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1. Quick-start

Dear customer,

On the first sides of this comprehensive instruction manual you will find this Quick start guide, where you can get a quick overview of the main features of the Speed Pedelec.

For further information please read the additional instructions on the following pages.

There you will find all the important technical issues and details and further relevant information. Should you have any further questions, please ask one of our authorized dealers or contact our technical hotline, whose contact details are at the end of the manual.

Enjoy your Speed Pedelec and we wish you a lot of fun
Your team of Klever Mobility.



Image 2 complete bike marking: major parts of B Speed (PLUS)



Image 3



Image 3-1

Security check:

Before starting the bike please always check the operation of the brakes and the air pressure in the tires

Launch of the electric drive

To start the propulsion system, there are three ways to activate the system:

1. **Press and hold for 1 second**, the POWER button (Image 3) – the system runs for 3 sec through a system check - now the system is activated

Or

2. **You start pedaling** and thus the system will wake up automatically. After 3 sec. of system check, the electrical drive will support you.

Or

3. **Insert the E-KEY** (Image 3-1) then the system will wake up and ready to ride.

Use the PLUS (+) and MINUS (-) buttons to select the desired level of support. The support level is indicated by the bright bars on the top side on the display.

0 bar	UL (Ultra Low)	Ultra-low support
1 bar	L (Low)	Low support
2 bars	M (Medium)	Medium support
3 bars	H (High)	High support
Additional press of the  (TURBO) button, boost function works only when driving above 6 km/h during pedaling. (Can be pressed at any stage.)	T (Ultra High)	Strongest support
Press the  (TURBO) button without pedaling or the bike stops	> 4 km/h at L & UL > 12 km/h at M > 18 km/h at H	pushing aid (throttle)

QUICKSTART

Charging the battery:



Caution! The battery should only be charged with the appropriate, supplied charger.

The battery can be charged on and off bike (for removal the battery see Chapter 6.4.3.)

Connect the charger with the power cable and the power plug to the wall socket. The LED on the charger shows constant red light. The charger is ready for use. (Image 6)

Connect the charger plug from the charger to the charging socket on the battery. (Image 5,6,7a+b)

The charging process starts automatically. Once the LED on the charger constantly lit green the operation is complete and the battery is charged. First pull the plug now, and second, remove the charger plug from the battery charger.

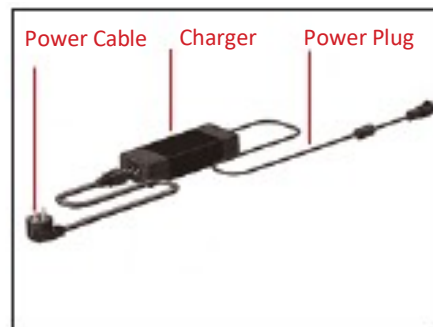


Image 4



Image 5



Image 6



Image 7a



Image 7b

Charging status	Charging Indicator (LED) Charge	Charging Indicator (LED) Battery	Remark
	Flashing red	error	check connections
	Steady red		Charger is ready
0%	Flashing yellow	Flashing red	Capacity very low; charging starts Normal charging
<35%	Steady yellow	Flashing red	Normal charging
35 – 75%	Steady yellow	Flashing yellow	Normal charging
75 – 90%	Steady yellow	Flashing green	Final charging
>90%	Flashing green	Flashing green	Final charging
100 %	Steady green	no LED	

Charging time of an empty battery (0-100% capacity) takes about six hours.

2. Introduction

Congratulations

With the purchase of a Speed Pedelec of Klever Mobility You have made the right purchase decision and got a high quality product with what you will have much pleasure in everyday life.

Technically and functionally up to date, it is carefully manufactured using the highest quality materials and components. An excellent design and excellent value for money distinguishes this bike.

In order to have permanently unclouded driving pleasure with the new product, we would like you to read this manual carefully.

Everything you need to know in terms of technical specifications, operation, maintenance and care we have in this booklet carefully compiled for your information.

Please note the additional information in the instructions supplied with the components.



Pay particular attention to the bolded sections are additionally marked with "Caution". The most important information is again summarized that should be observed to avoid possible accidents and danger to your life and limb.



Bold sections marked with this symbol contain information about this bike and its accessories and its handling, after which it should be again to highlight.



Work described that by this sign are, should be performed by a dealer. They require a lot of experience and special tools.

Furthermore, if you need any further information or advice, please contact our technical hotline at +49 (0)223-4933420 (Monday-Friday from 8-17 clock), or contact an authorized retailer.

Introduction

The latest available information on our products and other technical information and videos can be found on our website:
www.klever-mobility.com.

Your bike is equipped according to EU type approval regulation 168/2013 and rated as vehicle in category L1eB. You can use it safely on public roads.

The additional electric drive is limited to max. 45 km/h, and thus complies with the statutory requirements for a L1eB vehicle.
Due to the fact, the support is limited to max. 45 km/h, you do need driving license, an insurance or an insurance plate.

We wish you a lot of fun and safe ridings at all times

Your Team of Klever Mobility

3. EU Declaration of Conformity

The Manufacturer:

Klever Mobility Inc.
No. 8, Ln.76, Sec.3, Zhongyang Rd.,
Tucheng Dist.; New Taipei City 236
Taiwan

Represented by:

Klever Mobility Europe GmbH
Dieselstr. 8
D-50859 Köln
www.klever-mobility.com
Tel.: +49 2234 93342 0
info@klever-mobility.com

Hereby confirms for the product:

B3 (Commercial name: B Speed Plus & B Speed)

The conformity with regard to regulation
(EU) No. 168/2013

Supplemented by regulation
(EU) No 3/2014, No 44/2014 and No 134/2014

As last amended by regulation
(EU) No 2016/1824

Technical documentation by:

Klever Mobility Europe GmbH
Dieselstr. 8
D-50859 Köln

Daniel Wester
Technical Manager

Signature

4. Getting started - Safety check

Although your bike has been subjected to a final check during assembly and by the dealer, the transport and the time might have caused changes.

Therefore, before getting started the first time and later on before every ride, you should consider some important things and check the bike short.

1. Make yourself intensely familiar with the Pedelec and the functioning of the electric drive, before the first ride in public traffic.
2. Check the correct setting of the saddle and the handlebars (see section 7.1. Saddle and handlebar/stem adjustment)
3. Check the correct function of the brakes
4. Check the air pressure and the profile depth of the tires
5. Check the lighting system for proper operation
6. Check the tightness of the bolts and the wheels
7. Check the minimum insertion of the seat post

Caution: Do not start when you in one of these points identify deficiencies. A defective bike while driving can cause serious accidents and endanger your live. If in doubt, please contact your dealer or our technical hotline.



Your bike is claimed in everyday driving through extreme weather and road bumps. Through this constant dynamic loads experienced all parts of the bike material fatigue and wear. Therefore, examine your bike regularly for wear of the components and other changes such as scratches, cracks or discoloration. These symptoms may be signs of damage and a future failure of the accessory. Bring your bike to your dealer regularly comply the plan of inspection, so he can fix or replace these parts.

5. Behavior in road traffic

Due to the electric auxiliary propulsion you reach high speeds and accelerations much faster than you are used to with a regular bike. Therefore, you should intensively familiarize yourself with the Pedelec only on a traffic free road before you go in public traffic. During driving of the road you should follow these tips:

- Always wear a bike helmet during riding
- Make yourself familiar with the traffic rules and stick to the rules
- Be ready to brake at any time and expect misconduct of others
- Drive defensively and be considerate to other road users
- Drive where it is always offered on the bike paths
- Always keep your bike in a perfect condition
- Use your bike only in accordance with its intended purpose (see chapter 13."normal use")
- Don't use while driving a mobile phone and a headset
- Be sure to observe the maximum weight of 145 kg of the bicycle. (see chapter 11. Technical Data)
- Please let check regular, according to the recommended service intervals your Speed Pedelec by an authorized workshop

6. Propulsion system of Klever Mobility

You have purchased a Speed Pedelec that helps you, with this electric propulsion system, of the movement in everyday life. Slops can be better managed and the wind resistance can be overcome better.

This electric auxiliary drive consists of the following components:

1. Battery
2. Engine/Motor
3. Control unit /Display,
4. Motor Controller
5. Torque sensor
6. Pedal Sensor
7. Charger (Image 8a)



Image 8a



Image 8

Once you have turned on the drive (See also Section 6.3. Display) and you start pedaling the engine will support you as long as you pedal, up to a max. speed of 45 km/h

This limitation of the support, the B Speed moves within the legal framework of the Road Traffic Act and is still considered as a normal bicycle. It is exempt from compulsory insurance and do not need a license. Likewise, it is not compulsory to wear a helmet, although we strongly recommend it for your own safety.

The five (different) levels of support you can select according to the external circumstances (e.g. level four (high level) on climbing uphill or headwind) or your personal preferences. Please note that a high level of support also means a higher consumption of current and reduces the range of the system and the battery.

When you drive faster than 55 km/h, the automatic energy recovery (technical recuperation) is activated. The motor operates as a generator and charges the battery again.

If you ride beyond 60 km/h (e.g. downhill) the system may enter auto-protection mode. In this condition the system is still alive (e.g. display lights up, but the motor output is temporarily shut off, and will not automatically restored.) The system will shut off when the bike stops.

To restore the system from auto-protection mode to normal operation, press the power key to power on your bike.

The Biactron system (on B Speed) is designed to perform at vehicle speeds not exceeding 60 km/h. Speed beyond 60 km/h may cause permanent damage to the system.

6.1. Sensors and function

The Speed Pedelec is equipped with a torque sensor in the dropouts, which is electronically controlled. This sensor accurately measures the change in tension force of the chain at every step (left or right) and informs the system about the force you exert during pedaling. A computer in the control unit then calculates the values, with which the additional thrust of the motor it is very sensitive and harmonious controlled.

During pedaling, the torque and the pedal sensor measure very sensitive and exactly the drivers input and enables the motor controller to operate the additionally support of the Motor

The thrust itself can influence even on the five levels of support (Turbo, High, Medium, Low, Ultra Low). This makes the system very efficiently and economically, saves power consumption and maximizing range.

The additional speed sensor controls the power of the electric motor to zero once you have reached 45 km / h. From this and a higher speed the Speed Pedelec works like a conventional bicycle.

Propulsion system of Klever Mobility

But this also means that you have either to pedal or press the TURBO button on the display bracket to retrieve power of the electric motor.

This button functions as a starting and pushing aid to max.4 km/h it helps you to accelerate from a standstill. It was designed as an aid when starting uphill or for the case that the wheel has to be pushed.

6.2 Levels of support

The propulsion system provides five levels of support available. Depending on topography, weather conditions and your own feelings, you can choose the power of the engine by using the PLUS (+) and MINUS (-) keys and the  (TURBO) button on the control panel (see Section 6.4 display.).

System Level	support	Driving situation (recommended)
UL (Ultra Low)	No support, system is activated	downhill
L (low)	Low support	In the plain
M (medium)	Medium support	Slightly inclines; headwind
H (High)	High support	Steep inclines; fierce headwinds
 (Ultra High) (while pedaling)	Strongest support	Steep ramps; violent gusts

When  (TURBO) button is pushed without pedaling, “throttle” mode provides motor output for < 18 km/h at H; < 12 km/h at M; < 4 km/h at L.

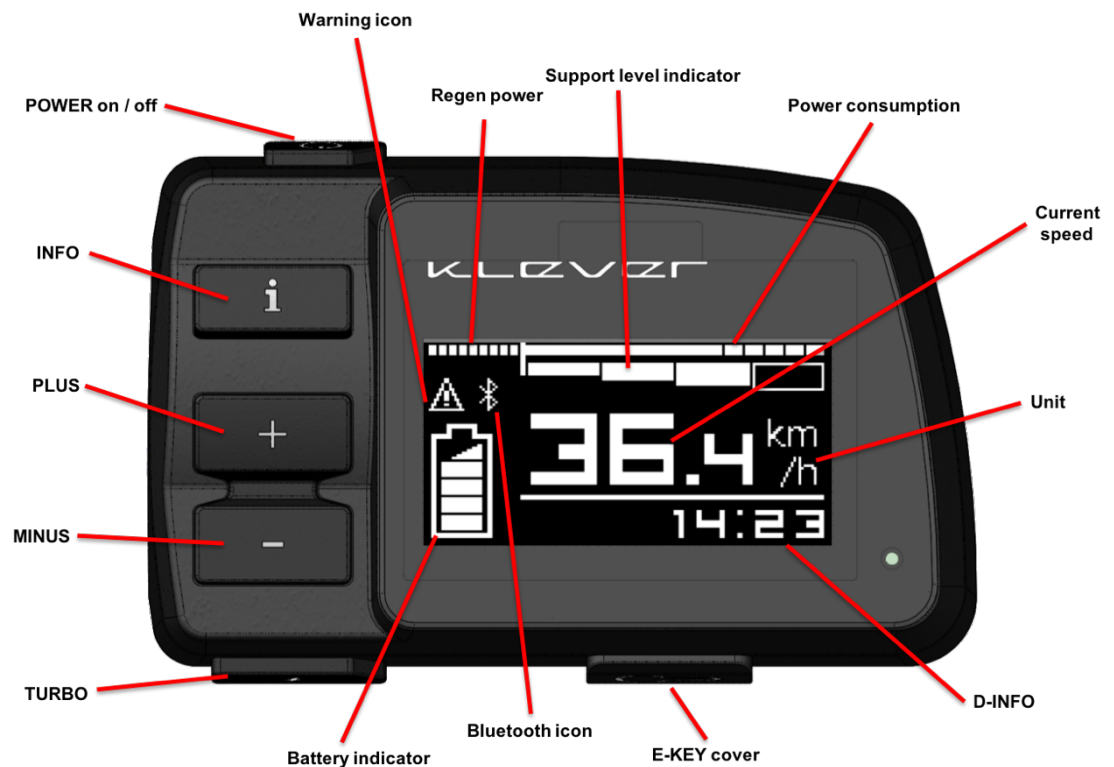


Image 1

6.3 Display/User interface

The **Display** (with user interface) is your gate to the electric propulsion system (Image 1)

With the display you start and control the electric system.

You can start the system with or without inserting the E-KEY.

When the key pairing function is enabled, the bicycle has its own individually programmed display. When enabling the key matching function in setting motor lock, only the same ID of E-KEY will work with the bike. It is not possible to activate your Pedelec with the E-KEY of another bike. There are two same E-KEY on a bike after manufacturing.

Every press of a button will be confirmed with a short acoustic signal.

As soon as the E-KEY is inserted into its display, the system starts.

With the E-KEY already in its display while the system is off, you have two ways to start it:

1. Push the power button

the system will make a check for the first 3 seconds - now the system is ready

or

2. You start pedaling the bike and trigger the automatic start sequence. A system check is started for the first three seconds, after which the system supports you.

Button:	Location	Function
POWER	Upper left edge	On / Off
INFO	Top left	Switch between clock, range, trip, odo and fitness
PLUS (+)	Middle left	Switch up support level
MINUS (-)	Lower left	Switch down support level
TURBO	Lower left edge	Starting and pushing aid (at reset); strongest support (while pedaling)



Image 2

6.3.1 Function of each button:

Start/ stop button (Image 2)

By pressing POWER button for 1 sec boot the system. The system performs a system check of about 3 seconds, and the drive system is ready to operate. The electric drive supports you depending on the level of assistance during pedaling.

By pressing this button again the system turned off and all settings are stored.

Now the Pedelec works like a normal bicycle.

Press the button again, the system starts at exactly the point at which you have turned it off and all old settings and levels of support are enabled again.

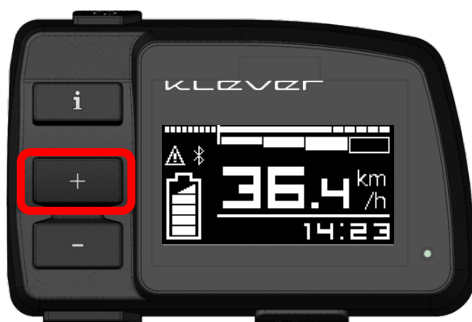


Image 3

PLUS (+) Button (Image 3)

Pressing the PLUS (+) button you can always increase each support level by exactly one level. E.G. the selected support level is on M (medium) and you push the PLUS (+) button, the support level of the motor will increase exactly one level, in this case H (high).

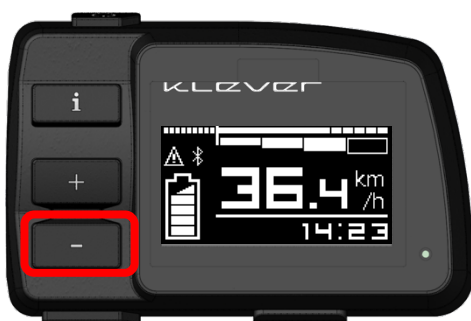


Image 4

MINUS (-) Button (Image 4)

By pressing the MINUS (-) button you can reduce each support level always exactly one level. E.g. the selected support level is M (medium), and you press MINUS (-), the assistance of the electric-motor decrease by one level to L (low).



Image 5

INFO Button (Image 5)

By pressing the INFO button, all important information will be accessed and displayed on the screen.

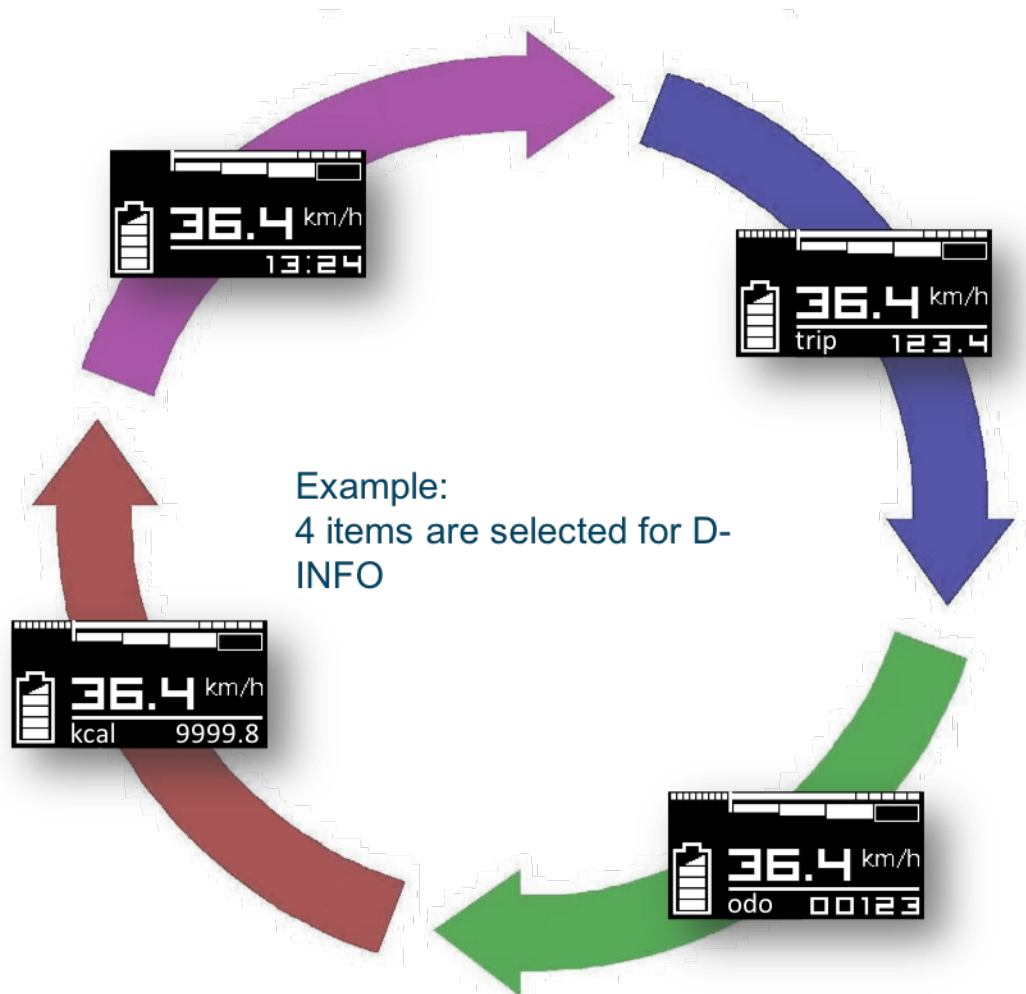
Press the INFO button shortly to switch among available items. Defaults are **time**, **trip**, **km-day**, **odo**, **SOC** and **kcal**. Some examples of them are listed after.

Note: The available items might depend on bike model and version.

Time (hh:mm): the time can be adjusted by one of below methods:

- Setting menu
- Synchronize with smartphone
- Service tool at a dealer

Press "INFO key" to change D-INFO



SOC (State of Charge): The SOC indicates the current battery capacity by %.

(Image 6)



Image 6

trip: Kilometers ridden since the last reset. (Image 7; example 123.4 km)

If you want to set the trip to zero, e.g. at the beginning of a trip, press the INFO button to enter the RESET. Select trip, then confirm by long pressing the ENTER (+) button.



Image 7

Km-day: Kilometers ridden since 00:00 every day. (Image 7-1; example 123.4 km)

The millage will be turned to zero at 00:00:00 every day.



Image 7-1

odo: Accumulated riding kilometers (Image 8; example 1234 km)



Image 8

kcal: Kilocalories you burn from riding. (Image 8-1; example 123 kcal)

To set the weight of rider, long pressing INFO and enter “Rider” to input the number.
kcal can be reset by enter RESET.



Image 8-1



Image 9

TURBO Button (⚡) (Image 9)

This button has two functions:

1. **As a starting and pushing aid:** to help you pushing and/or starting a bicycle at a traffic light on a ramp or facilitate uphill you can press this button.

When ⚡ (TURBO) button is pushed without pedaling, “throttle” mode provides motor output for < 18 km/h at H; < 12 km/h at M; < 4 km/h at L. When you release the button, the support from the motor stops immediately.

2. **As a turbo support while pedaling.** When you need extra support for a short period of time, for example on a steep ramp, press the button and to get the highest possible support from the motor.

Turbo mode only works while pedaling simultaneously.

When you stop pedaling / or release the button the turbo assistance from the motor will stop.



Note: Driving with a starting aid/ turbo mode has to be learned. Practice this procedure only on a pedestrian street. Only when you feel secure and control the prosecco, drive on public road.

Display Content

Battery Status (Image 10)

The battery icon shows the charging status of the battery. One bar represents 20% of full capacity (half bar for 10%). If only one bar is shown, only 20% of the maximum capacity of the battery is available. Now the battery should be recharged as soon as possible.

When the battery icon is half of bar, there is less than 10% battery capacity remaining. Recharging of the battery is now urgently needed.

Display	Charging level
Five bars light up	100%
Four bars light up	80%
Three bars light up	60%
Two bars light up	40%
One bar light up	20%
Half of bar light up	Less than 10%

Additionally, you can check the charging level with the LED on the front side of the battery. (See also Section 6.4.1. Charging the battery)

To save energy, it's not possible to choose the highest support level from a remaining capacity of 10% (once half of bar is shown; see also chapter 6.2 on page 15). From 5% remaining charge on, it's only possible to use the lowest support level.

Support level (Image 11)

The bars in the upper part of the screen show of the chosen level of support of the electric motor.

In the right column of the table we have listed recommended setting, in which driving situation which level will be the best to use the system optimally and minimize power consumption. Of course it is possible to use the levels individually, e.g. driving in the plane with the highest level of support (H).



Image 10



Image 11

System Level	support	Driving situation (recommended)
UL (Ultra Low)	No support, system is activated	downhill
L (low)	Low support	In the plain
M (medium)	Medium support	Slightly inclines; headwind
H (High)	High support	Steep inclines; fierce headwinds
⚡ (Ultra High) (while pedaling)	Strongest support	Steep ramps; violent gusts

When ⚡ (TURBO) button is pushed without pedaling,
“throttle” mode provides motor output for < 18 km/h at H; < 12 km/h at M; < 4 km/h at L.



Image 12

Speedometer (Image 12)

The main display will show you the current speed.



Image 12-1

Regen Power (Image 12-1)

This will show you the regen power you get from the system when you make the setting of setting >> Recup >>

1. Coasting: On (1-2-3-auto) or
2. Braking: On (1-2-3-auto)

*(braking regen only available on S-pedelec)

The more bars, the more regeneration from system.



Image 12-2

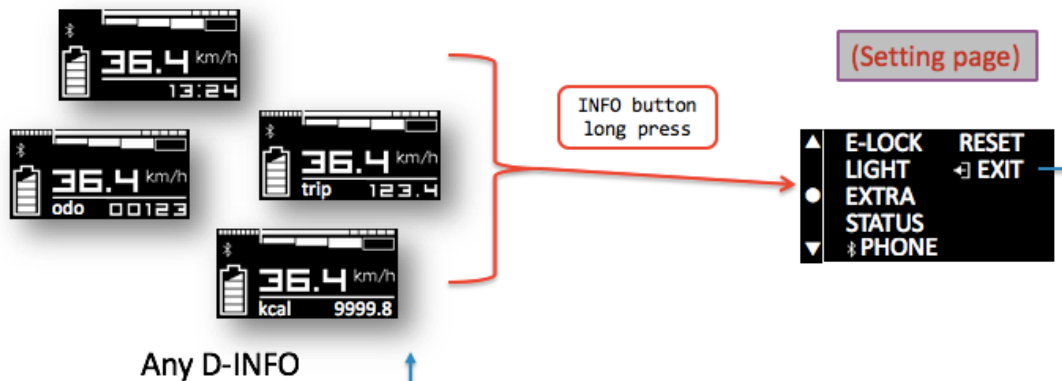
Power consumption (Image 12-2)

This shows you the power consumption from the system.

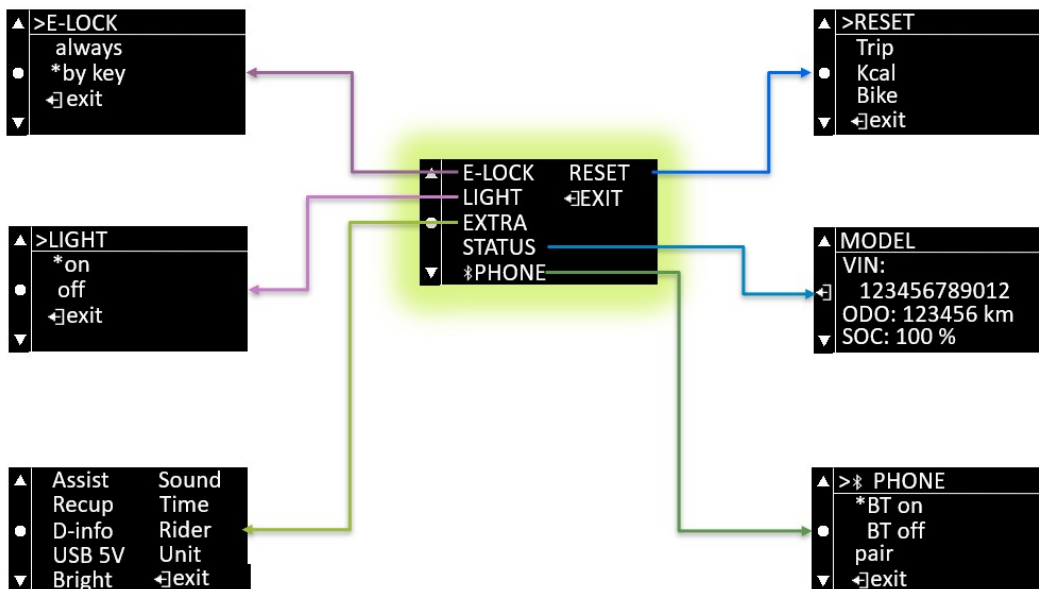
The longer or more bars, the more power output from the system. Keeping more power consumption all the time might decrease your riding range.

Settings

„INFO key” long press to enter Setting page



Setting Page



Setting >> E-LOCK

The two E-KEYs are paired with the system when the bike is assembled. Two options you can choose,

1. “always”: you have to insert the E-KEY to activate the system. Motor lock is activated when power off the system.
2. “by key”: If the E-KEY is removed when the system is on, system will ask you if you want to lock the motor. Once you choose “no”, you don’t need E-KEY next time to activated the system.

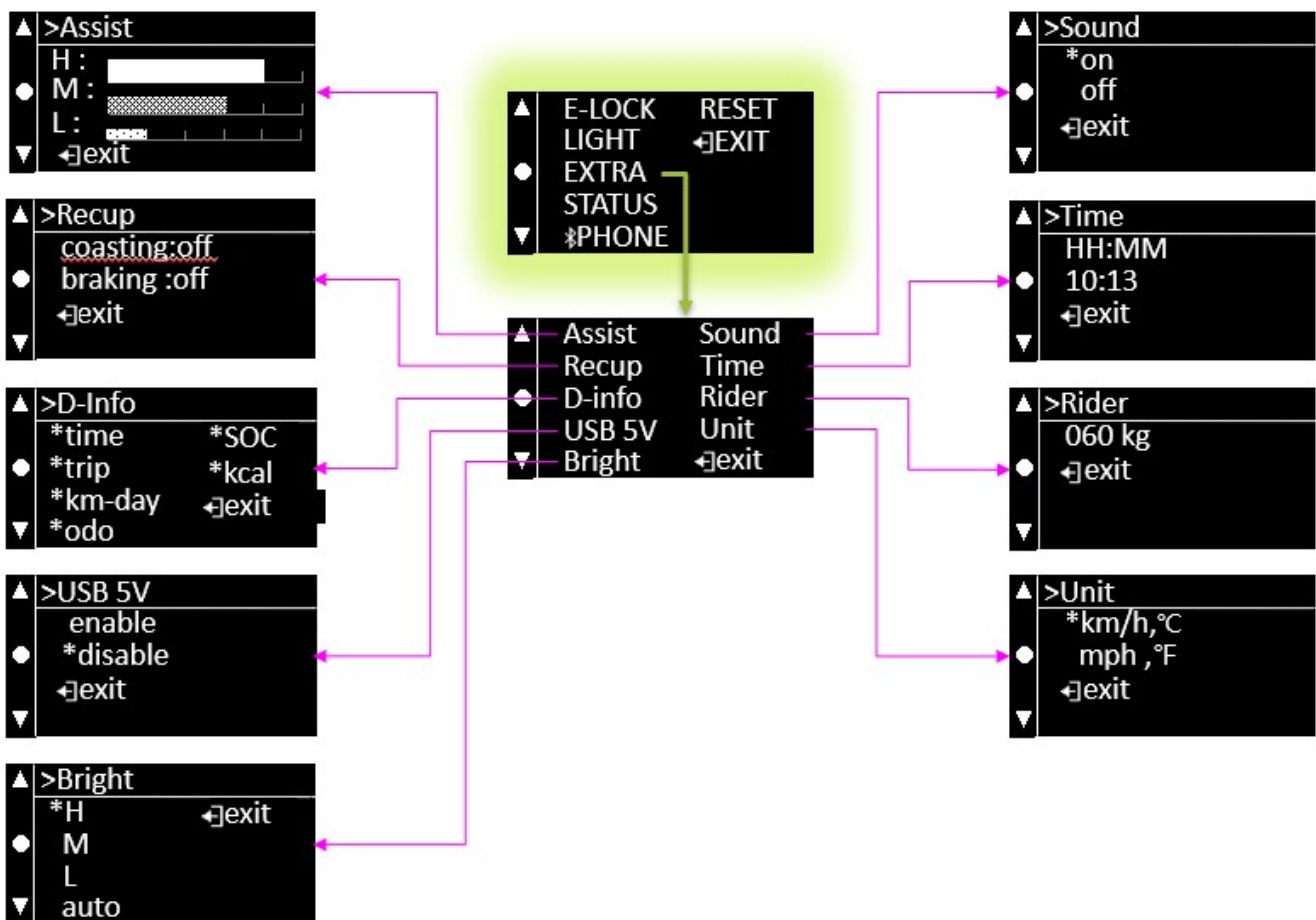
Setting >> LIGHT

You can decide to keep the front and rear light on or off when the system is on.

Due to the EU regulation of S-Pedelec, the front/rear light will turn on by system after power on the system even if you set to turn off the front/rear light.

Setting >> EXTRA

Several setting for you to change for example the behavior of the system support, the major information you want to see when you're riding, or the unit/rider weight and so on.



Setting >> EXTRA > Assist

Five levels for each support mode (H, M, L) to meet different requirements. The factory defaults for each support mode is on three.

Setting >> EXTRA > Recup

Recup means the recuperation of energy to the battery. Two recup functions: coasting regen and braking regen. Different regen level from 1 to 3 to adjust or you can make the system automatically decides the level of regeneration. Factory default is off for both regen functions.

Braking regen is only available on S-Pedelec.

Setting >> EXTRA > D-Info

Six items of information show on major display by default. Short press the INFO button to rotate the information. You can hide any one of them if you don't want it to show when riding.

Setting >> EXTRA > USB 5V

An extra wire comes from the display allows you to connect Klever USB charger to charge your device with 5V. Function is disable by default. The USB charger is optional accessory and please ask Klever team or authorized dealers.

Setting >> EXTRA > Bright

The brightness of backlight can be adjusted.

Setting >> EXTRA > Sound

The volume of system sound can be adjusted.

Setting >> EXTRA > Time

Time can be adjusted here or synchronize with smartphone

Setting >> EXTRA > Rider

Input rider's weight for calorie calculation.

Setting >> EXTRA > Unit

Change the unit between km/h, °C and mph, °F to fit user scenario.

Setting >> PHONE

You can use your smartphone as a dashboard to show the information from bike system by Bluetooth connection.

Setting >> RESET

Trip and Kcal can be reset to zero. Or Bike setting can be reset to factory default.

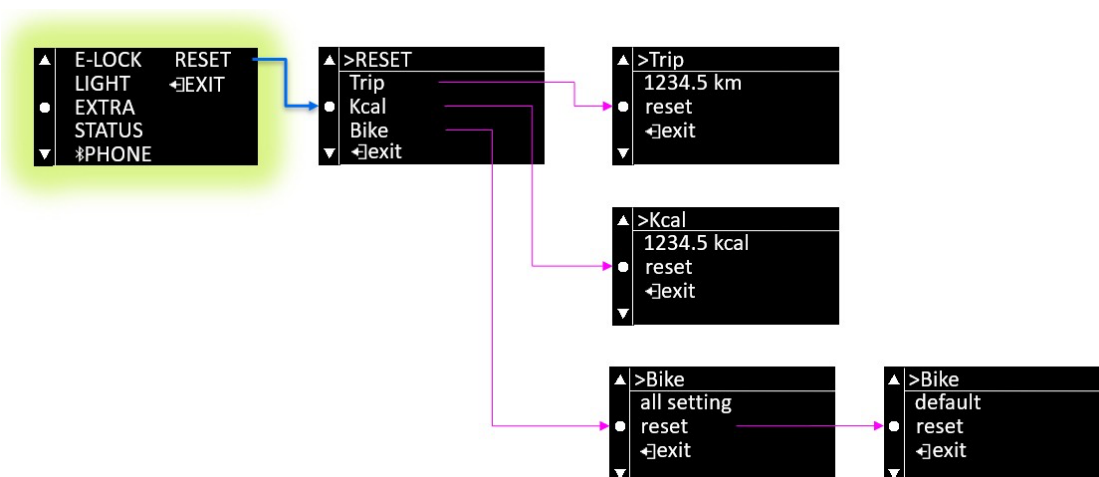




Image 25



Image 25a

6.4 Battery

Your Speed Pedelec has a high quality lithium-ion battery of the newest generation. For technical details, please refer to Chapter 11 Technical data.

The status of the battery, you can always check on the LED on the charging socket of the battery. Press the button at the charging socket and the LED lights on either red, orange or green.

Red	capacity <35%, the battery should be charged
Orange	Capacity 35 - 75%; battery can be charged
Green	Capacity > 75% battery can be charged

The battery is protected automatically from overheating, overloading and deep discharge. That makes it, in practice very easy and simple to handle.

Nevertheless, you should consider some important things in order to maximize the life and performance of the battery.

Since the lithium ion battery has no memory effect, you can charge it at any time, even if it is not completely discharged. In practice, it has been shown that it is even better to charge it again after short distances of a few kilometers.

Your battery has a lifetime of 500 charging cycle. One charging cycle means a full charge of the battery (0-100% capacity). Partial loads can be done more often.

When the battery for a long time (more than 2 months) is not used, it should be recharged as a low self-discharge is normal. Store the battery, if possible, in a dry, cool and dark place. The ideal storage temperature is between 5-20 ° C.

Avoid exposing the battery to direct sunlight over a long time. Temperatures over a longer period of more than 45 ° C or below - 10 ° C can cause permanent damage.

In winter, you should never start with a cooled battery. The capacity of a cold battery is significantly reduced and accordingly with a lower range.

A battery which is exposed a long time to frost, should be gently heated by the ambient temperature of a heated room, before starting.



Caution! Never place the battery on the heater.

If you need to park the bike outside for a long time in the cold season, remove the battery and store it in a heated room. Because the battery is very easy to remove, this will be no problem.

Do not expose the battery to humidity, to prevent corrosion of the charging socket and the plug contacts. Protect the battery against mechanical damage and don't drop it. Mechanical damage can also cause overheating and spontaneous ignition of the battery

Also the battery should be charge at moderate temperatures (15-25 ° C). Avoid charging in direct sunlight or near heaters, as well as charging outside in winter at low temperature. A cooled battery should be gently heated to room temperature before loading



Caution: Do not put it on a heater, do not heat with a hair dryer.

Caution! Charge the battery only! with the provided exclusively dedicated charger.

Do not use any other type of charging unit since this may damage the batteries until to overheating and ignition. During loading, neither the charger nor the battery should expose to humidity, to prevent short circuits and electric shocks.

The battery is maintenance-free. Should it be broken or getting defect, contrary to expectations, seal the contacts with tape and take it to your dealer or contact our technical hotline. Never under any circumstances open up the battery yourself. This is dangerous and can damage the battery lead to self-ignition. The warranty will be void if you do so!



Do not dispose of batteries into household waste. It must be disposed of properly. It's best to take it to one of our dealers, who can take care of the proper disposal.



Caution!

- Charge the battery only with the provided battery charger
- The battery can be recharged any time, even after short trips
- Avoid temperatures below -10°C and above 45°C for a long time
- Never start with a cooled battery
- After an extended period (about two months) of storage, the battery should be recharged
- Protect it from humidity
- Protect it from mechanical damage
- Never open the battery yourself



Used batteries do not belong in the household waste, they must be disposed of properly

6.4.1 Charging the Battery

You can charge the battery on or off bike (e.g. important in winter) Charging at any time, even after a partial discharge (eg, after a short distance of a few kilometers) is possible. There is no need to wait until it is completely discharged, as it has no memory effect.

To remove the battery pack, refer to Chapter 6.5.3. Disassembly and assembly of the battery.



Caution! Charge the battery only with the supplied and provided battery charger.

For the technical data of the charger please read chapter 51. Technical data.

To charge the battery, do the following: You can monitor the charging process on the basis of the indicator LEDs on the charger and battery.

- Connect the power cable from the charger to the charger
- Insert the power plug of the charger into the wall socket, the LED lights solid red the charger is ready to charge (Image 26)
- Connect the charger socket of the charger into the socket of the battery, and turn on the switch, the charging process will start automatically (Image 27a+b)
- The LED on the charger switches to flashing yellow light, charging begins
- The LED indicator turns to yellow continuous light, the battery is charged to about 35%, The charging is in progress
- The LED changes to flashing green, the battery is to about 75 - 90% charged
- The LED comes on solid green, the battery is now fully charged, the charging is complete.
- Turn off the switch and disconnect the power plug from the Wall socket.
- Unplug the charger socket of the charger from the battery.

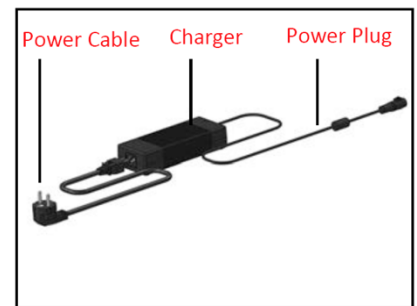


Image 26



Image 27a



Image 27b

The LED lights on the charger and battery documents the state of the charge process:

State of charge	Charger LED	Battery LED	Note
	Flashing red		Error detected. Reset by re-plugging AC to main
	Steady red		Ready to be connected to battery
0%	Flashing yellow	Flashing red	Recovering battery from very low state of charge
<35%	Steady yellow	Flashing red	Normal charging
35 – 75%	Steady yellow	Flashing yellow	Normal charging
75 – 90%	Steady yellow	Flashing green	Normal charging
>90%	Flashing green	Flashing green	Final charging
100 %	Steady green	=> no LED	Fully charged

The charging time for a full charge (from 10 to 90% capacity) is about 2.3 hours (570Wh battery w/250W fast charger).



Make sure that the battery is no longer connected to the charger, after the successful charge process. Likewise, the charger should be disconnected from the power supply.

Battery and charger become warm during charging. Ensure adequate ventilation of the battery and charger. The vents should not be covered.

Place the charger and battery on clean surfaces. Prevent contamination of the charging socket on the charger and the battery.

Avoid humidity and direct sunlight.



Attention! If the charger is damaged, contact Please contact an authorized retailer.
Never open the charger.

6.4.2 Range

The range specification of the system can only be relative, as it is very strong depending on the chosen level of support, the technical condition of the bike (oiled chain, optimal tire pressure, etc.) the total weight of the system (bike, rider and luggage) to the topography of the chosen route and the weather (counter-or tailwind, winter or summer).

The smaller the selected support level the larger the range of the electric system.

Generally, you can expect the following ranges:

- Fully charged battery 570 Wh
- Temperature between 12-30°C
- Flat and slightly hilly terrain
- Total system weight between 95-105 kg (rider weight 70-80 kg)
- Little to no wind

Range	Level
ca.100km	UL (Ultra Low)
ca. 80km	L (Low)
ca. 55km	M (Medium)
ca. 30km	H (High)



Attention: In winter, the range can be up to 30% less by lower battery capacity due to the lower temperatures.



Image 28a



Image 28b



Image 28c

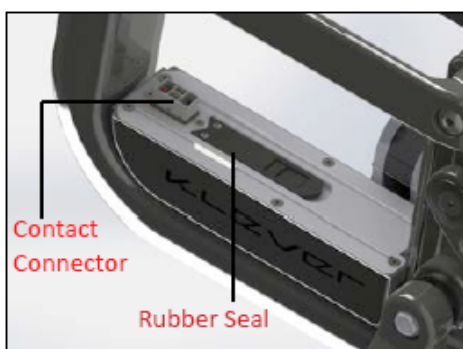


Image 29

6.4.3 Disassembly and assembly of the battery

Removing the battery

The battery is automatically saved with the battery lock and thereby protected from theft. Using the provided key you can lock and unlock both.

To disassemble the battery, first turn off the system using the power button on the Display. Turn the key in the battery lock clockwise up to the stop and pull out at the same time on the handle the battery pack diagonally backwards, against the direction of travel, completely out of the bracket on the frame. (Image 28a)

Now you can charge the battery separately or store it safely for a longer ride break.

We recommend you cover the battery connector by the rubber seal to prevent from water and humidity. (Image 28b)

Mounting the battery

Insert the battery carefully into the guide rail, while the groove of the battery casing must be careful inserted into the guide rail on the bicycle frame, and let it gently down glide until you heard the lock engages and the electronic contacts are connected. (Image 28b+29)

The key does not leave in the lock, the lock will automatically snap in and the battery is now locked, the system is ready for operation and the battery protected from being stolen.

6.4.4 Transport of the battery

The battery is subjected to the Dangerous Goods Legislation requirements.

The user can transport the battery by road and train without further requirements.

When being transport by third parties (e.g. forwarding, post or via air) special requirements on Packing and labeling must be observed

For preparation of the item being transported, consulting an expert for hazardous material is absolutely required.

Use the battery only when the casing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packing.

Please also observe possibly more detailed national regulations.



In every case of concerning transport of the battery, please refer to an authorized bicycle dealer

6.5 Troubleshooting

The system will not turn on

Check whether the display is firmly in the bracket. Check all connections. Check the battery. He must sit correctly in the battery keeping of the frame and the lock is closed.

The display key is installed but the system will not turn on:

check if you have installed the correct display key.

The system can be turned on, but you do not have support

Check all connections to the motor



If it's not possible to solve the problem, please contact an authorized dealer or our technical hotline.

7. The Bicycle

All other accessories of your Speed Pedelec are high quality, conventional bicycle components whose handling and operation should be explained here briefly. Important information regarding the adjustment, operation and maintenance of the bike and its accessories are summarized here.

You will also find further information in the accompanying user manuals of each manufacturer.



Image 30

7.1 Saddle and handlebar adjustment

The B comes in only one frame size. The adjustment to your body size and their needs will be made on the saddle, stem and handlebar adjustment, which normally do the authorized dealer.

In order to readjust by yourself or in the case of a driver change the settings are briefly described in the following lines.



Caution: All work described require mechanic experience and appropriate tools. Use to tighten the screws a torque wrench and never exceed the maximum torque of the screws. All the necessary tools and information to the torques can be found in chapter 11. Technical Data.



Image 31

Adjustment of the saddle height:

The optimal saddle height is if you touch the pedal with the heel of your stretched leg, when sitting on the saddle (Image 30). Or when you bring the ball of the foot to the center of the pedal, your knee should be slightly bent (Image 31)

Loosen with a suitable allen key the seat clamp screw and move the seat post with the saddle at the proper height. Align the saddle with the frame using the saddle nose and the bottom bracket or top tube as references.

Fasten the screw of the seat clamp again and check the correct height of the saddle. Repeat the process if necessary until you find the correct saddle height.

The distance between saddle and handlebar (by pushing the saddle forward or backward) and the saddle angle are adjusted by the saddle clamping screws (Image 32) of the seat post. The saddle should generally be positioned horizontally.



Attention: please pay attention to the approved torques when tightening the saddle clamp screws to the correct torque (see chapter 11 Technical data).



Caution: The saddle with the seat post may never be installed over the minimum mark on the seat post. During riding operation, the post might break or the frame might be damaged.

Handlebar adjustment

The position of the handlebar depends on the Seat position you would like to have on your bike. It is generally true that your seat position is more sportive the further your upper body is bent forward. This leads to better aerodynamic, but puts more stress on your arms, wrists and your upper body and a worse comfort.

In order to optimally adjust the handlebars to your needs, the stem is adjustable in the angle. (image 34)

This will achieve, if desired, more upright and relaxed riding position.

Your dealer will be happy to advise and install the most appropriate stem for your needs and will adjust the handlebar position.

If you should like to change the position after some time, please do the following:

Loosen with a suitable wrench the clamping screw of the angle adjustment of the stem and adjust the angle of the stem according to your wishes. (image 35)

Tighten the clamp screw of the stem firmly again and please make sure to use the correct maximum torque of the screw (Chapter 11 max. 9,5 Nm) .

Please note that now the handlebars, the brake levers and the gear shifter have changed their position.



Image 32

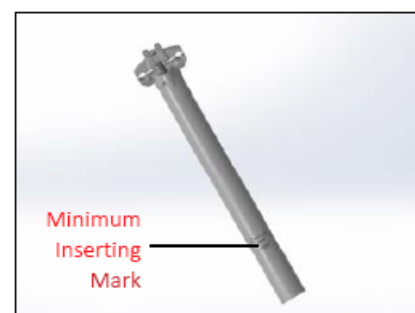


Image 33

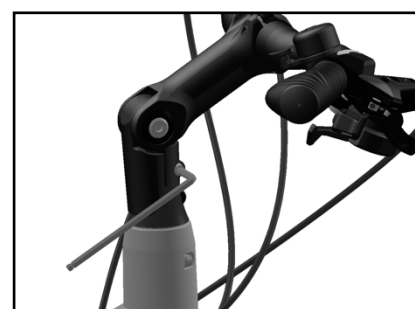


Image 34

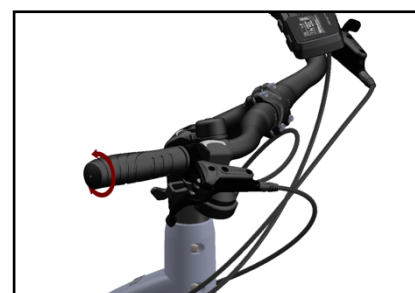


Image 35

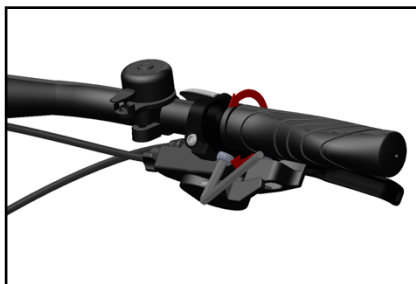


Image 36



Caution: Check the tightness of the handlebar. In no case it may be able to twist.

Would you change now the position of the brake levers and the gear shifter, loosen the clamp screws and twist them according to your wishes. Then tight the clamping screws again. (image 36)



Caution: Don't exceed the maximum torques.(6-8Nm)

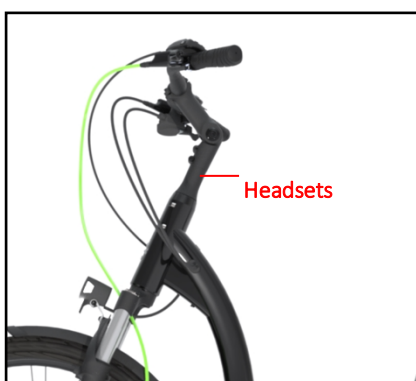


Image 37

7.2 Headset

In order to steer easily and safely, the fork's bearing in the frame (headset) must be of easy motion and without play. During driving, dynamic loads caused by extremely unevenness routes put a lot of stress on the headset and it is possible that it loosens. Therefore, a regular check is indispensable.

Pull the front wheel brake with one hand and push the bike forward and backward. If you notice a movement between headset and frame, the headset has to be readjusted.



Attention: The adjustment of the headset requires some experience. It is the best the dealer should do this.



Image 38

If you should make the adjustment by yourself, make the following steps:

1. Loose with an allen wrench, the lateral clamping screws at the stem, where the stem is fixed on the fork stem.(Image 38)
2. Now you can adjust the headset play with the top screw of the headset (see image 39), by turning the screw with a 6mm allen key clockwise, until you don't feel play anymore.(Image 39).



Attention: The adjustment of the headset requires some experience. It is the best the dealer should do this.

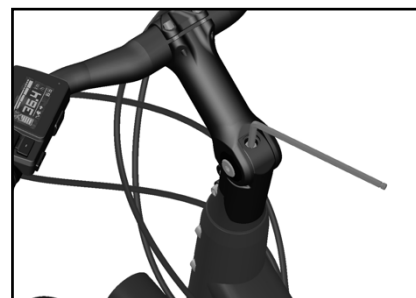


Image 39

3. Rearrange stem and handlebar in the direction of travel and retighten the clamping screws firmly.
4. Pay attention to the maximum torque of the screws, which may not be exceeded under any circumstances.
5. Control the play again and repeat the process if necessary.



If it's not possible to adjust the headset, this may have many reasons. In this case you should definitely contact an authorized dealer.



Caution: Finally, check the tightness of the stem. A loose stem is dangerous and can lead to an accident.

You can check smooth running by lifting the front of your bike and letting the handlebar swing to the left and right. The front wheel has to be able to move freely and without stopping. If you feel slight stops in the movement, the bearing is worn and the headset has to be replaced. This has to be done quickly by a dealer.



Feel light grids, the tax rate are worn out and need replacing. The let most immediately by the dealer perform.

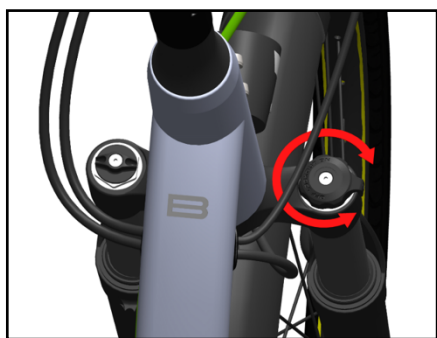


Image 40

7.3 Suspension fork

Your Pedelec is equipped with a high-quality suspension fork which increases your comfort and the safe handling of the bike. The fork is set at the factory and ready to run.

A lock out lever that sits on the right side of the fork crown, you can lock your suspension fork (image 40). This locking mechanism should only be used on smooth, flat roads. On bad roads, the spring should function and the lock mechanism should always be open. To keep your fork for a long time working, it should be regularly maintained. Some basic maintenance tips you should heed. Clean the smooth surface of the stand pipe of the fork after every ride with a clean cloth and some water. Afterwards spray the tubes with some lubricating spray or some hydraulic oil, so it can smooth deflecting and the bearings remain always lubricated.



Caution: You should never clean the fork either with a steam cleaner or with harsh detergents. Always follow the maintenance and care instructions on the manufacturer's instructions supplied with the bike.

7.4 Brakes



Image 41

Your Pedelec is equipped with a high-quality hydraulic disc brake. The disc brake is characterized by a very good braking action even by moisture and other bad weather conditions. The brake is very low maintenance.

The brake consists of a brake lever with a master cylinder, a hose cable made of plastic and the brake caliper and the disc mounted on the hub. The brake works with a special, non-toxic mineral oil. The oil pressure created in the brake lever by operating it is transmitted via hose cable to the brake cylinder and effect the contact pressure of the brake pads at the brake disc.



Attention:

New brake pads must be run in so that they can achieve their optimal deceleration values. By braking at least 30 times from approximately 30 km the brake pads will achieve their maximum brake power.

Break control: The left hand break lever control rear wheel break and right hand break control front wheel break.

Not properly run in brakes do not reach their optimal deceleration values and prone to vibrations and loud squeal.

The brake pads and rotors must be regularly checked for wear.

If Disc and brake pads are worn, they will need to be replaced.

Changes in the brake performance with loosing brake power or you can push the lever through to the handlebar without any braking effect, air could come into the brake system and this must be removed by bleeding the brake. That and the replacement of worn brake pads and discs should be done by an authorized dealer.



Attention! Soiled brake pads and discs can reduce the effect of the brake substantially. Prevent in any case, while cleaning the bike and lubricating the chain that oil or other liquids can contaminate the brake pads and brake discs. Contaminated brake pads cannot be cleaned and need to be replaced. You can clean the disc with brake cleaner or warm water and a little detergent if necessary.

For more information on brake, brake pad and brake disc and the wear limit of them, read the operation manuals supplied by the manufacturer.

7.5 Drive and gearshift

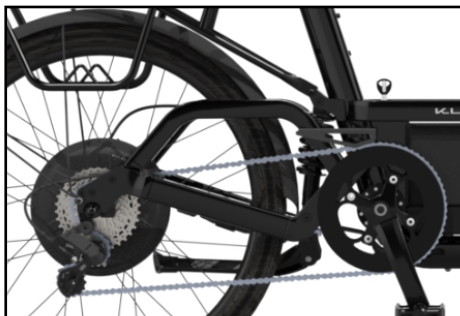


Image 42

Your Pedelec is equipped with a high-quality 10-speed derailleur, currently the most efficient power transfer on the bike. These gears will help you to always use the optimal transmission (pedaling cadence) independent of terrain (flat or hilly area) and independent of weather (Tail or Headwind).

That means that you are able to pedal always with an optimal cadence of 60-80 crank revolutions per minute. The complete system (image 42) is composed of the bottom bracket, the crankset, the rear derailleur, the chain, the gear shifter and the 10-speed cassette. With the gear shifter you control the rear derailleur, which ensures that the chain can move on the sprockets of the freewheel and the translation changes.



Image 43

Your dealer has checked your bike before the handover and adjusted the shifter. Through the first mile under stress, however, the shift cables could lengthen slightly and the shifter must be readjusted.

With the adjustment screw of the shifting lever (image 43), you can readjust the tension of the shift cable. With the two positioning screws on the rear derailleur, you can adjust the lower (h screw) and upper end stop (l-screw), to make sure, that the chain cannot get between pinion and drop out or between pinion and spokes of the rear wheel.



The precise adjustment of the derailleur is difficult and should better be done by a mechanics. If you have any problems with the adjustment of the shifter, please contact your dealer.

The chain should be cleaned and greased regularly (especially after driving in the rain), so it runs as quietly as possible, the friction losses are as low as possible, and the lifetime is maximized. Clean the chain regularly with a clean cotton cloth and lubricate it afterwards.

Some minutes after you have oiled the chain rub it with a cloth to remove superfluous oil from the outer surface.

Since the chain is one of the wear parts on your bike, it should, if it is worn to be replaced. A worn chain deteriorating the shifting characteristics, and leads to increased wear on the chain wheel and on the sprockets of the cassette.



The exact control of the chain should be carried out at the dealer, who has the necessary tools to measure and replace it.



Caution: A poorly riveted or badly worn chain may break and cause serious falls.

You will find more information in the enclosed operating manual of the chain.

7.6 Wheels and tires

The wheels are extremely stressed parts of the bike that make contact with the road, provide the propulsion and buffer the road bumps. Due to this heavy use, they should be regularly monitored and reviewed.

All wheels are manufactured with great care and precision.

They consist of the hub (ball bearing hub in the front wheel and electric motor in the rear), the high-quality 2 mm stainless steel spokes and rims.

In unlikely cases of radial and axial offset or broken spokes, the wheels should be repaired or re-centered immediately.

This should be done by an authorized dealer.

For removal and installation of the wheels due to a puncture or in the case of transportation you take the following steps:

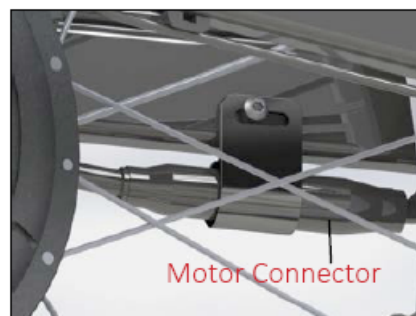


Image 44a

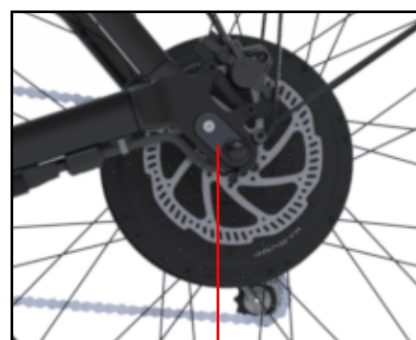


Disassembly of the rear wheel

- Shift the chain to the smallest sprocket on the free wheel
- Turn off the electric drive system and disconnect the motor connector below the right chain stay of the frame
- Remove the screw on the mounting bracket (cable guide) below on the chain stay (Image 44a+b)
- Loosen the axle nut of the motor with a 19 mm wrench
- Remove the screw of the locking washer (Image 45) on the left side of the axle (drive direction) and remove the screw and washer
- Now pull the wheel out of the dropout, thereby pivot the rear derailleur backwards



Image 44b



Locking Washer Image 45



Image 46

- Ensure the disc-brake with the enclosed transport lock (between the brake pads).
- This prevents the accidental compression of the pads by the unintended application of the lever
- the assembly is done in reverse order
- During assembly please insert carefully the disc between the brake pads, please before remove the transport lock



Caution: Take care to tighten the axle nuts to the proper torque (40 Nm)!

Tires

The tire provides grip and traction, and contributes significantly to the smooth running and comfort by absorbing small shocks.

The size of the tire can be found on the tire sidewall printed specifically in millimeters and inches. At B Speed plus and B Speed, the size 24 x 2.15 inches or 55 - 507 is mounted. That is, the tire has a diameter of 507 mm (24 inches) and a width of 55 mm (2.15 inches). Depending on the air pressure, and width of the rim, the tire can vary in width around 2-3 mm.



Image 47

The recommended operating pressure range is between 2.0 bar (55psi load) and 4.0 bar (55 psi load)

Regularly check the correct tire pressure before every ride and pump up, if necessary.

The bike is standard equipped with an inner tube with Schrader valve. So you can check and inflate the tire at any gas station.



Caution: above-or below never exceed this recommended range. The tire and the tube can be damaged and this may lead to sudden loss of air with significant risk of accident.

Regularly check the tires for cracks and control the tread depth. If cracks have formed or a foreign object has damaged the fabric of the tire or the tread depth is no longer sufficient, replace the tires for safety reasons.

If in doubt, ask your dealer. He will verify and if necessary, change the tire.



Image 48



Image 49

In the case of a flat tire, you do the following:

You can use for tire mounting plastic tire lever.

1. As described above dismount the appropriate wheel like in the instructions of this manual.
2. Deflate the tire and push a tire lever under the tire wire opposite the valve and lever the tire over the rim flange.
3. Push the second tire lever in a distance of approx.. 10cm from the first one between tire and rim and lever again.
4. Now, you can generally lever the tire over the whole circumference of the wheel by moving the lever and the inner tube can be removed.
5. Dip the disassembled and inflated tube in a water bath to discover the leak on the rising air bubbles.
6. Repair the tube according to the instructions on the repair kit or if necessary replace it.
7. Check the tire for sharp objects that could have caused the puncture and remove them. If the fabric of the tire is damaged, replace it.
8. Start the mounting of the tube, start by inserting the valve into the valve hole in the rim and inflate the tube with very little air pressure until it is wrinkle-free.
9. Now mount the tube with no creases under the tires and deflate it again.
10. Now , starting opposite the valve, lift the tire wall over the flange of the rim and pull it deep into the rim and lever the rest of the tire by hand over the rim edge. Use no tire levers, as this is a risk of damaging the tube.
11. Now push up the valve, so that the edge of the tire reaches at the valve area the edge of the rim.
12. Pull the valve and inflate the tube to the tire manufacturer recommended tire pressure.

7.7 Luggage carriers

Your Speed Pedelec is equipped with a high quality, stable and durable aluminum luggage rack. The rack is suitable for all standard panniers.

Please note, however, the maximum load capacity of the luggage rack of 20 kg. With weights over 20 kg the luggage carrier may not be loaded.



Image 50



Caution: Please ensure that you do not reach the total permitted weight in the case of luggage transport



Attention: Please note that the extra weight changes the handling of the bike and the braking distance is extended.

8. Transport of the Speed Pedelec

You can transport your Speed Pedelec easily by car or train. To transport by cars, we recommend to use a bike rack for the trailer hitch, which is specific designed for the e-bike transport and suitable for larger loads. Which carriers comply with these requirements, you can ask the retailer.

Not recommended is the transport on the car roof. The higher weight and the specially shaped frame tubes make it very difficult to fasten the bike securely. In addition, permissible maximum weight and to tightly sized brackets and rails of the carrier limit secure transportation.

You should definitely remove before transportation with a rear carrier the battery, the display as well as other non-fixed accessories such as: Air pump and luggage bags. Additional protection should be given to electrical contacts on the display holder and the battery connector on the frame with for example a plastic bag to protect them from moisture and rain. By the air stream, humidity can be pressed into the electrical contacts.

If your car is big enough, the best is to transport it in the inside. There it is optimally protected.

The transportation by air is almost impossible, unless you want to transport the bike without the battery. The battery is classified as hazardous by the airlines and will not be transported. If in individual cases ask the airlines, under which circumstances the transport of the battery may be possible. However, it can be quite expensive.

If you need further information, you will find it in this manual, see chapter 6.4.4. Transport of the battery

9. Maintenance, Care and Storage

Maintenance and care

Regular maintenance and care guarantee a longer lifespan of your high-quality Pedelec.

You should carry out simple cleaning and care works yourself regularly and let the dealer do the necessary inspections.

Never clean the Pedelec with a strong jet of water or a steam cleaner. The high water pressure might squeeze water into the bearings, motor and electronic contacts and will destroy these parts due to thin the bearing grease, corrosion and short circuits.

Clean the bike with a damp cloth and mild detergent. Please make sure that no electrical contact gets wet.

The contacts can be maintained and conserved from time to time with a little care oil (e.g. 1Step Finish Line) preservation. Contact spray is too aggressive and don't preserve.

You should repair varnish damages at once. All parts liable to corrosion should be maintained and preserved by appropriate means.

The chain should be lubricated regularly like all other movable mechanical parts such as the joints of the rear derailleur.



Caution: During cleaning and lubrication, avoid oil and fat on the brake pads and brake discs. The braking effect might deteriorate and represent a serious risk.



Always ensure that the tires are inflated within the manufacturer's recommended operating pressure, which can be found printed on the on the tire sidewall. He should be by no means over-or under-steps.

The entire electrical system of your Pedelec as the motor, the sensors, the wiring and the battery is maintenance-free. If you get unexpected problems with the system, take note, that you have to contact or technical hotline (see also Chapter 1 Introduction) or an authorized dealer.

It's important of using "original" components from the manufacturer if they want to change any components on their bike. Or contact our official dealer if they want to make any changes or replacement of the components self changes is not recommended.



Caution: Do not open the motor, the display or the battery. It is dangerous and the guarantee expires immediately.

Storage

The mounting of the bike should always be in a dry, covered place to minimize the effects of weather and avoid direct sunlight for long periods.

If you do not drive in winter, you should consider the following tips:

Store it cleaned, lubricated and well preserved in a dry place and cover perhaps additionally with a tarp. Conserve the electrical contacts through some suitable care oil.

Winter storage in the garage is only partially recommended. By the dissolved salt in the condensed water coming with the car in the garage, the corrosion can be increased.

The battery should be stored separately and optimally at a temperature of 10 ° to 15 ° Celsius in a dry place. Please fully charge it before the first ride in the spring. After storage for more than two months, it is advisable to recharge the battery (see chapter 6.4.Battery).

10. Disposal

Disposal

All electronic components, such as motor, display, battery and charger are to be returned to an environmentally compatible recycling and do not belong in the trash.

For EC Countries:



According to the European Directive 2002/96/EC, defective or no longer usable electrical equipment must be collected separately and returned to an environmentally friendly recycling. The same goes for batteries according to the European Directive 2006/66/EC.

Please return broken or defective batteries to an authorized retailer.

Transportation:

Only the battery is considered to be hazardous and subject to the Dangerous Goods Legislation requirements during transport or shipping by third parties (agents, air transportation or mail).

Please refer to Chapter 6.4.4. Transport of the battery.

The transport of all the other parts is not particularly limited.

11. Technical data

Display / Operating unit
Illuminated LCD display, with alarm and motor lock system
five levels of support
Ultra low - Low - Medium - High - Turbo
Bicycle Computer, display of speed, range and Odometer (Day trip)
Key: acceleration and pushing aid / Turbo function
Battery charge level indicator with five LEDs (each bar 20% Capacity)
Ambient Light sensor
Confirmation by a beep when a button is pressed

Battery:
Lithium-Ion Battery
44V / 8.12Ah / 570Wh
3.4 kilograms
Charging level indicator via LED: <35% red / orange 35-75% / > 75% Green
Allowable discharge temperature: -20 ° C - +50 ° C
Allowable storage temperature (12 months): -20 ° C-+25 ° C (optimal +5 ° C-+20°C)
Allowable charging temperature range: -5 ° C - +45 ° C (+5 ° C-optimal +20 ° C)
Lockable and detachable
Charging time 2.3 hours (from 10 -90%)
Place of loading: on or off-bike
Charging Cycles 500 (one charging cycle 0-100% capacity)
Range: Step 1 (UL) = ca.85km / Level 2 (L) = ca.km / Level 3 (M) = 65 km / Level 4 (H) = ca.30km
Lifetime: after two years or 500 cycles still remain at least 60% of the original capacity

Motor:
brushless DC motor in the rear hub
Control over torque sensor in the dropout and speed sensor at the bottom bracket
Max. 6000 W
Operating voltage 44 V
Support until max. 45 km/h
Weight 4 kg

Charger
Input voltage 200-240 V, 47-63 Hz
Output voltage of 48 V
Maximum charge current 5A
Output power 250 watts
Charge time 2.3h for 570Wh battery (10-90% capacity)
Size: 182 x 100 x 50 mm, with fan
Weight: 1.23 kg (with AC adapter)

Recommended tightening torques of the bicycle components:

Stem	Handlebar clamp screw	M5	Allen wrench 4mm	5,5 Nm max.
	Clamp Screw adjusting angle	M6	Allen wrench 5mm	9,5Nm max.
	Clamp screw steer tube			
Seat post	Clamp screw saddle	M6	Allen wrench 5mm	9,5Nm max.
Front wheel	Axle nut; Hexagon	9 mm axle diameter	15mm open-end wrench	20 Nm max.
Rear wheel	Axle nut; Hexagon	12 mm axle diameter	19mm open-end wrench	30-40 Nm
	Clamp screw locking washer	M5	Allen wrench 3mm	5,5 Nm
Stand	Clamp screw	M10	Open-end wrench	46 Nm max.
Brake lever	Clamp screw	M6	Allen wrench 5mm	9,5 Nm max.
Brake body	Mounting screw	M6	Allen wrench 5mm	6-8 Nm max.
Rotor	Mounting screw	M5	Torx 25	5,5 Nm max.
Shifting lever	Clamp screw	M6	Allen wrench 5mm	9,5 Nm max.
Carrier	Clamp screws	M5	Allen wrench 4mm	5,5 Nm max.
	Clamp nuts; Hexagon; self-locking	M5	8mm open-end wrench	
Pedals			15mm small open-end wrench	35 Nm max.
Bottom bracket	Bearing cups	BSA Thread	Special bearing tool	40 Nm
Crankset	Mounting screw	M10	Allen wrench 8mm	45 Nm max.
Derailleur	Mounting screw	M10	Allen wrench 5mm	8-10 Nm
	Clamp screw cable	M5		6-7 Nm
Front lamp	Clamp screw	M6	Allen screw 5mm	9,5 Nm

General maximal screw tightening torques (for greased DIN screws):

Screw	M4	M5	M6	M8	M10
Tightening torque in Nm	2,9	6	8	10	46

The torque indications always refer to the upper limit of the screws resilience.

You should always adjust the torque key to a little more than 50% of the value stated by the manufacturer and tighten the screw. Check the firm fit of the connection afterwards.

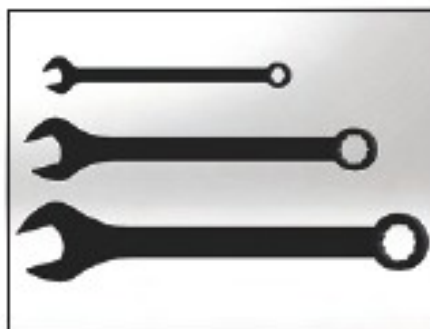
If the clamping connection is not strong enough, increase the value gradually in steps of 0,5 Nm.

If necessary, adjust the maximal value (never exceed it) and loosen the screw by half a revolution before finally tightening it.

Tools:



Tools



Combination Wrenches



Sockets and Bits



Torque Wrench



Torx



Tire Lever

The gross vehicle weight of the bike:

Rider + luggage = 120 kg

Rider + bicycle + luggage = 145 kg

Tires:

Size: 24 x 2.15, 55-507

The recommended air pressure: 2.0~4.0 bar;

Circumference approximately 1900 mm.

The exact circumference of the wheel depends on the air pressure and the weight load of the bike.

12. Liability for material defects and warranty

By on 01.01.2002 entered into force European warranty law you are entitled to a warranty period of two years. This applies from the date of purchase or delivery (delivery date) of the Pedelec. The proof is the proof of purchase, which you should be stored carefully. Also you should be registered your bike on our homepage: www.klever-mobility.com.

This liability for material defects applies to all accessories of the entire Pedelec.

Warranty claims are available:

- if the fault was present before the purchase of the Pedelec
- in the case of a material, manufacturing or information error
- if no function-related wear was present (see Chapter 14)

Warranty claims are not available:

- For damages caused by accidents or force majeure
- For damages caused by misuse or mishandling
- when relates to parts which have a functional wear subject (see Chapter 14) excepted material or workmanship errors
- For damages caused by inadequate care and maintenance
- for damages caused by faulty repairs
- for damage caused by additionally installed accessories that are not included in delivery
- for consequent damage caused by not immediately resolved, early identified deficiency

In addition, we provide a comprehensive warranty that goes beyond the liability for material defects.

- **Two year warranty** on all bike parts
- **Three year warranty** on all drive modules of the electrical system: motor control unit, display and cabling
- **Two year warranty**
- **Five year warranty** against frame breakage

This warranty applies only to the original owner on presentation of proof of purchase (sales receipt or bill showing the purchase date). This warranty covers exclusively material and workmanship errors.

In case of justified complaints, the article will be replaced or repaired. Further claims such as: replacement of property damage, downtime, cost of borrowing and renting, travel and transportation costs or loss of profits, are excluded.

This warranty does not cover damages caused by misuse function, by

Wear and tear, by accidental damage, vandalism and by improper assembly or repair.

1. Warranty repairs will be made exclusively by Klever Mobility or an authorized dealer.
2. Costs through a prior executed repair of an unauthorized dealer, will not be reimbursed.
3. Parts replacement or repairs during the warranty period will not result in an extension or a new beginning of the warranty.
4. Each battery is subject to a natural aging process. Regarding the battery Klever Mobility guarantees after two years, or alternatively, after 500 charging cycles a remaining capacity of about 60% of the original capacity.
5. The Two-year warranty begins on the date of purchase. A warranty claim must be notified immediately.

13. Intended Use

Your Speed Pedelec is determined according to their structural requirements for a particular purpose. Thus, the usage is limited to specific areas.

Your Speed Pedelec is designed based on the construction and equipment for use on public roads on normal roads and paved roads.

The vehicle is equipped in accordance with the EU type approval regulation 168/2013 and rated as vehicle in category L1eB. To keep your Speed Pedelec always running and roadworthy, regular reviews and inspections are required or necessary repairs should be made immediately.

Klever Mobility is not liable if the Speed Pedelec is used against its original purpose or for damages resulting from a breach of important instructions in this manual.

Warranty and insurance void if the vehicle is remodeled or the type approved parts are changed to ones without type approval.

This is particularly true in case of damage caused by overloading or off-road use or by the improper disposal of defects. The same applies to non-compliance with the prescribed maintenance, operation and maintenance requirements that are described in this manual.

14. Wear

Your Speed Pedelec as technical product consists of many components, which are subject to normal wear due to their function. Therefore, all the following components should be regularly checked and if necessary replaced immediately:

1. **Brake Discs and pads** are claimed during each braking operation and worn appropriately. Therefore, they must be periodically reviewed and if necessary, be replaced immediately.
2. **Tires and tubes** are subject to a function-related wear and should be checked regularly. Regularly check the air pressure and tread depth. The air pressure should always be at the manufacturer's recommended operating pressure, which is printed on the tire sidewall.

Is the profile of the tire no longer deep enough or the tire has cracked sidewalls, it should be replaced immediately.

3. **Rims and spokes** are stressed at every braking or driving over an obstacle. Regularly check the concentricity of the rim and the spoke tension. If the wheel has a radial or axial offset, it should be readjusted immediately. In the event of breakage of a spoke, the broken spoke should be immediately replaced and the wheel has to be centered.
4. **Chain, sprocket, chain wheels and derailleur rolls** wear out normally at every time. Regular cleaning and lubrication of these components can be extended considerably their service life. They should, however, if they are worn be replaced immediately.
5. **Shifting and brake cables** must be maintained regularly and replaced if necessary. Especially the bike is often parked outdoor and exposed to the weather.
6. **Hydraulic oils and lubricants** change over time and lose their effectiveness. Therefore, all lubrication points are regularly cleaned and re-greased to minimize the wear.
7. **he painting** requires regular care. Check regularly all the paintwork for damage and rectify this immediately. The points at which cables can rubbing the painting, you should be protect them with a little clear, transparent film

15. Legal requirements for participation in traffic

To participate in public transport, the Speed Pedelec must be equipped according to the EU type regulation.

If the bike will be driven or purchased in a different country, familiarize yourself with their national road traffic regulations.

16. Regular Inspections – inspection plan

To keep your Pedelec always roadworthy and be updated to the latest technical status, it should be inspected regularly.

We recommend after 500 - 1,000 km or within a year to carry out the first inspection. Any further should be carried out after 2-3000 kilometers or once a year.



An inspection should be made by an authorized dealer



Caution: If inspections are not carried out or done unprofessional, it can significantly impair the functions of your bike or even a severe, possibly even fatal, accident.

17. FAQs:

How far can I travel with one battery charge?

This is dependent on the temperature, the topography of the terrain, the technical condition of the total weight of the bicycle. Tires with low air pressure or high weight or driving in hilly terrain, reduce the range (see chapter 6.4.2.).

Must the battery be empty before I can charge it?

No, you can charge the battery at any time, even if it is only partially discharged.

How can I protect the bike from theft?

Your Speed Pedelec is equipped with a ring lock mounted on the front fork to lock the front wheel. In addition, the Speed Pedelec has a motor lock and alarm system, which can be activated by the lock button on the display. The battery is protected by the battery lock to protect it against theft.

Can I transport the Pedelec via air?

Because the battery is considered to be dangerous, many airlines refuse to transport the battery. If in individual cases ask your airline, under which conditions and costs a transport may be possible.

Do I need insurance?

Because the electric support will reach 45 km/h the Speed Pedelec is considered as a L1eB vehicle and requires either insurance or a license plate.

What do I do with a defective battery?

Defective batteries do not belong in household waste and must be disposed of properly. It is best to take it to an authorized dealer.

How many times can I charge my battery?

We guarantee that the battery after 500 full charge cycles or two years from now owns 60% of the original capacity. Of course, you can charge the battery more often or use longer than two years. But because of the natural aging process over time the battery loses more and more capacity

Void the warranty, if I do not stick to the recommended regularly inspections?

No, the warranty does not expire. We recommend, however, for your own safety to carry out all in this manual described and recommended inspections.

Can I charge the battery with another charger?

Never !!!, the battery may only be charged with the appropriate, supplied charger.

18. Bicycle passport

Fill out immediately all data after purchase in order to present the pass in the case of warranty claims, together with proof of purchase. If your Pedelec is once stolen, the data facilitate the work of the police.

Name

Street

Postcode / Town

Tel

Email

Type of bike

Frame size

Frame color

Frame number

Key number

Battery number

Charger number

Date of purchase

Signature

19. Inspection plan

1. Inspection		Date:
After 500 - 1,000 km or no later than 1 year after purchase.		
Date	Stamp / Signature	
Repairs		
Replaced components		
2. Inspection		Date:
After 3000-4000 km or later than 2 years after purchase.		
Date	Stamp / Signature	
Repairs		
Replaced components		
3. Inspection		Date:
After 5000-7000 km or no later than 3 years after purchase.		
Date	Stamp / Signature	
Repairs		
Replaced components		
4. Inspection		Date:
After 7000-9000 miles or within 4 years of purchase.		
Date	Stamp / Signature	
Repairs		
Replaced components		

20. Imprint:

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August 14, 2018 edition