's firmware is available in the **Ampler Bike App**.



10.4 Carrying out a calibration of the torque sensor

During calibration, the Pedelec's torque sensor is calibrated and the functionality of all electronic components is synchronised with each other. This calibration is carried out using the **Ampler Bike App**.

! We recommend calibrating the sensor every 3 to 6 months.



Ampler Bike App installed on a smartphone.

Ampler Bike App connects to the Pedelec via Bluetooth.

1. In the **Ampler Bike App**, open the settings menu and select the menu item "System maintenance".
2. Follow the calibration instructions in the **Ampler Bike App**.

10.5 Carrying out a factory calibration

A factory calibration can only be performed after the **Ampler Customer Service** enables the possibility through the **Ampler Bike App** remotely.

- 2 When instructed by **Ampler Customer Service**, open the settings menu in the **Ampler Bike App** and select the menu item "Factory Calibration".
- 3 Follow the calibration instructions in the **Ampler Bike App**.

⚠ DANGER
During factory calibration, the motor starts by itself and the rear wheel begins to spin. It is important that the rear wheel is lifted during the whole procedure to avoid damage or injury.

11 Inspection and maintenance

Inspection and maintenance of the Pedelec can be carried out by any bicycle workshop.



Information on inspection and maintenance schedules:



11.1 Inspection schedules

Schedule	When?
First inspection	• after 500 km or after approx. 6 weeks
Annual inspection	• at least once a year - and • every 3000 km
Regular inspection	Recommendation: with frequent use (high mileage) at least 2 to 3 inspections per year: • before the start of the season • during the season • at the end of the season

12 Repair

Repairs to the Pedelec can only be carried out by a bicycle workshop or by Ampler Bikes and our Service Partners, depending on the particular case.

Ampler Customer Service always decides who can carry out the repair in each individual case.

→ Before making repairs: Contact **Ampler Customer Service**.

13 Decommissioning

If the Pedelec will **not** be used for a longer period of time (e.g. in winter), it should be decommissioned, or "put out of operation".

13.1 Decommissioning the Pedelec

1. Clean the Pedelec.
2. Charge the battery to approx. 40% - 80%.
3. Check the state of charge regularly.
 - If necessary, recharge the battery to 40% - 80%.
4. Store the Pedelec in a clean, dry place.
5. Follow the instructions for correct storage.

14 Storage

Storing the Pedelec

Since the battery is permanently installed in the frame of the Pedelec, the following rules apply to the storage of the Pedelec when it is **not** used for a longer period of time:

- ▶ Store the Pedelec in a dry place, **not** below 0 °C ambient temperature.
- ▶ Protect the Pedelec and storage location from direct sunlight, heat, permanently high temperatures, rain, moisture and humidity, frost and ice.

Check the battery regularly

If the Pedelec is **not** used regularly, the battery can discharge over time.

As a rule, the battery should maintain a state of charge between 40 - 80%.

- ▶ Check the state of charge of the battery regularly.

ATTENTION

Damage to the battery is caused by a permanently low state of charge when not in use for a long time.

The battery cells may get damaged and lose their function.

- ▶ Check the state of charge regularly and charge the battery if necessary..

15 Disassembly

Before shipping the Pedelec in its original packaging, before storing it for a longer period of time and when putting it out of operation, some components of the Pedelec can be disassembled.

This includes: seatpost, saddle, if necessary also the pedals.

16 Disposal



→ Do **not** dispose of the battery and charger in household waste. Dispose of the battery and charger in accordance with local regulations for recycling electrical equipment.



→ Dispose of Pedelec components according to locally applicable regulations.

17 Technical specifications

17.1 Pedelec

Parameters	Juna	Axel
Frame		
• Size	XS / S	M / L
• Shape	Low-step	Diamond
Weight specifications, maximum load		
• Total weight of the Pedelec, without cargo, without accessories	16.5 kg in size S	16.3 kg in size M
• The maximum, possible load (rider, luggage)	120 kg	120 kg
• The maximum, permissible total weight (incl. rider and luggage)	136 kg (rounded)	136 kg (rounded)
Drivetrain	single speed	single speed
Brakes	Mineral oil hydraulically operated disc brakes	Mineral oil hydraulically operated disc brakes
• Front wheel/rear wheel		
Wheels and tires		
• Size	27,5"	27,5"
• Tires, size	50-548 mm	50-548 mm
• Tire pressure	max. 5.0 bar / 73 PSI	max. 5.0 bar / 73 PSI
Lighting system		
• Front light	LED	LED
• Rear light	integrated in rear fender	integrated in rear fender
Motor	Rear wheel hub motor	Rear wheel hub motor
• Rated voltage	48 V	48 V
• Continuous rated power	250 W	250 W
• Max. assist speed	25 km/h	25 km/h
Rechargeable battery	Li-Ion	Li-Ion
• Ambient temperature	>0 °C	>0 °C
• Rated voltage	48 V	48 V
• Rated capacity	336 Wh	336 Wh
• Charging time	approx. 2.5 h	approx. 2.5 h
• Range (depending on assist mode and riding style)	approx. 70 km	approx. 70 km
Drive emissions		
• Noise levels	<70 dB	<70 dB

Tightening torques

Position	Tightening torque	Tools
Headset cap screw	• max. 2 Nm	• 4 mm hex key
Stem clamping screws	• max. 6 Nm	• 4 mm hex key
Saddle clamp	• 9 - 10 Nm	• 5 mm hex key
Seatpost clamp	• 5 - 6 Nm	• 4 mm hex key
Thru-axle front wheel	• 10 Nm	• 6 mm hex key
Rear wheel axle, nuts	• 10 Nm	• 6 mm hex key or • 15 mm spanner
Pedals	• 35 Nm	• 6 mm hex key or • 15 mm spanner

17.2 Battery charger

Parameters	
Battery charger	external
• Voltage mains supply	220–240 V/AC; 50/60 Hz
• Plug connector	Rosenberger, magnetic
• Voltage output	max. 54.6 V
• Charging current output	max. 3.0 A

17.3 Accessories: trailer adapter

Parameters	Value
Trailer load	→ Pay attention to the max. load capacity of the trailer.
Mounting	on rear wheel axle

17.4 Accessories: rear carrier

Parameters	Value
Trailer load	max. 15 kg
Mounting	on rear dropouts and rear fender

18 Further information

18.1 Addresses

18.1.1 Manufacturer

Ampler Bikes OÜ
Telliskivi tn 60/2, Tallinn
10412 Estonia

18.1.2 Customer Service

hello@amplerbikes.com
Telephone: +49 30 5683 7159

18.2 Ampler Support Portal

The Ampler Support Portal provides further information on:



- Notes and videos on all stages of use.
- Notes on how to reach the customer service.
- Notes on the General Terms and Conditions and Warranty
- Notes on exchanging information with other users of an Ampler bike, e.g. on social media.

19 EC Declaration of Conformity

Manufacturer

Ampler Bikes OÜ

Address

Telliskivi tn 60/2, Tallinn
10412 Estonia

Declares that the machinery described

Product: Electrically power assisted cycle (EPAC)
Trade name: Ampler
Model: Juna 2022
Axel 2022

Conforms to the following directives

2014/35/EU LVD Low Voltage Directive
2014/30/EU EMC Electromagnetic Compatibility
2014/53/EU RED Radio Equipment Directive
2006/42/EC MD Machinery Directive
2011/65/EU RoHS

Conforms to the following standards

LVD EN 60335-2-29:2009
EMC EN 15194:2017
MD EN 15194:2017/EN ISO 12100:2010/EN ISO 13849:2015

Hannes Laar, CPO
Tallinn, Estonia



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