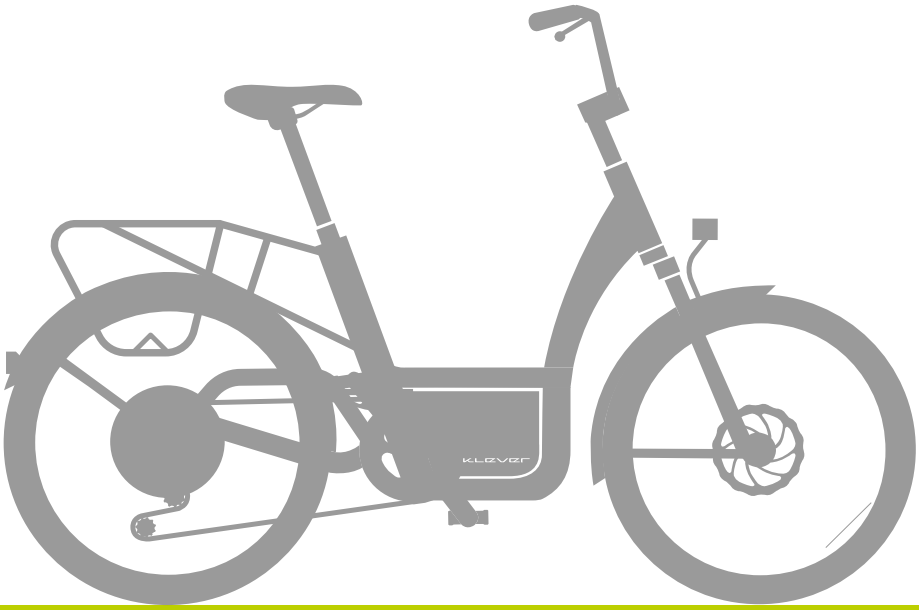
User manual

45km/h

Range

Klever B Speed



models:

B SPEED PLUS

B SPEED

1. Quickstart

Dear customer,

On the first pages of this comprehensive instruction manual you will find this QuickStart guide, which gives you 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 authorised 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.

The Klever Mobility team.

Image 2

Image 3

Image 4

Security check:

Before starting the bike please always check the operation of the brakes and the tyre pressure.

Launch of the electric drive

You can start the system with or without inserting the E-KEY (image 3).

When the E-KEY pairing functions is enabled, the bicycle has its own individually programmed display. In this case your Klever bike can only operate an E-KEY with the same ID. It is not possible to activate your Klever bike with an E-KEY of another bike. Each Klever bike will be delivered with two identical E-KEYs.

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

As soon as you insert the E-KEY into the display, the system will start. With the E-KEY already in the display while the system is off, there are two ways to activate the system:

1. Press the power button (image 4), the system runs a system check for 3 seconds – now the system is activated.

or

2. When you start pedalling the system will wake up automatically. After 3 seconds of system check, the electric drive will start to support.

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
The Walk/Turbo(ϟ) button has 3 functions: 1. **Walk-assist** when walking next to your Speed Pedelec. 2. **Turbo WITHOUT** pedalling of the cyclist 3. **Turbo WITH** pedalling of the cyclist		
1. Actuate the Walk/Turbo (ϟ) button when walking next to your vehicle. The maximum speed depends on the selected support rate in your display. Therefore, we recommend to use the Walk-assist mode only when you selected the L support rate.	> 4 km/h	Pushing aid while taking your Speed Pedelec by the hand
2. Turbo mode WITHOUT pedalling of the cyclist. The maximum speed depends on the selected support rate in your display.	At L < 4 km/h At M < 12 km/h At H < 18 km/h	Additional support at standstill or in case you do not want to pedal
3. Turbo mode WITH pedalling of the cyclist. When actuating while riding in L support rate When actuating while riding in M support rate When actuating while riding in H support rate	L < 45 km/h H (High) H (High) Not applicable	Additional support while riding hills or strong headwinds

Caution! We recommend that you use the Walk-assist mode only in case you also selected the L support rate. In case you preselected the M or H support rate, then the maximum speed of the vehicle is too high to be able to comfortably and safely alongside the B Speed.

Image 5

Charging the battery:

Caution! The battery should only be charged with the appropriate, supplied charger (Image 5).

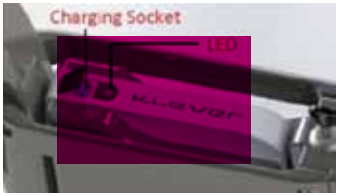


Image 6

The battery can be charged on (image 8A) and off bike (image 8B). For removal of the battery see section 6.5.3.

Connect the charger with the power cable and the power plug to the wall socket. If 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 (images 6+7+8A/8B).

The charging process starts automatically. Once the LED on the charger constantly lights green the operation is complete and the battery is charged. Unplug from wall first, then remove the charger lead from the battery charger


Image 7


Image 8A


Image 8B

Charging status	Indicator LED Charger	Indicator LED Battery	Remark
	Flashing red		Check connections
	Steady red		Charger is ready
0%	Flashing yellow	Flashing red	Capacity very low; charging starts
<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 colour	Fully charged

The charging of an empty rechargeable battery of 570 Wh (from 0% to 96%) will take about 2.3 hours with a quick charger. For an 850 Wh battery the process will take about 3.5 hours.

2. Introduction

Congratulations

With the purchase of a Speed Pedelec of Klever Mobility you have made the right purchase decision and you 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 Speed Pedelec.

For a trouble free, pleasurable riding experience with the new product, please read this manual carefully.

Everything you need to know in terms of technical specifications, operation, maintenance and care, has been carefully compiled in this manual.

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

Pay particular attention to sections in bold which are additionally marked with "Caution". The most important information is again summarised. It should be observed to avoid possible accidents and danger to your life and limb.

Bold sections marked with this symbol contain information about the B Speed and its accessories and its handling.

Operations marked with this sign are to be performed by an authorised Klever 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 authorised retailer.

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

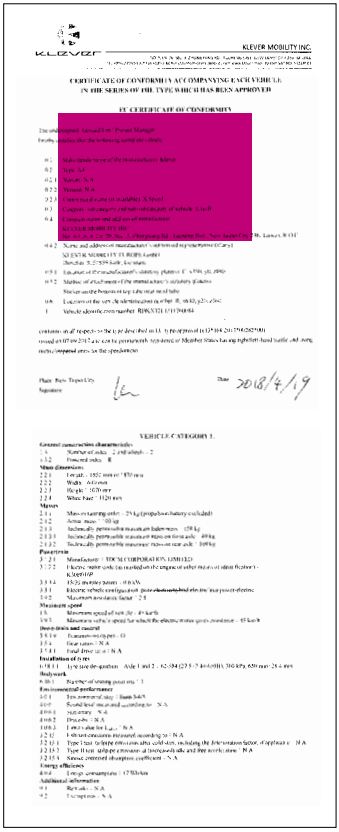
Your Speed Pedelec is equipped according to EC Type Approval Regulation 168/2013 and rated as a vehicle in category L1e-B. You can use it safely on public roads.

The Speed Pedelec must be equipped with a well audible horn, a wing mirror (LH-side), a lighting system with quality marks for the head light and the tail light with integrated brake light, reflectors and with 2 sets of brakes independently actuating the front and rear wheel.

The additional electric drive is limited to max. 45 km/h, and thus complies with the statutory requirements for an L1e-B vehicle.

Due to the fact that the B Speed is a type approval vehicle in the L1e-B category it must be registered at your national road safety authority (e.g. KBA in Germany, DIV in Belgium, RDW in the Netherlands, DREAL in France or DVSA in the United Kingdom). In addition, you will need a license plate (as proof of your local registration and your liability insurance), an insurance and a driving license. Moreover, you will need to wear an approved Speed Pedelec helmet as well.

3. Type approval and EC Certificate of Conformity (CoC)



KLEVER MOBILITY INC.

CERTIFICATE OF CONFORMITY ACCOMPANYING EACH VEHICLE IN THE SERIES OF THE TYPE WHICH HAS BEEN APPROVED

EC CERTIFICATE OF CONFORMITY

VEHICLE CATEGORY L

**** The image of the Certificate of Conformity (CoC) of the X Speed (45 km/h.) Please see page 63 of this manual for the full size image.*

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

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

Represented in Benelux by:
Klever Mobility NL B.V.
Afslag 8
3981 PD Bunnik
Tel.: +31 30 210 2905
infoNL@klever-mobility.com

Hereby confirms for the product: B Speed model year 2019 conformity with the applicable European Regulation EC 168/2013. Your B Speed comes with a Klever Certificate of Conformity (CoC) with which your vehicle can be registered.

Klever will register your B Speed at your local road safety authority (e.g. KBA in Germany, DIV in Belgium, RDW in the Netherlands, DREAL in France or DVSA in the United Kingdom). After registration, your Klever dealer will receive the license plate and the code for the name of the registrant. Your dealer will then assemble the license plate and ascribe the vehicle to your name and to your liability insurance. With the code for the name of the registrant you can organise the assignment to your name and insure yourself as well.

.

Please note! With a maximum speed of 45 km/h. the B Speed is NOT a regular electric bicycle, but it is a so-called Speed Pedelec. According to the Type approval Regulation it is an L1e-B vehicle and therefore it has to comply with different road traffic regulations and it has a different position and different place within the traffic. Make sure you understand the local road traffic and safety regulations in your country. Also, you will need a license plate (as proof of your local registration and your liability insurance), Insurance and a driving license. Moreover, you will need to wear an approved Speed Pedelec helmet as well.

Technical documentation by:
Klever Mobility Europe GmbH - Technical Manager
Dieselstr. 8
D-50859 Köln

4. Getting started - Safety check

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

Therefore, before your first ride, and every ride, you should consider some important things and check the vehicle.

1. Make yourself intensely familiar with the Speed 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 7.2).
3. Check the correct function of the brakes.
4. Check the air pressure and the thread depth of the tyres.
5. Check the lighting system for proper operation.
6. Check the tightness of the bolts and nuts of the wheels.
7. Check the minimum insertion of the seat post.

Caution: Do not start when you identify deficiencies in one of these points. While riding a defective Speed Pedelec this can cause serious accidents and endanger your live. If in doubt, please contact your dealer or our technical hotline.

Your bike suffers wear and tear in everyday riding through extreme weather and road bumps. Through constant dynamic loads all parts of the bike experience 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 and comply with the plan of inspection, so he can fix or replace these parts.

Please note! The everchanging road and weather conditions will constantly fatigue the B Speed and its components and parts. This may cause fatigue and wear. Therefore, it is recommended to inspect your Speed Pedelec on a regular basis and look for wear of parts and changes in scratches or cracks, or the discolouring of parts. These could possibly indicate damage of the part. Following the inspection plan in section 19, you best bring your B Speed to your Klever dealer for inspection, service, maintenance and repair.

Please note! Be sure to only use original Klever spare parts. In case you are not sure whether to use certain spare parts or not, please contact your official Klever dealer or otherwise call our technical hotline.

5. Behaviour in road traffic

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

- Always wear a 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.
- Ride defensively and be considerate to other road users.
- Always keep your bike in a perfect condition.
- Use your bike only in accordance with its intended purpose (see chapter 13. Intended Use).
- Don't use a mobile phone or a headset while riding.
- Be sure to observe the maximum weight of 145 kg of the Speed Pedelec (see chapter 11. Technical Data).
- Please have your Speed Pedelec checked regularly by an authorised Klever dealer, according to the recommended service intervals.

6. The Klever Mobility propulsion – the BIACTRON system

Image 9

You have purchased a Speed Pedelec that helps you improve your day to day mobility, with its electric propulsion system. Slopes can be better managed and the wind resistance can be better overcome.

This electric auxiliary drive consists of the following components (image 10): 1. Battery; 2. Motor; 3. Control unit/Display; 4. Motor controller; 5. Torque sensor; 6. Pedal sensor; 7. Charger (Image 9).

Once you have turned on the system and you start pedalling the motor will support you as long as you pedal, up to a max. speed of 45 km/h.

Due to its maximum speed, the B Speed is no longer considered as a normal bicycle. It is obliged to be insured and does need a license. Likewise, it is compulsory to wear a helmet and 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

Image 10

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 ride faster than 55 km/h., the automatic energy recovery (technical recuperation) is activated. The motor operates as a generator and re-charges the battery.

In case the technical recuperation has been activated, you will hear an acoustic signal. During the process of recuperation, the bars on the display representing the battery state of charge will start to flash and the LED light on the battery will once flash red, yellow and green consecutively.

6.1. Sensors and function

The Speed Pedelec is equipped with a torque sensor in the dropout, and it is electronically controlled. This sensor accurately measures the change in chain force at every pedal stroke (left or right) and informs the system about the force you exert during pedalling. A computer in the control unit then calculates these values, and manages precisely the amount of support from the motor, hence generating a perfect synergy between the cyclist and the B Speed.

During pedalling, the torque and the pedal sensor measure very sensitively and exactly the rider's input and enable the motor controller to operate the additional support of the motor tailored to the needs and riding conditions of the cyclist.

You can also define the amount of motor support by yourself choosing between the five levels of support (Turbo, High, Medium, Low, Ultra Low).

This makes the system very efficient and economic, saving power consumption and maximising range. The additional speed sensor sets the power of the electric motor to zero once you have reached 45 km/h. Above 45 km/h. speed, the Speed Pedelec works like a conventional bicycle, the only way to maintain the propulsion of the vehicle is by pedalling solely.

The electric motor will only activate if you pedal, therefore, from a standstill, to start, either you have to pedal, or actuate the Walk/Turbo button. Without pedalling, by pressing the Walk/turbo button, the electric motor support will take you to a maximum speed of 18 km/h. The Walk/Turbo button was designed as an aid when starting uphill or in case the bike has to be pushed.

6.2 Levels of support

The propulsion system provides five levels of support. Depending on topography, weather conditions and your own preferences, you can choose the motor support using the plus and minus (-) keys and the ϟ boost button on the control panel (see the separate manual of the LCD-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
ϟ (Ultra High) (while pedaling)	Strongest support	Steep ramps; violent gusts

Please note! In case you actuate the Turbo button (ϟ), there are 3 options depending on the situation:

1. You walk alongside the B Speed and/or you push it out of your garage.

Make sure the support level you select is L. While pushing the Walk/Turbo button you will activate the Walk-assist mode and you will trigger a moderate electric motor power up to 4 km/h. In this way you can walk with your vehicle comfortably and easily. Warning: In case you preselected the M or H support levels, then the maximum speed of the vehicle will

be too high to be able to walk comfortably and safely alongside the B Speed.

2. You are sitting on your B Speed and intend to start from standstill on a ramp without pedalling. Push the Turbo button and you will get the strongest support up to 18 kph/. provided you preselected the M or H level.

3. You are sitting on your B Speed and you are pedalling with for instance M level support and you need strongest support momentarily. Push the Turbo button while pedalling and you will trigger the strongest support regardless your speed (from 0 to 45 km/h).

Please note! These 3 options will only function while you keep the Turbo button pushed. As soon as you release the Turbo button, the electric power support will stop. Except in the case of pedalling: in that case after releasing the

Turbo button the level of electric power support will go back to the preselected level (level M as the example in option 3).

In order to save battery power, the support level will automatically be limited to the M level when the battery capacity drops to 10%. When the battery capacity drops to 5% the support level will be limited to the L level and in the case of a battery capacity of 2% or less the level will be UL.

6.3 Regeneration

The BIACTRON drive system of your Klever electric bicycle has an innovative, unique function: the recovery of battery capacity, also known as regeneration. Every time the drive system goes into freewheel, the BIACTRON system starts to brake on the motor and the motor friction is converted into electricity that is stored in the battery. The freewheel is activated if you do not pedal and roll out to a traffic light or you roll down a hill or mountain without having to pedal. This function, regeneration for freewheeling, applies to all B models. With the B45 models, an additional regeneration function is added: in case you operate the brake levers, battery capacity is regenerated too.

Section 6.4.3 (menu for settings) explains how you can activate this function and adjust it to your own preferences. The regeneration function is a nice and clean addition to the capacity, consumption and range of your battery. The more and longer you ride in a mountainous environment, the more you will benefit from this function. However, the recovery of electricity is limited and depends to a large extent on your riding behaviour, the environment where you ride and the chosen regeneration settings.

6.4 Display

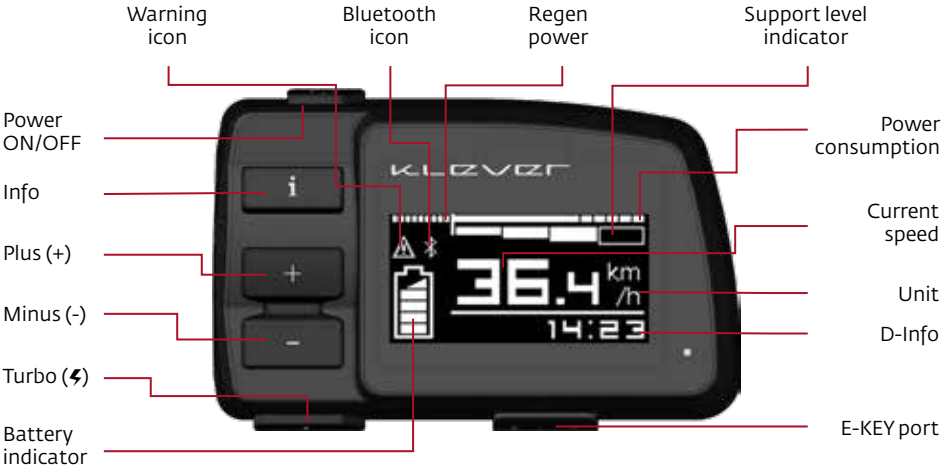


Image 11

The Display (with user interface) is your gate to Klever's electric propulsion system, BIACTRON (Image 11). With the display you start and control the electric drive system.

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

When the E-KEY pairing function is enabled, the bicycle has its own individually programmed display. In this case your Klever bike can only operate an E-KEY with the same ID. It is not possible to activate your Klever bike with an E-KEY of another bike. Each Klever bike will be delivered with two identical E-KEYs.

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

As soon as you insert the E-KEY into the display, the system will start. With the E-KEY already in the display while the system is off, there are two ways to activate the system:

1. **Press the power button** (Image 11), the system runs a system check for 3 seconds - now the system is activated.

or

2. **When you start pedalling the system will wake up automatically**. After 3 seconds of system check, the electric drive will start to support.

Button	Location	Function
Power	Upper left edge	On / Off
Info	Top left	Switch between clock, range, trip, odo, SOC and fitness data
Plus (+)	Middle left	Increase support level
Minus (-)	Lower left	Reduce support level
ϟ Turbo	Lower left edge	Starting and pushing aid (at rest); strongest support (while pedalling)

6.4.1 Function of each button

Start/ stop button (Image 12)

By pressing the POWER button you'll boot the system. The system performs a system check of 3 seconds, and the drive system is ready to operate. The electric drive will start to support depending on the level of assistance chosen.

By pressing this button again, the system will be turned off and all settings are being stored.

Press the button again, the system starts and all previous settings and levels of support are enabled again.

Image 12

PLUS (+) Button (Image 13)

By pressing the PLUS (+) button you can increase the support level. For instance, when the selected level is M (medium) and you press the PLUS (+) button, the support level of the motor will increase to H (high).

Image 13

MINUS (-) Button (Image 14)

By pressing the MINUS (-) button you can reduce the support level. For instance, when the selected level is M (medium) and you press the MINUS (-) button, the support level of the motor will decrease to L (low).

Image 14

Image 15

INFO Button (Image 15)

By pressing the INFO button, subsequently all rider's information can be displayed on the LCD-screen.

Press the INFO button shortly in order to go through the available rider's data: **Time, SOC, trip, km-day, odo, kcal. Kcal.**

See below.

Please note: the available data may vary depending on bike model and software version.

Press "INFO key" to change D-INFO

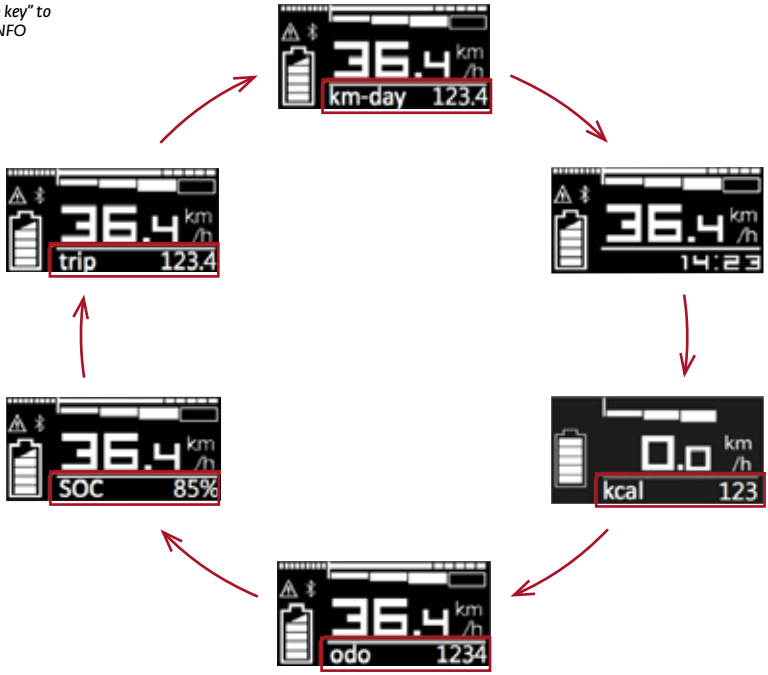


Image 16

Image 17

Time (hh:mm) (Image 17)

The time can be adjusted by the settings menu of the display, by synchronising with your smartphone or with the Klever service tool at you local dealer.

SOC (State of Charge) (Image 18)

The SOC indicates the current battery capacity by %, in this case 85.

Image 18

Trip (Image 19)

Kilometres ridden since the last reset, in this case 123.4 km.

If you want to reset the trip distance to zero at the start of a new trip, press the INFO button long and select RESET in the menu. Then select trip, then confirm by long pressing the ENTER (+) button.

Image 19

Km-day (Image 20)

Kilometres ridden today, starting at 00:00, in this case 123.4 km.

The daily mileage will be set to zero at midnight 00:00 every day.

Image 20

odo (Image 21)

Accumulated kilometres during the lifecycle of your Klever, in this case 1234 km. When the odo reaches 99999 km. it will be reset to 0.

Image 21

Kcal (Image 22)

The number of kilocalories burnt by the cyclist, in this case 123 kcal.

For proper kcal calculation please set the rider's weight. Press the INFO button long and select "Rider" to input the weight number. Kcal can be reset by selecting RESET in the menu.

Image 22

Image 23

⚡ TURBO Button (Image 23)

This button has two functions:

1. As a starting and pushing aid: to help you push or start a bicycle at a traffic light, on a ramp or uphill just press this button.

When the ⚡ (TURBO) button is pushed without pedalling, the "throttle" mode provides motor output:

- < 18 km/h at H
- < 12 km/h at M
- < 4 km/h at L

When you release the button, the motor support instantly stops.

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

Turbo mode only works while pedalling. The turbo assistance from the motor will stop when you stop pedalling or when you release the button.

Please note: driving with a starting aid/turbo mode has to be learned. Practice this procedure only on a quiet street or parking lot. Only when you have familiarised yourself with the additional turbo support. You can ride on a public road.

Please note: using the turbo mode as a pushing aid to roll your Klever bike out of the garage, or roll it up a ramp, please make sure that you have selected the L program. When using the pushing aid in the M or H mode, you may have serious difficulty to keep the pace of the bike.

6.4.2 Display content

Image 24

Battery status (Image 24)

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

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

Display	Charging level
5 bars light up	100%
4 bars light up	80%
3 bars light up	60%
2 bars light up	40%
1 bar light up	20%
Half of bar lights up	Less than 10%

Additionally, you can check the charging status too with the LED on the front side of the battery.

In order to save the battery capacity, it is not possible to choose support level H in case only 10% battery capacity is left. With 5% remaining capacity it is only possible to use the L level.

Support level (Image 25)

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

In the right column of the table on page 24 we have listed recommended settings: for which situation which level of support will be the best of use. Of course, it is possible to select the levels according to your own liking, e.g. driving in the plane with the highest level of support (H).

Image 25

System Level	Support	Driving situation (recommended)
UL (Ultra Low)	No support, system is activated	Downhill
L (low)	Low support	On the plain
M (medium)	Medium support	Slight hill / headwind
H (High)	High support	Steep hill / fierce headwinds
ϟ (Ultra-High) (while pedalling)	Strongest support	Steep ramps / violent gusts

Image 26

Speedometer (Image 26)

The main display will show the current speed.

Image 27

Regeneration Power (Image 27)

This will show the regeneration power you get from the system in case you have selected the Recup mode in the menu:

1. While coasting: On (levels 1-2-3-auto) or

2. While braking: On (levels 1-2-3-auto)

*(braking regeneration is only available on 45 km kph Speed models). The more bars you see, the more regeneration you get from the system.

Image 28

Power consumption (Image 28)

This shows the actual power consumption. The longer or more bars, the more your battery is being drained. Of course, higher consumption will decrease your range more rapidly.

6.4.3 Settings

Press „INFO button" long to enter the Setting menu

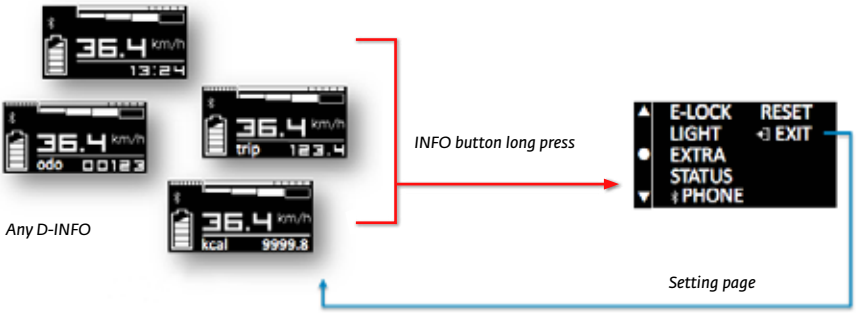


Image 29

Setting Menu

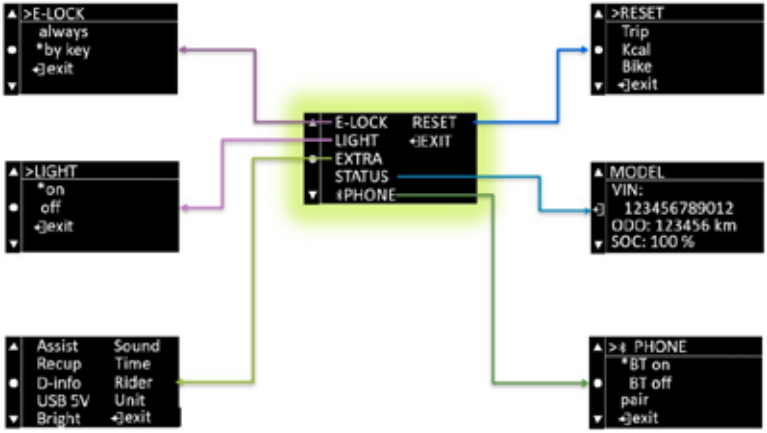


Image 30

Setting E-LOCK

The two E-KEYs which come with your bike are being paired with the E-drive system by your dealer. You have two options for the E-KEY functionality:

1. always

When you turn on the system the display will read "insert E-KEY". You have to insert the E-KEY to activate the system. In case you start to ride without inserting the E-KEY, then the alarm will set off and the motor will be locked.

Once you have inserted the E-KEY and the system is being activated, you can remove it and the system will continue to operate until you turn off the system. After that the motor lock is being activated. The next time when you turn on the system again, the display will ask again for the insertion of the E-KEY.

2. by key

The start-up procedure is the same, the display will ask to insert the E-KEY. In case you remove the E-KEY while the system is still on, the display will ask whether you want to lock the motor or not:

a. Once you select "no", you can continue to cycle. The next time when you turn on the system, you don't need the E-KEY to activate the system.

b. Once you select "yes", the system will be turned off and the alarm and the motor lock will be activated. In case you start to ride your bike now, the alarm will set off and the motor will be locked. In case you turn on the system with the Power

button, then the display will ask you to insert the E-KEY again.

Setting LIGHT

You can decide to keep the head and tail light on or off when the system is on. Due to the EU regulations for Speed Pedelecs (45 kph), the head and tail light on Speed models will always be turned on automatically.

Setting EXTRA

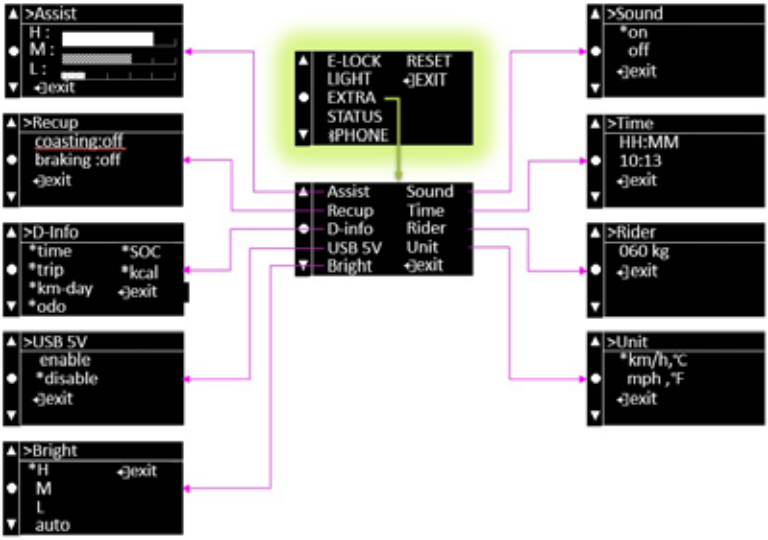


Image 31

With the EXTRA menu you have options to change the performance of the support system, change the major information you want to see while riding, change the unit/ rider weight etc.

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 regeneration of energy back into the battery pack. Two recup functions: coasting regeneration and braking regeneration. The regeneration levels can be set from 1 to 3 or you can select the automatic mode; 1 = minimal regen and 3 = maximum regen. The factory default setting

is off for both regen functions. Braking regeneration is only available on Speed models.

Setting EXTRA > D-Info

Six types of information can be shown on the major display by default. With a short press of the INFO or MINUS (-) button you can go through this information. And you can hide any of those in case you need them while riding.

Setting EXTRA > USB 5V

An extra wire comes from the display which allows you to connect the Klever USB charger for charging your device with 5V. This function is disabled by default. The USB charger is an optional accessory. Please ask the Klever team or authorised dealers.

Setting EXTRA > Bright

The brightness of the blacklight can be adjusted.

Setting EXTRA > Sound

The volume of the system sound can be adjusted.

Setting EXTRA > Time

Time can be adjusted here or can be synchronised with your smartphone.

Setting EXTRA > Rider

Input the rider's weight for the proper calculation of the calorie output.

Setting EXTRA > Unit

Change the unit setting from km/h, to mph, and °C to °F.

Setting PHONE

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

Setting RESET

Trip and Kcal can be reset to zero. Or the bike setting can be reset to the factory default values.

Image 32

6.5 Rechargeable battery

Image 33

Image 34

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

The status of the battery can always be checked through the LED light button, next to the charging socket of the battery (image 34). If you press the button, the LED will shine either red, yellow or green. If light stays off, then the battery could be broken. Please have your local dealer check the battery.

red	capacity <35%, battery should be charged
yellow	capacity 35 - 75%; battery can be charged
green	capacity> 75% battery can be charged

The battery is automatically protected from overheating, overcharging and deep discharging. It is very user-friendly, very practical, very easy and simple to handle.

Nevertheless, you should consider some important things in order to maximise 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.

Your battery has a lifetime of 700 charging cycles. One charging cycle means a full charge of the battery (0-100% capacity). Partial loads can be done more often.

When the battery is not being used for a long time (more than 2 months), 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 cold battery. The capacity of a cold battery is significantly reduced and consequently will have a lower range.

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

Caution! Never place the battery on the heater and never try to heat it with a hair dryer.

In case you need to park the bike outside for a long time during the cold season, remove the battery and store it in a heated room. Since 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 battery could catch fire.

Also, the battery should be charged 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 cold battery should be gently heated to room temperature before charging. Never place the battery on the heater and never heat it with a hair dryer!

Caution! Charge the battery exclusively with the proprietary and dedicated charger which comes with the B Speed.

Do not use any other type of charging unit since this may damage the battery and may cause overheating or fire. During loading, neither the charger nor the battery should be exposed to humidity, in order to prevent short circuits and electric shocks.

The battery is maintenance-free. Should it be broken or become defective 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 could damage the battery that may catch fire. 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 proprietary 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 cold battery.
- After an extended period (about two months) of storage, the battery should be recharged.
- Protect the battery from humidity.
- Protect the battery from mechanical damage.
- Never open the battery yourself.

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

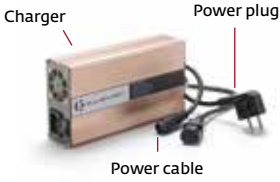


Image 35

Image 36

Image 36

6.5.1 Charging the battery

You can charge the battery on or off your bike (e.g. important in winter time) (image 35 & 36). Charging at any time, even after a partial discharge (e.g. after a short distance of a few kilometres) 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 section 6.5.3.

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

For the technical data of the charger please read section 11, Technical data on page 51.

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 to the charger.
- Insert the power plug of the charger into the wall socket, the LED will start to flash red.
- The charger is ready for charging once the LED lights steady red.
- Connect the socket of the charger into the socket of the battery. The charging process will start automatically.
- 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 is steady green, the battery is now fully charged, the charging is complete.
- Disconnect the power plug from the Wall socket.
- Unplug the socket of the charger from the battery socket.

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
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 of an empty 570 Wh battery (from 0 to 96%) is about 2.3 hours in combination with the included quick charger. At a premium price you can buy our biggest 850 Wh battery, its charging time is about 3.5 hours.

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 sockets on the charger and the battery.

Avoid humidity and direct sunlight.

Attention! If the charger is damaged, please contact an authorised retailer. Never open the charger.

6.5.2 Range

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

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

The below chart offers a proper indication of the range you may expect under similar conditions:

- Outside temperature 12 - 30°C
- Flat and slightly hilly terrain
- Total system weight between 95 – 105 kg (rider's weight 70 – 80 kg)
- Little to no wind.

Battery	Range
570 Wh	30 – 60 km.
850 Wh	45 – 90 km.

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

Image 37

6.5.3 Removing and mounting of the battery

Removing the battery

The battery is automatically locked in place with the battery lock and thereby protected from theft. Using the provided key, you can lock and unlock both the battery lock and ABUS folding lock (accessory option) in order to fully protect your Speed Pedelec against theft.

To remove the battery, first turn off the system using the On/Off button on the display. Turn the key in the battery lock clockwise up to the stop, and pull out at the battery with the handle diagonally and backwards from its docking station (image 37).

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

Having removed the battery, please don't forget to protect the contact connector with the rubber seal. We advise to always use the rubber seal (image 38).

Image 38

Mounting the battery in the docking station

Insert the battery carefully into the guide rail, while the groove of the battery casing must be carefully inserted into the guide rail on the bicycle frame, and slide it gently down until you hear the lock engage and the electronic contacts are connected (image 39).

For this operation you do not need the key of 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.

Image 39

Never ride your B model WITHOUT battery pack. Prior to starting to ride your B Speed, make sure that you have inserted your battery pack into the docking station. Riding without battery pack may cause damage to your BIACTRON drive system.

6.5.4 Transport of the battery

The battery is subjected to the Dangerous Goods Legislation. The user can transport the battery by road and train without any further requirements. When being transported by third parties (e.g. forwarders, post or via air) special requirements on packing and labelling must be observed.

For the preparation of the battery being transported, consulting an expert for hazardous material is absolutely required. Ship 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 detailed national regulations.

In every case of transporting a broken or damaged battery, always refer to an authorised bicycle dealer.

The dealer can inspect the battery and, in case necessary, forward the broken battery to Klever Mobility.

6.6 Diagnostics and troubleshooting

The system will not turn on.

Check whether the display is positioned firmly in the bracket. Check all connections. Check whether the battery is sitting correctly in the docking station in the frame and whether the battery lock is engaged.

The display is fixed but the system will not turn on.

Check if you have installed the correct display.

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 authorised dealer or our technical hotline.

7. The Speed Pedelec

All other components 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 B Speed and its accessories are summarised here.

You will also find further information in the accompanying user manuals of the component suppliers.

Image 40

7.1 Type approval vehicle and dedicated equipment

As explained in section 3, the B Speed is not a regular electric bicycle, it is a Speed Pedelec. It is an electrically powered vehicle with a maximum speed of 45 km/h. Consequently, it is a type approval vehicle which has to comply with the European Regulation EC 168/2013. Therefore, the B Speed comes with special equipment (a well audible horn, a brake light and a wing mirror) which is in relation to the higher speed of this vehicle (up to 45 km/h) and the type approval requirements.

Image 41

7.1.1 Horn

The horn is mounted on the front fork (image 40) and can be actuated with a push button at the left-hand side of the handlebar, underneath the LCD display (image 41). With this horn you can notify the other road users of your presence on the road, especially under unclear and crowded traffic conditions.

Image 42

7.1.2 Brake light

The tail light has an integrated brake light. When you actuate your brake levers then the brake light in the rear will start to light with higher intensity than the regular tail light (image 42). In this way the road users behind you will be notified that your speed is decreasing.

Image 43

7.1.3 Wing mirror

Your B Speed is being equipped with a wing mirror on the left-hand side of your handlebar (image 43). The mirror can be adjusted by hand according to your preferred position. With this mirror you will have eyes on the road users behind you, especially those who are faster than you and are in the process of overtaking you. Consequently, you don't need to turn around and you can keep your attention on the traffic behind you and in front of you at the same time.

Image 44

Image 45

Image 46

Image 47

7.2 Adjustment of saddle and handlebar

The adjustment to your body size will be made with the adjustment of the saddle, stem and handlebar. Your dealer can do this on the spot.

In order to readjust by yourself or in the case of another cyclist, changing the settings is briefly described below:

Caution: All work described requires mechanic experience and appropriate tools. Use a torque wrench to tighten the bolts and never exceed the maximum torque of the bolts. All the necessary tooling and information on the recommended torques can be found in section 11 Technical Data.

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.

Or when you bring the ball of the foot to the centre of the pedal, your knee should be slightly bent (Image 45). Loosen with the proper Allen key the seat clamp bolt and move the seat post with the saddle to its proper height. Align the saddle with the frame using the saddle nose and the bottom bracket or top tube as references.

Fasten the bolt 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 bolts (Image 46) of the seat post. The saddle should generally be positioned horizontally.

Attention: please pay attention to the recommended torques when tightening the saddle clamp bolts (see Chapter 11 Technical data).

Caution: The seat post may never be installed over the minimum which could lead to injuries.

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 48).

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 49)

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 48

Image 49

Caution! Check whether the handlebar is correctly tightened, you should not be able to turn it at all.

7.3 Headset

In order to steer easily and safely, the fork´s bearing in the frame (headset) must function smoothly and be without any play (image 50). During riding, dynamic loads put a lot of stress on the headset. Therefore, a regular check is indispensable.

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

Image 50

Attention: The adjustment of the headset requires some experience. This operation is best left to an authorised and experienced dealer.

Image 51

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

1. Loosen the 2 bolts at the lower front part of the stem,

Image 52

clamping the stem to the fork, with an Allen key, (image 50).

2. Loosen the central pivotal bolt on the side of the stem. With this bolt the inclination of the stem can be readjusted. Tilt the stem forward in order to make space for the rubber cover and the bolt underneath (image51).

3. Carefully remove the rubber cap covering the adjustment bolt and turn this bolt on top of the fork steerer a quarter of a turn tighter (image 52)

Attention: This bolt does not serve for screwing and fixing, but only for adjustment of the headset (image 52).

4. Make sure the stem and handlebar are in the direction of riding and retighten the 2 clamping bolts firmly.

5. Define the correct inclination of the stem and retighten the central pivotal bolt firmly.

6. Pay attention to the maximum torque of the bolts, which may not be exceeded under any circumstances.

7. 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 authorised dealer.

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

You can check smooth functioning of the headset 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 exchanged. This has to be done by a dealer.

Image 53

7.4 Suspension front fork

Both the B Speed and the B Speed Plus are equipped with a suspension front fork, which improves the riding comfort. This front fork is pre-set with factory settings. With a lockout button on the righthand fork leg you can turn off the suspension (image 53). It is best to use the lockout only on smooth and straight roads and always use the suspension on badly paved roads.

For the long-term proper functioning of the front fork regular maintenance is required. Some basic tips for maintenance: clean the smooth surfaces of the stanchion tubes with a cloth and water. After cleaning spray some water repellent oil on the stanchion tubes for lubrication of the bearings and for a plush suspension function.

Warning! Never use a high-pressure cleaner or aggressive detergent for the maintenance of the front fork. Pay attention to the maintenance instructions in the manual of the fork supplier.

7.5 Disc Brakes

Imsge 54

Your Speed Pedelec is equipped with high-quality hydraulic disc brakes (image 54). The disc brake is characterised by very good braking performances even under rainy weather and other bad weather conditions. The disc brake is very low maintenance and does not wear the rim. The brake consists of a brake lever with a master cylinder, a hose made of plastic, the brake calliper and the disc mounted on the hub. The brake works with a special, non-toxic mineral oil. While actuating the brake lever, the oil pressure is being transmitted via the hose to the brake calliper and makes the brake pads contact the 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/h to complete standstill, the brake pads will achieve their maximum brake power. Break control: The right-hand brake lever controls the rear wheel brake and the left-hand brake lever controls the front wheel brake.

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

The brake pads and rotors must be regularly checked for wear. If discs and brake pads are worn, they will need to be replaced. In case the brake performance is getting less and you are losing brake power or you can push the lever through to the handlebar without any braking effect, the brake system must be bled (purged). That and the replacement of worn brake pads and discs should be done by an authorised dealer.

Caution! In case the brake performance is decreasing or the system shows signs of leakage, do not continue to ride your Speed Pedelec and go and see your local dealer immediately.

Attention! Oil or grease on the 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 immediately. You can clean the disc with brake cleaner or warm water and a little detergent if necessary.

Please note! Ride more cautiously under humid and rainy conditions because the stopping distance could be longer.

For more information on disc brakes, brake pads and discs and their wear limit, read the operation manuals supplied by the brake manufacturer.

7.6 Drive train and gear shift

Image 55

Image 56

Your Speed Pedelec is equipped with a high-quality 10-speed derailleur drive train. These gears will help you to always use the optimal transmission (pedalling & 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 is composed of the bottom bracket, the crankset, the rear derailleur, the chain, the gear shifter and the 10-speed cassette (image 55). With the gear shifter you control the rear derailleur, which ensures that the chain can move on the sprockets of the cassette.

Your dealer has checked your bike before the handover and adjusted the shifter. During the first miles under stress, however, the shift cables could lengthen slightly and the shifter may become misaligned and may have to be readjusted.

With the adjustment screw of the rear derailleur, you can readjust the tension of the shift cable (image 56).

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 the smallest sprocket and drop out or between the largest sprocket and spokes of the rear wheel. Please read also the enclosed operating instructions of the manufacturer of derailleur and shifter.

The precise adjustment of the derailleur is difficult and should better be done by an experienced mechanic. 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 maximised.

Clean the chain regularly with a clean cotton cloth and lubricate it afterwards.

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

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

The control of the chain wear 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 causes serious falls or injury.

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

7.7 Lighting

Your Speed Pedelec is equipped with high-quality lighting which corresponds with the type regulation and has an official mark: indicated by the letter E, and a six-digit number.

The lighting is supplied by the battery power of the vehicle. The headlight is a LED with high output and standlight function. The taillight is a bright LED too with standlight function, with brake light and license plate illumination.

If there is a failure in the lighting system please verify that the light switch on the display is switched to "On", check all contacts at headlight and taillight. Check all cables for damage.

If you don't find any errors, you should be looking for repair at an authorised dealer immediately

Caution: A non-functioning light is illegal and endangers your life on the road. Bicycles without lights are easily overlooked in the dark. You would risk serious accidents.

More information on the headlight and the taillight can be found in the manual from the lighting supplier.

7.8 Wheels and tyres

The wheels are one of the most stressed components of the vehicle. They contact the road, provide the propulsion and they absorb the road bumps. Due to the heavy use, they should be regularly checked.

All wheels are manufactured with great care and precision.

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

In unlikely cases of radial or axial play or broken spokes, the wheels should be repaired or re-centred by an authorised dealer.

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

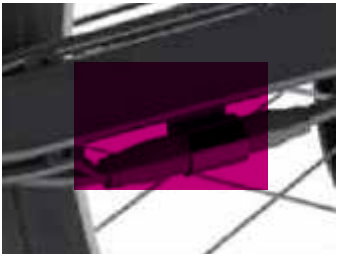


Image 57

Image 58

Image 59

Removal of the rear wheel

- Shift the chain to the smallest sprocket on the cassette.
- Turn off the electric drive system.
- Remove the bolt of the mounting bracket (cable guide) on the inside of the left-hand chain stay with a T25 Torx key (image 57). Disconnect the motor socket.
- Disassemble the bolt of the mounting bracket (cable guide).
- Loosen the axle nuts on either side of the motor with a 19 mm wrench.
- Remove the screw of the locking washer on the left side of the axle and remove the screw and washer (image 58).
- Now pull the wheel out of the dropout, while pivoting the rear derailleur backwards.
- Block the brake pads of the disc-brake by inserting the enclosed pad separator into the calliper (image 59). This prevents the accidental compression of the pads by the unintended application of the lever while the disc is being removed.
- The assembly of the rear wheel is done in reverse order.
- After having removed the pad separator, make sure to insert the disc carefully between the brake pads during assembly.

Caution: Take care to tighten the axle nuts to theproper torque (40 Nm) and make sure there is sufficient space (at least 5 mm.) between the disc and the motor cable!

Removal of the front wheel

- The B Speed models have a suspension front fork (image 60): first open the lever of the quick release and then turn the thru axle counter clockwise. Remove it from the front wheel.
- Pull the front wheel out of the fork.
- Block the brake pads of the disc-brake by inserting the enclosed pad separator into the calliper (image 59).
- The assembly of the front wheel is done in reverse order.
- During assembly please insert the disc carefully between the two brake pads.
- Pay attention to the correct torque of the thru axle (20 Nm).

Image 60

Note: Rotors can be very hot after riding. Let them cool down, before disassembly.

Caution: Check before each ride whether the tyres are still correctly fitted to the wheels.

Tyres

The tyre provides grip and traction and contributes significantly to the smooth running and comfort by absorbing little bumps.

The tyre size can be found on the sidewall printed specifically in millimetres and inches: 24" x 2.15" or 55 – 507 mm. The wheel has a diameter of 507 mm. (24") and a width of 55 mm. (2.15").

The recommended tyre pressure is indicated on the sidewall of the tyres (Schwalbe Big Ben 2.0 – 4.0 bar; 30 – 55 Psi).

Regularly check the correct tyre pressure and pressurise your tyres if necessary.

The tyre uses an inner tube with Schrader valve.

So, you can check and inflate the tyre at any gas station.

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

Regularly check the tyres for cracks and for its tread pattern height. If you find that cracks or sharp objects have damaged the fabric of the tyre or the tread pattern is no longer

Image 61

Image 62

sufficient, replace the tyres. If in doubt, ask your dealer. He will verify the tyres and if necessary, replace them

In the case of a flat tyre, do as follows:

Always use plastic tyre levers.

1. Remove the wheel as described above.
2. Deflate the tyre and push a tyre lever underneath the tyre bead opposite of the valve and lift the tyre over the rim flange.
3. Push the second tyre lever underneath the tyre bead in a distance of approx. 10cm from the first one (image 61). If the tyre is still very tight around the rim, then use the third tyre lever as well.
4. Now, you can generally lift the tyre over the whole circumference of the rim by moving the lever and the inner tube can be removed.
5. Dip the disassembled and inflated inner tube into a bucket of water in order 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. In case of replacement, make sure you buy the correct size inner tube.
7. Check the inside of the tyre for sharp objects that could have caused the puncture and remove them. If the fabric of the tyre is damaged, replace it.
8. Start the mounting of the inner tube 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 inner tube without any creases underneath the tyre (image 62).
10. Starting opposite to the valve, lift the tyre bead over the flange of the rim and pull it deep into the rim and lift the rest of the tyre by hand over the rim's shoulder. Use no tyre levers, as this may damage the inner tube.
11. Push up the valve a little back into the tyre, so that the bead of the tyre is correctly seated in the rim.
12. Pull the valve back again and inflate the inner tube to recommended tyre pressure.

7.9 Luggage carrier and the transport of luggage

Your Speed Pedelec is equipped with a robust and durable aluminium luggage carrier with an integrated LED taillight (image 63). The carrier is compatible with all standard panniers, and you can use an extensive range of accessories. Check our website for more information.

Please note, however, the maximum load capacity of the luggage rack is 20 kg.

Image 63

Caution: when transporting luggage please ensure that you do not go over the total permitted weight of the Speed Pedelec, cyclist and luggage being 145 kg.

Attention: Please note that the additional weight of luggage changes the handling of the bike and extends the braking distance too.

7.10 Lock and anti-theft protection

Your Speed Pedelec comes with a motor immobiliser combined with an acoustic alarm system. The battery can only be removed from the frame by unlocking the battery lock with the key (see section 6.5.3). With the same key you do not only open the battery lock, but also the ABUS folding lock (which is optional and can be ordered with the identical key number). We recommend to also use a chain lock in order to be able to lock the vehicle to solid fixtures.

7.11 Accessoires

Useful accessories can enhance the functionality of your Speed Pedelec and significantly increase your riding pleasure.

These accessories are available at your dealer.

Please Note! Accessories must be compatible with your Speed Pedelec. Incompatible accessories may influence and alter the riding characteristics of your Speed Pedelec and can lead to accidents. Best ask your dealer for information and advice.

Caution! The use of bicycle trailers and child seats in combination with a type approval category L1e-B vehicle is NOT allowed.

8. Transport of your B Speed

You can transport your Speed Pedelec easily by car or train. For transport by car we recommend to use a tow bar bike rack, which is specifically designed for the transport of E-bikes and for heavier loads. Please ask your dealer for more specific recommendations.

Not recommended is the transport on the car roof. The heavier weight and the special frame tubes prevent you from stably fixing the Speed Pedelec on a roof rack. In addition, the weight of the Speed Pedelec is usually higher than the maximum weight limit of the car roof rack.

Prior to transporting your vehicle with a tow bar rack, you should remove the battery pack, the display as well as other non-fixed accessories such as: air pump and panniers. Additional protection should be given to electrical contacts of the bracket of the display and to the battery connector on the frame. This can be done with a plastic bag to protect those parts from moisture and rain. Air flow may cause the moisture to enter into the electric system.

If your car is big enough, then it is best to transport your B Speed on the inside of your car. That offers the optimal protection.

The transportation by air is almost impossible, unless you want to transport the bike without the battery. For airlines, these batteries are classified as hazardous goods and consequently will not be transported. To be sure, ask your airline under which conditions the transport of the battery may be allowed. However, this could be quite expensive.

For more information on the transport of the battery, please check section 6.5.4. page 33 Transport of the battery.

9. Maintenance, care and storage

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

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

Never clean the Speed Pedelec with a high-pressure cleaner or a steam cleaner, as water may enter bearings, motor and electronic contacts. Water could damage these parts due to corrosion and short circuits.

Clean your vehicle with a damp cloth and mild detergent.

Please make sure that no electrical contacts get wet.

The contacts can be maintained and conserved from time to time with a little care oil (e.g. 1-Step Finish Line) preservation. Contact spray is too aggressive and doesn'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 contact with oil and fat on the brake pads and brake discs. The stopping power might deteriorate and could represent a serious risk.

Always ensure that the tyres are inflated within the manufacturer's recommended operating pressure, which can be found on the tyre's sidewall. Never go over or under the recommend range of tyre pressure.

The entire electrical system of your Speed Pedelec, such as the motor, the sensors, the wiring harness and the battery are maintenance-free. If you meet unexpected problems with the system, contact or technical hotline (see also Chapter 2 Introduction) or consult an authorised Klever dealer.

Caution: Do not open the motor, the display or the battery. It is dangerous and this will immediately void the warranty.

Storage

The storage of the vehicle should always be in a dry, covered place to minimise the effects of weather and avoid direct sunlight.

In case you do not ride your B Speed during winter, you should consider following:

Store your Speed Pedelec well cleaned, lubricated and well preserved in a dry place and cover it with a tarp. Protect the electrical contacts with a little care oil (e.g. 1-Step Finish Line).

Winter storage in a garage is not ideal. Salt from salt spraying may enter your garage with your car. And this salt could cause corrosion of your Speed Pedelec.

The battery should be stored separately, ideally at a temperature between 10° and 15° Celsius in a dry place. Please fully charge the battery before the first ride in the spring. After storage for more than two months, it is advised to recharge the battery (see section 6.5.1 Charging of the battery).

10. Disposal and transportation

Disposal

All electronic components, such as motor, display, battery and charger are to be returned to an environmentally friendly recycling. These parts should not be considered household waste or abandoned into the environment.

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 authorised Klever 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 section 6.5.4. Transport of the battery.

The transport of all other parts is not particularly limited.

11. Technical data

Display / Operating unit
Illuminated LCD display, with starter & motor immobiliser and acoustic alarm
5 levels of support
Ultra-Low - Low - Medium - High - Turbo
Bicycle Computer, display of speed, range and Odometer (Day trip)
Button for: acceleration and walking aid / Turbo function
Battery state of charge with five bars (each bar 20% battery capacity)
Ambient Light sensor
Confirmation by an acoustic beep when a button is pressed

Rechargeable Battery
Lithium-Ion
44V / 12.9 Ah / 570 Watthour 44V / 19.1 Ah / 850 Watthour
3,4 kilograms 570 Wh / 5,1 kilograms 850 Wh
Charging level indicator via LED: <35% red / yellow 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 (optimal +5 ° C- +20 ° C)
Lockable and detachable
Charging time: Quick charger: 570 Wh 2.3 hours / 850 Wh 3.5 hours
Place of charging: on or off-bike
Charging cycles: 700 (one charging cycle 0 – 100% capacity)
Range: 1. 570 Wh battery: 30 – 60 km. 2. 850 Wh battery: 45 – 90 km.
Lifetime: after two years or 700 cycles still at least 60% of the original capacity remains.

Motor
Brushless DC motor in the rear hub
Control over torque sensor in the dropout and speed sensor at the bottom bracket
Max. 600 W
Operating voltage 44 V
Support until max. 45km/h
Weight 4.4 kg

Charger
Input voltage 200-240 V, 47-63 Hz
Output voltage of 48 V
Maximum charge current 5A
Output power: 240 Watt
Charging time: 2.3 hours for 570 Wh battery (0 – 96% capacity)
Size: 185 x 100 x 49 mm. with fan
Weight: 1.2 kg. (incl. 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 tightening torques for DIN bolts:

Bolt	M4	M5	M6	M8	M10
Tightening torque in Nm	2,9	5,5	9,5	23	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 bolt. Check the firm fit. In case 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 bolt by half a revolution before finally tightening it.

Imsge 65

Tools (image 65):

1. Allen keys
2. Combination wrenches
3. Sockets and Bits
4. Torque Wrench
5. Torx keys
6. Tyre lever

The gross vehicle weight of the Speed Pedelec:

Rider + vehicle + luggage = 145 kg

Tyres:

Size: 55-507 mm (24" x 2.15")

Recommended tyre pressure: 2.0 – 4.0 bar (30 – 55 Psi).

The circumference is approximately 1900 mm.

The exact circumference depends on the tyre pressure and the total weight of the Speed Pedelec.

12. Product liability and warranty

According to European warranty laws you are entitled to a period of 2 years for product liability, duty of care and warranty from the side of the manufacturer. This applies from the date of purchase or delivery (delivery date) of the Speed Pedelec.

The proof is the proof of purchase, which should be stored carefully. You should register your vehicle on our website: www.klever.mobility.com.

This product liability for material defects applies to all components of the entire Speed Pedelec.

Warranty claims are granted:

- In case the defect was present prior to the purchase of the Speed Pedelec.
- In case of a material, manufacturing or information defect.
- In case of function-related wear which was not caused by regular tear and wear (see Chapter 14).

Warranty claims are rendered void:

- In case of damages caused by accidents or force majeure.
- In case of damages caused by misuse or improper use.
- In case claims relate to parts which are subject to functional wear (see Chapter 14) except material or product defects.
- In case of damages caused by faulty and inadequate care and maintenance.
- In case of damages caused by faulty repairs.
- In case of damage caused by components which were out of specification and assembled after purchase of the vehicle.
- In case of consequential damage caused by not immediately resolved, earlier identified defects.

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

- **Two-year warranty** on all bike components.
- **Three-year warranty** on all drive modules of the electrical system: motor, control unit, display and cabling.
- **Two-year warranty** on the battery (also refer to point 4 and 5 below).
- **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 authorised dealer.
2. Costs from a previously executed repair of an unauthorised 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 700 charging cycles a remaining capacity of about 60% of the original capacity.
5. In case you officially register the battery of your X Speed on our website (www.klever-mobility.com) Klever extends the warranty term of your battery from 2 to 3 years. Within this term we guarantee that your battery still has 50% of its original capacity after 500 charging cycles.
6. The two-year warranty begins on the date of purchase.
7. A warranty claim must be notified immediately.

13. Intended use of your B Speed

Your Speed Pedelec is designed according to 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, normal paved roads.

The vehicle is equipped in accordance with the Road Traffic Regulations for type approved vehicles. And therefore, it is allowed to ride it on public roads. In order 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 in case the Speed Pedelec is used against its originally intended purpose nor for damages resulting from a breach of important instructions in this manual.

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

14. Wear

Your Speed Pedelec consists of many components, which are all 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 put under stress during each braking operation and wear as a consequence. Therefore, they must be periodically inspected and if necessary, be replaced immediately.
2. **Tyre and inner 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 tyre sidewall.
   Is the thread profile of the tyre no longer deep enough or the tyre has cracked sidewalls, it should be replaced immediately.
3. **Rims and spokes** are stressed while braking or riding over obstacles. Regularly check the concentricity of the rim and the spoke tension. If the wheel has radial or axial play, this should be readjusted immediately. In the event of spoke breakage, the broken spoke should be immediately replaced and the wheel has to be centred.
4. **Chain, sprocket, chain wheels and derailleur pulley wheels** wear out normally. Regular cleaning and lubrication of these components will extend their service life substantially. They should, however, in case they are worn be replaced immediately.
5. **Shifting and brake cables** must be maintained regularly and replaced if necessary. Especially if the Speed Pedelec 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 to be regularly cleaned and re-greased in order to minimise wear.
7. **Paintwork** requires regular care. Check all paintwork for damage and rectify this immediately. Brake and shifter cables can rub the painted surface of the frame. Protect those spots with a transparent foil.

15. Legal requirements for participation in traffic on public roads

Due to the fact that the B Speed is a type approval vehicle in the L1e-B category it must be registered at your national road safety authority (e.g. KBA in Germany, DIV in Belgium, RDW in the Netherlands, DREAL in France or DVSA in the United Kingdom). With a maximum speed of 45 km/h. the B Speed is NOT a regular electric bicycle, but it is a so-called Speed Pedelec. According to the Type approval guideline it has to comply with different road traffic regulations and it has a different position and different place within the traffic. Make sure you understand the local road traffic and safety regulations in your country. Also, you will need a license plate (as proof of your local registration and your liability insurance), an insurance and a driving license. Moreover, you will need to wear an approved Speed Pedelec helmet as well.

16. Regular maintenance – inspection plan

To keep your Speed Pedelec always roadworthy and 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 inspections should be carried out after 2-3.000 kilometres or once a year.

Inspections should be made by authorised Klever dealers.

Caution: In case inspections are not carried out or done unprofessionally, this may significantly impair the functions of your vehicle or may even lead to severe, possibly fatal accidents..

17. FAQ's

How far can I travel with one battery charge?

This depends on the outside temperature, the topography of the terrain, the technical condition and total weight of the bicycle and rider. Tyres with low air pressure or high weight or driving in hilly terrain, reduce the range (see section 6.5.2).

Battery	Range
570 Wh	30 – 60 km.
850 Wh	45 – 90 km.

This chart offers a proper indication of the range you may expect under similar conditions:

- Outside temperature 12 - 30°C
- Flat and slightly hilly terrain
- Total system weight between 95 – 105 kg. (rider's weight 70 – 80 kg.)
- Little to no wind.

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 comes with starter and motor block. This electronic block is combined with an acoustic alarm system, to be activated with the identical E-KEY which is paired to your bike. The battery can only be removed from the frame by unlocking the battery lock with the key. The same key not only opens the battery lock, but also the ABUS folding lock (which is optional and can be ordered with the identical key number). We recommend to also use a chain lock in order to be able to lock the vehicle to the solid fixtures.

Can I ride my Speed Pedelec in wintertime?

In general, there is no problem whatsoever to ride your B Speed at low temperatures. Store your battery in a warm place before you start your journey. Keep in mind that in wintertime at low outdoor temperatures the range may decrease by 30%.

Can I transport the Pedelec via air?

Because the battery is considered to be dangerous, many airlines refuse to transport the battery. In individual cases you may want to ask your airline, under which conditions and

costs a transport may be possible.

Do I need an insurance and do I need to wear a helmet?

Yes, due to the fact that the B Speed is a type approval vehicle in the L1e-B category it must be registered at your national road safety authority. According to the Type approval guideline you will need a license plate (as proof of your local registration and your liability insurance), insurance and a driving license. Moreover, you will need to wear an approved Speed Pedelec helmet as well. Your Klever dealer can help you pick a proper insurance and helmet.

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 authorised dealer.

How many times can I charge my battery?

We guarantee that the battery, after 700 full charge cycles or two years from the date of purchase still has 60% of its original capacity. Of course, you can charge the battery more often or use it longer than two years. But because of the natural aging process over time the battery loses more and more capacity.

Does the warranty void, in case I do not stick to the recommended regularly inspections?

No, the warranty does not void. We recommend, however, for your own safety to carry out all 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. In case your Speed Pedelec ever gets stolen, these data will facilitate the work of the police.

Name

Street

Postal code / Residence

Tel

Email

Klever model

Frame size

Frame colour

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 3,000 – 4,000 km. or no later than 2 years after purchase.	
Date	**Stamp / Signature**
Repairs	
Replaced components	

3. Inspection	**Date:**
After 5,000 – 7,000 km. or no later than 3 years after purchase.	
Date	**Stamp / Signature**
Repairs	
Replaced components	

4. Inspection	**Date:**
After 7,000 – 9,000 km. or no later than 4 years after purchase.	
Date	**Stamp / Signature**
Repairs	
Replaced components	

20. Appendix

KLEVER MOBILITY INC.
NO. 8, LN. 76, SEC. 3, ZHONGYANG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN
TEL +886 2 80763968 Fax +886 2 80763528 info@klever-mobility.com www.klever-mobility.com VAT NO. 53228504

CERTIFICATE OF CONFORMITY ACCOMPANYING EACH VEHICLE IN THE SERIES OF THE TYPE WHICH HAS BEEN APPROVED

EU CERTIFICATE OF CONFORMITY

The undersigned: Edward Lin / Project Manager
hereby certifies that the following complete vehicle:

0.1. Make (trade name of the manufacturer): Klever
0.2. Type: X4
0.2.1. Variant: N.A.
0.2.2. Version: N.A.
0.2.3. Commercial name (if available): X Speed
0.3. Category, subcategory and sub-subcategory of vehicle: L1e-B
0.4. Company name and address of manufacturer:
KLEVER MOBILITY INC.
No. 4-1, 6, 8, Ln. 76, Sec. 3, Zhongyang Rd., Tucheng Dist., New Taipei City 236, Taiwan, R.O.C.
0.4.2. Name and address of manufacturer's authorised representative (if any):
KLEVER MOBILITY EUROPE GmbH
Dieselstr. 8, 50859 Koln, Germany
0.5.1. Location of the manufacturer's statutory plate(s): C, x350, y0, z890
0.5.2. Method of attachment of the manufacturer's statutory plate(s):
Sticker on the bottom of top tube near head tube
0.6. Location of the vehicle identification number: R, x630, y20, z360
1. Vehicle identification number: RHKX12L1511760084

conforms in all respects to the type described in EU type-approval (e13*168/2013*00282*00)
issued on 07.09.2017 and can be permanently registered in Member States having right/left-hand traffic and using metric/~~imperial~~ units for the speedometer.

Place: New Taipei City
Signature:

It is possible to have a new, high quality photo certificate ????

Date: 2018/4/19

VEHICLE CATEGORY L

General construction characteristics

1.3. Number of axles : 2 and wheels : 2

1.3.2. Powered axles : R

Main dimensions

2.2.1. Length : 1850 mm or 1870 mm

2.2.2. Width : 640 mm

2.2.3. Height : 1070 mm

2.2.4. Wheelbase : 1120 mm

Masses

2.1.1. Mass in running order : 25 kg (propulsion battery excluded)

2.1.2. Actual mass : 103 kg

2.1.3. Technically permissible maximum laden mass : 158 kg

2.1.3.1. Technically permissible maximum mass on front axle : 49 kg

2.1.3.2. Technically permissible maximum mass on rear axle : 109 kg

Powertrain

3.1.2.1. Manufacturer : TDCM CORPORATION LIMITED

3.1.2.2. Electric motor code (as marked on the engine or other means of identification) : K30B016P

3.3.3.4. ~~15~~/30 minutes power : 0.6 kW

3.3.1. Electric vehicle configuration: ~~pure electric/hybrid electric~~/manpower-electric

3.9.2. Maximum assistance factor : 2.8

Maximum speed

1.8. Maximum speed of vehicle : 45 km/h

3.9.3. Maximum vehicle speed for which the electric motor gives assistance : 45 km/h

Drive-train and control

3.5.3.9. Transmission (type) : O

3.5.4. Gear ratios : N.A.

3.5.4.1. Final drive ratio : N.A.

Installation of tyres

6.18.1.1. Tyre size designation : Axle 1 and 2 : 62-584 (27.5×2.40-650B), 300 kPa, 650 mm×28.4 mm

Bodywork

6.16.1. Number of seating positions : 1

Environmental performance

4.0.1. Environmental step : ~~Euro 3/4/5~~

4.0.6. Sound level measured according to : N.A.

4.0.6.1. Stationary : N.A.

4.0.6.2. Drive-by : N.A.

4.0.6.3. Limit value for L_{urban} : N.A.

3.2.15. Exhaust emissions measured according to : N.A.

3.2.15.1. Type I test: tailpipe emissions after cold start, including the deterioration factor, if applicable : N.A.

3.2.15.2. Type II test: tailpipe emissions at (increased) idle and free acceleration : N.A.

3.2.15.3. Smoke corrected absorption coefficient : N.A.

Energy efficiency

4.0.4. Energy consumption : 17 Wh/km

Additional information

9.1. Remarks : N.A.

9.2. Exemptions : N.A.

21. Imprint:

Editor, photography, text, graphic design and text:

Klever Mobility Europe GmbH

Dieselstr. 6

D-50859 Köln

Tel: +49 2234 93 342 0

Mail: info@klever-mobility.com

Web: www.klever-mobility.com

Technical modifications regarding the information and illustrations in this manual are reserved.

A liability of publishers and other third parties for contributions from this manual and the fact devoted damages of any kind are excluded.

May 2019 edition.

Klever Mobility Europe GmbH

Dieselstr. 8
D-50859 Köln
www.klever-mobility.com

Tel.: +49 2234 93342-0
Fax: +49 2234 93342-24

info@klever-mobility.com

Klever Mobility Europe GmbH

Dieselstr. 8
D-50859 Köln
Germany
tel. 0049 2234 93342-0
info@klever-mobility.com
www.klever-mobility.com