



Electric bikes
User manual

Welcome to the electric era!

Thank you for having chosen a more sustainable mobility which makes air more breathable with lower consumption and great savings, as well as guaranteed autonomy; a way to do good to yourself and the planet.

Congratulations for having decided to embrace a new lifestyle and innovative thinking: using cutting-edge technology such as electricity can only have positive effects.

With the purchase of Askoll bicycles, you can finally enjoy a vehicle that concentrates the best of Askoll's functionality, design and technology. Askoll a company that has forty years experience in the design and manufacture of electric motors.

This manual has been prepared to allow you to fully appreciate its quality. It contains information, warnings and advice on the proper use and maintenance of your new vehicle.

It is important to read it entirely before driving your vehicle for the first time. You will find out details and features that will reassure you of the choice made.

This publication is to be considered an integral part of the vehicle. If the vehicle is sold, the manual must be delivered to the new owner.

EN

The constant evolution in the design, aimed to guarantee the safety and quality standards of Askoll vehicles, may result in the fact that some information contained in this Use and Maintenance Handbook can be different from the vehicle in your possession. We are therefore confident that you will understand that the data, figures and descriptions herein may not be grounds for any claims.

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


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SYMBOLS









This manual contains particularly important information that should be read with care.

Each signal consists of a different symbol to make clear the content of the text that follows it, and to facilitate the placement of the subjects in the different areas.

 CAUTION	This symbol indicates situations of particular danger, which could result in death or serious injury if not avoided.
 WARNING	This symbol indicates a security generic warning. It is used to put warn about potential danger of personal injury or damage to things.
	Failure to fully comply with these requirements may cause serious damage to the vehicle and in some cases void the warranty.
	Right behaviour is indicated to prevent damaging nature by using the vehicle.

GENERAL INFORMATIONS

SAFETY IMPORTANT INFORMATION

	It is very important for you to know the electric bicycle. Read and understand this manual carefully before first use.
	This operating manual is part of the electrical bicycle, keep it for future reference.
	The electrical bicycle is not intended to be used by persons with reduced physical, sensory or mental capacities, or lack of experience or knowledge, unless a person responsible for their safety has supervised or instructed them concerning the use of the electrical bicycle, check to make sure children do not play with the electric bicycle.
  	Failure to fully comply with these requirements may cause serious damage to people, the vehicle, the environment and in some cases void the warranty.
	The pedal-assist electric bicycle is designed and built exclusively for riding on short and medium distances on urban or extra urban areas, exclusively where required by law.
	It is not allowed to carry passengers, with the exception of children on their special safety seats.

INFORMATION ON PEDAL-ASSIST SYSTEM

The Askoll bicycles are equipped with a Brushless electric motor, which is activated to provide assisted pedalling and therefore to reduce user effort. The engine comes into operation immediately after you start riding and interrupts its action as soon as you stop acting on the pedals. The maximum speed reached with the help of assisted pedalling is 25 Km/h. Four levels of pedal assist are available, but none with complete engine charge, i.e. pedalling must always be done to make the engine work.

The eB_{1M} and eB_{1L} bicycles are equipped with an electric motor and an automatic 2-speed gear shift on the rear wheel hub. The second gear is automatically inserted after exceeding a speed of 18 Km/h, and switches off as soon as there is a drop in speed, even when travelling at more than 18 km/h.

The Plus versions of the eB₁ bicycles are provided with a 5-speed gear shift selectable by the control on the right side of the handlebar.

The eB_{FOLDING} and eB_{OLT} bicycles have only one gear ratio and can reach a speed of 25 Km/h with the aid of assisted pedalling.

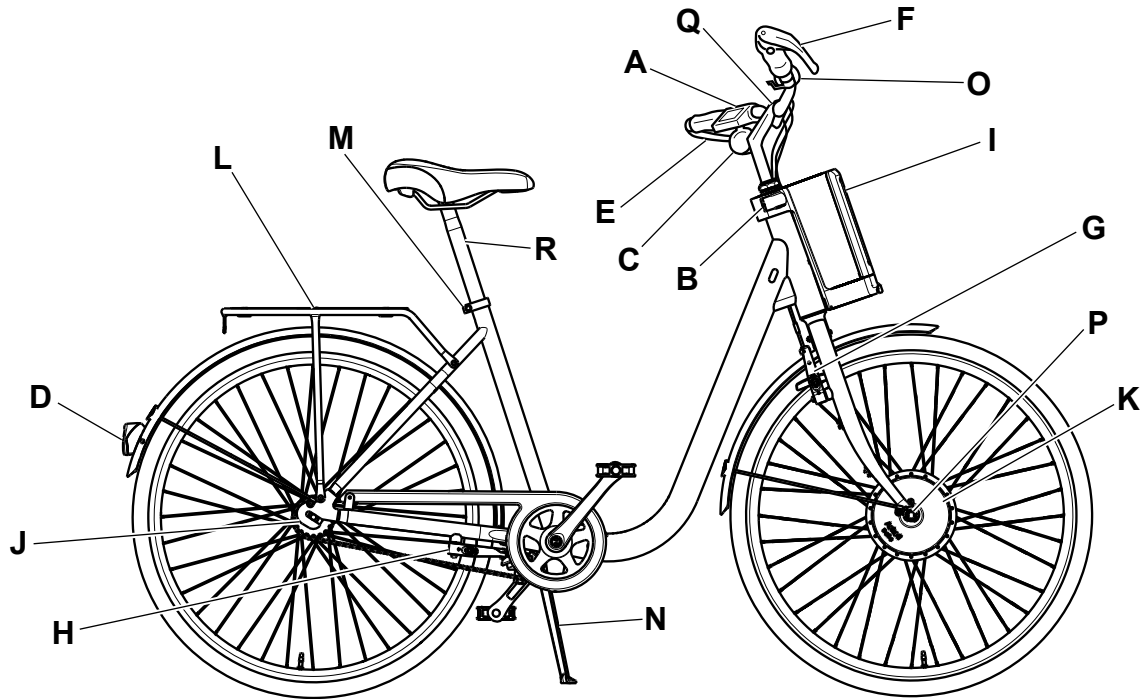
The eB_{4-U} and eB₄ bicycles are provided with a 6-speed gear shift selectable by the control on the right side of the handlebar.

The eB_{5-U} and eB₅ bicycles are provided with a 7-speed gear shift selectable by the control on the right side of the handlebar.

Autonomy with pedal-assist bicycle depends closely on the operating conditions, which can be: slope and / or type of surface, temperature, average speed, engine assistance level, tire pressure, weight carried, user weight and battery age.

CONTROLS AND INSTRUMENTS

BICYCLE COMPONENTS OF BIKE eB_{1M} / eB_{1L} AND PLUS VERSIONS



- A. Control Panel
- B. Battery lock
- C. Headlight
- D. Tail light
- E. Front brake lever
- F. Rear brake lever
- G. Front brake

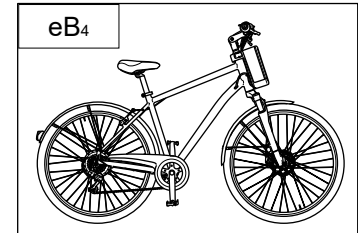
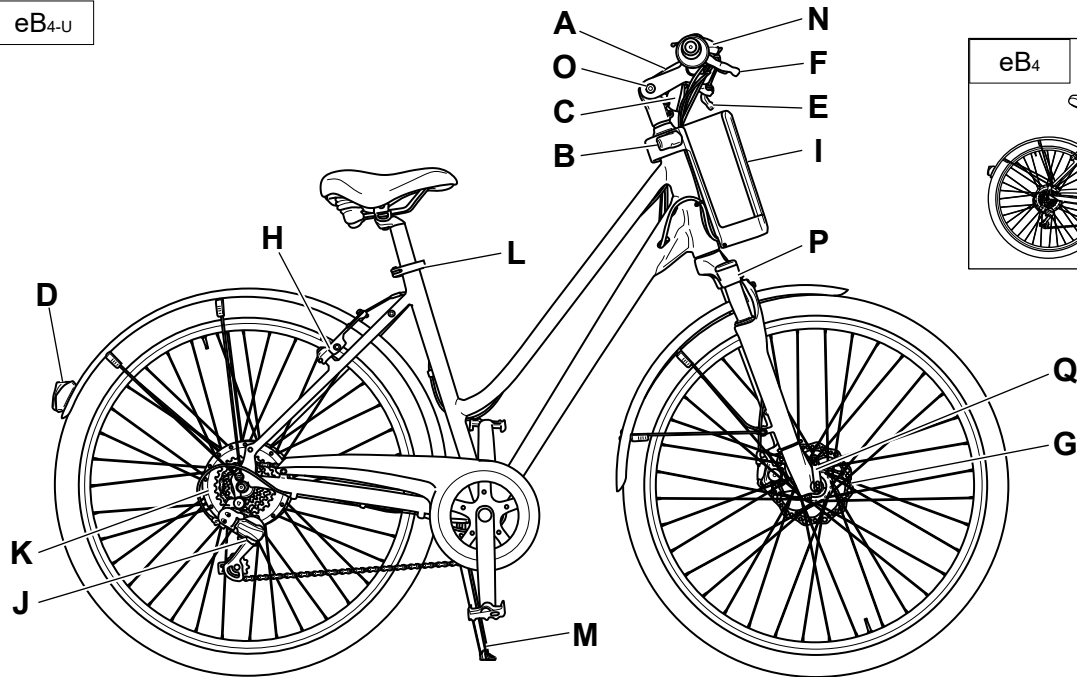
- H. Rear brake
- I. Battery
- J. Automatic gearshift
(5 speeds for Plus version)
- K. Electric engine
- L. Rack (optional)
- M. Seat lock and adjustment

- N. Stand
- O. Bell
- P. Motor anti rotation washers
- Q. Adjustable handlebar connection
(Plus version)
- R. Amortised seatpost sleeve
(Plus version)

CONTROLS AND INSTRUMENTS

BICYCLE COMPONENTS OF BIKE eB4-U / eB4

eB4-U



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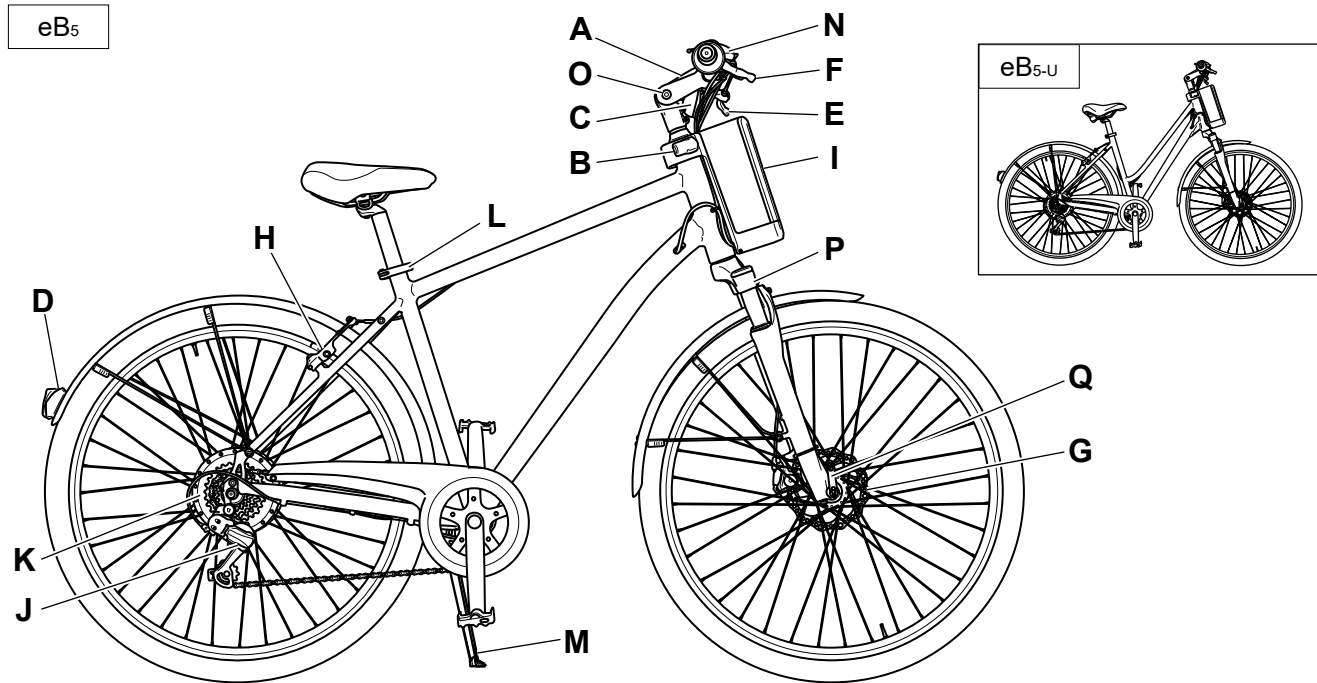
- A. Control panel
- B. Battery fastening lock
- C. Front headlight
- D. Taillight
- E. Front brake lever
- F. Rear brake lever

- G. Front brake disk
- H. Rear brake
- I. Battery
- J. 6-speed manual gear shift
- K. Electric motor
- L. Saddle adjustment and locking

- M. Kickstand
- N. Bell
- O. Adjustable handlebar connection
- P. Suspension fork
- Q. Front wheel release lever

CONTROLS AND INSTRUMENTS

BICYCLE COMPONENTS OF BIKE eB5 / eB5-U



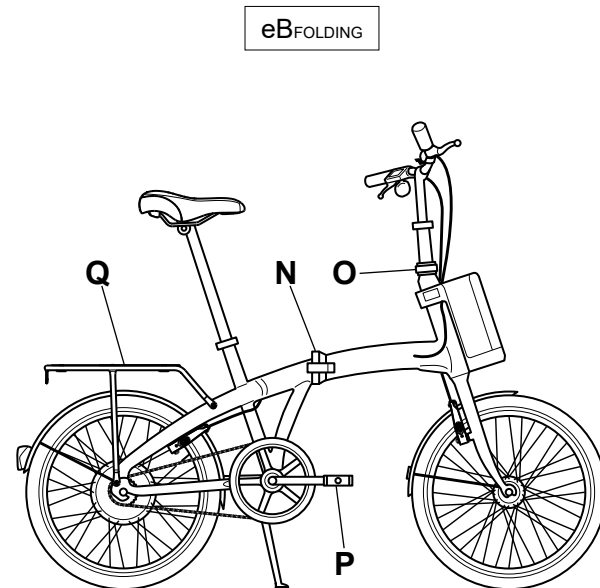
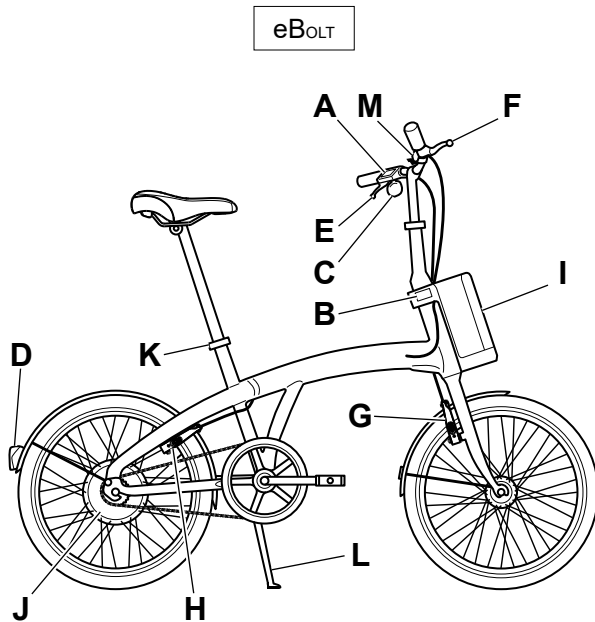
- A. Control panel
- B. Battery fastening lock
- C. Front headlight
- D. Taillight
- E. Front brake lever
- F. Rear brake lever

- G. Front brake disk
- H. Rear brake
- I. Battery
- J. 7-speed manual gear shift
- K. Electric motor
- L. Saddle adjustment and locking

- M. Kickstand
- N. Bell
- O. Adjustable handlebar connection
- P. Suspension fork
- Q. Front wheel release lever

CONTROLS AND INSTRUMENTS

BICYCLE COMPONENTS OF BIKE eBOLT / eBFOLDING



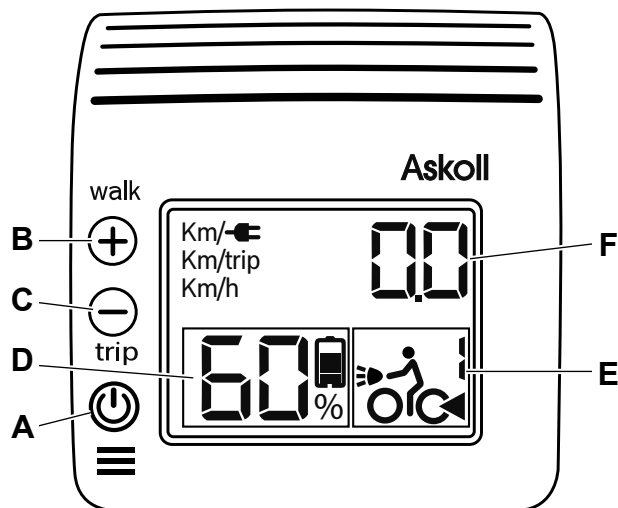
- A. Control Panel
- B. Battery lock
- C. Headlight
- D. Tail light
- E. Front brake lever
- F. Rear brake lever
- G. Front brake
- H. Rear brake
- I. Battery
- J. Electric engine
- K. Seat lock and adjustment
- L. Stand

- M. Bell
- N. Frame hinge
- O. Foldable handlebar hinge
- P. Retractable pedals
- Q. Rear luggage rack

EN

CONTROLS AND INSTRUMENTS

CONTROL PANEL



- A. On-Off button ☰
- B. + button ⊕
- C. - button ⊖
- D. Remaining battery charge indicator
- E. Assistance level indicator
- F. Displayed parameter indicator

ON / OFF BUTTON

Turns on the control panel, once on press to scroll the different functions. Keep pressed to turn panel off.

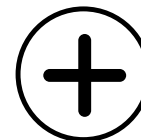
For function description of buttons, see "USE" chapter.



+ BUTTON

Increases engine assistance level. Activates walk assistant mode.

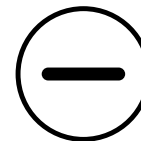
For walk assistant mode description, see "USE" chapter.



- BUTTON

Decreases engine assistance level. Used to zero partial mileage.

For function description of buttons, see "USE" chapter.



REMAINING BATTERY CHARGE INDICATOR

It indicates the percentage of remaining battery power before recharge is needed.

For charging process description, see “**USE**” chapter.

ASSISTANCE LEVEL INDICATOR

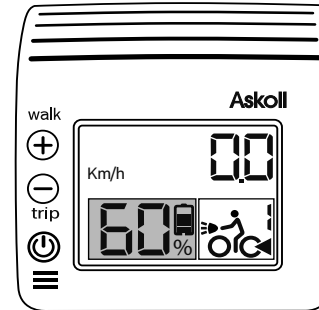
It indicates the level of motor assistance selectable between 0 (no assistance) and 4 (highest level of assistance).

For the description of pedal-assist system, see “**USE**” chapter.

DISPLAYED PARAMETER INDICATOR

Indicates the function displayed: cruising speed, odometer, total and partial mileage and mileage to go with remaining battery charge.

For parameters description, see “**USE**” chapter.



CONTROLS AND INSTRUMENTS

LH FRONT BRAKE LEVER

Lever that operates the front v-brake; in the eB4-U, eB4, eB5-U and eB5 models the lever operates the front disc brake.

For brake adjustment, see chapter

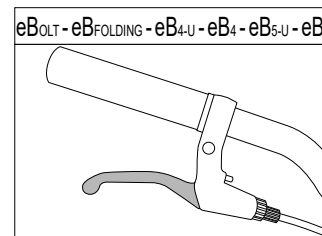
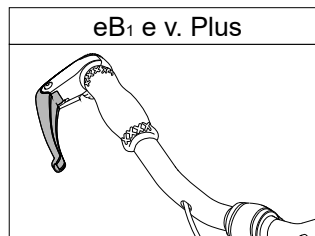
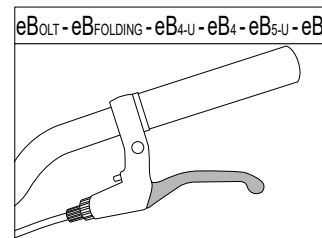
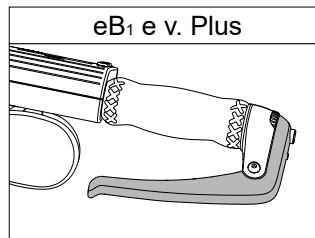
“ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE”.

RH REAR BRAKE LEVER

Lever operating rear v-brake.

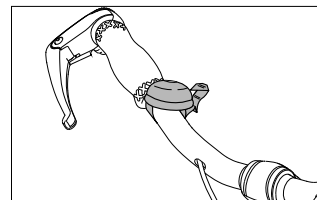
For brake adjustment, see chapter

“ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE”.



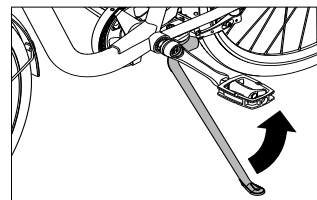
BELL

Mechanical bell.



KICKSTAND

Use stand on flat, compact surfaces.











CHECKS BEFORE DEPARTURE

Before using the electrical bike, it is always good practice to carry out certain controls:

- check battery charge,
- make sure battery pack is well installed on support bracket,
- check lights correct operation,
- check brake levers correct operation and become familiar with the braking action,
- make sure handlebar moves easily to both sides,
- check tire pressure (see information on their shoulder),
- make sure that handlebar fold and stem are tight and at the correct height with relation to riders' physical features,
- check that the seat is at a suitable height from the ground according to your physical characteristics.

To carry out these controls correctly refer to the instructions in this manual.


SAFE DRIVING


 WARNING	Before the first use, we suggest trying the bike in areas closed to traffic until familiarising with it.
 WARNING	Always ride within the limits of your abilities.
 CAUTION	Riding under the influence of alcohol, drugs or certain medicines is dangerous and it is prohibited by law.
 WARNING	Before you start riding, it is recommended to always wear a helmet and fasten it correctly.
 WARNING	Before riding, check that the stand is up.
 WARNING	Never ride on stairs, curbs or dangerous surfaces.
 WARNING	Use both brakes to allocate braking action on both wheels.
 WARNING	Do not brake hard on wet, slippery or dirt roads.

USE

USE WITH ENGINE ASSISTANCE

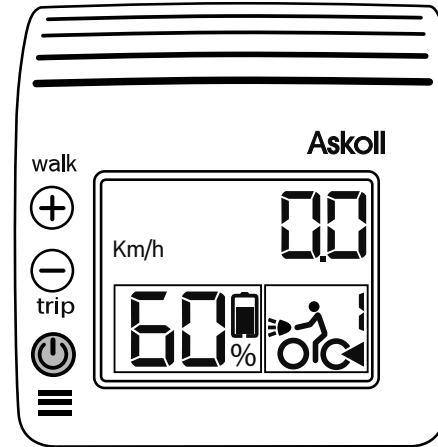
Panel power up

Pressing the button  for about two seconds, it is possible to turn on the control panel, once on press the button briefly to scroll through the menu.

To turn off the panel hold the button  pressed for about two seconds.

The control panel must be switched on by the user, but it turns off automatically when the bicycle is not used (about 5 minutes).

When on, headlights turn on automatically and cannot be turned off manually by the user unless the control panel is also turned off.



MOTOR SERVICE Mode

With the display on, pressing the buttons ⊕ and ⊖ you can select the desired motor service level ranging from 1 (minimum service level) to 4 (highest service level).

When the minimum battery percentage value is reached, the system switches automatically to ECO mode from service 4 or 3 to 2. The ECO mode allows travelling a greater distance and indicates the need to recharge the battery.

At level 0, the motor service will be disabled and you can travel only with the muscular power. The selected level will be displayed in the bottom right on the panel.

WALK ASSISTANT Mode

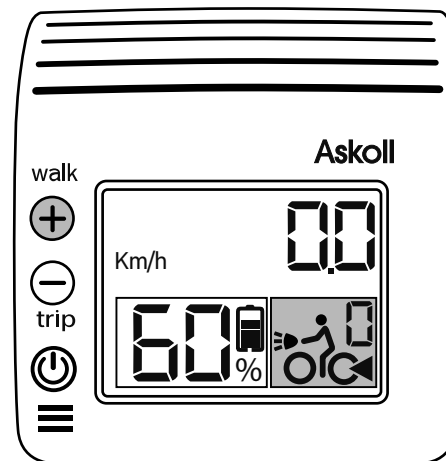
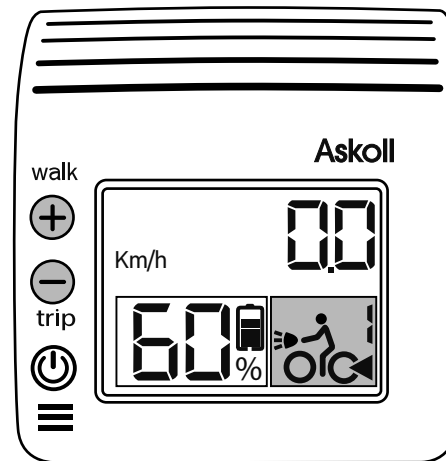
This mode assists when the user manually pushes the bike.

For activation, stand beside the bike and do not sit on the saddle.

The level of engine assistance must be 0.

Pressing and holding the button ⊕, walk assistant mode will help through the engine during a walk with the bicycle.

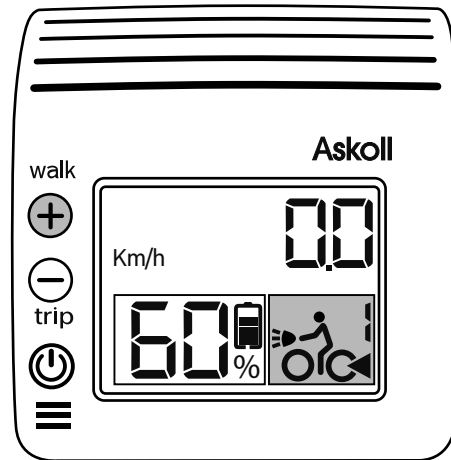
To stop using this mode simply release the button ⊕.




USE

SOFT START Mode

This mode provides the necessary help for starts in difficult conditions, such as small climbs. To activate it, the user must be sitting on the seat and the level of engine assistance must be on any level other than 0. Pressing the button ⊕ and moving a pedal slightly, soft start function will facilitate start. As soon as it is no longer necessary, release the button ⊕ and proceed with the normal use of the bicycle.

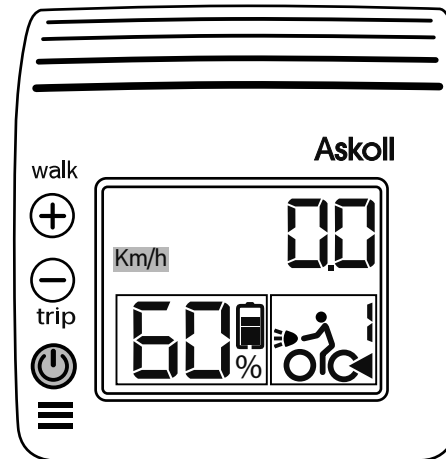


CONTROL PANEL VISUALIZATIONS

Through the display you can see different information, to select press the button  until the desired screen:

Cruising speed screen

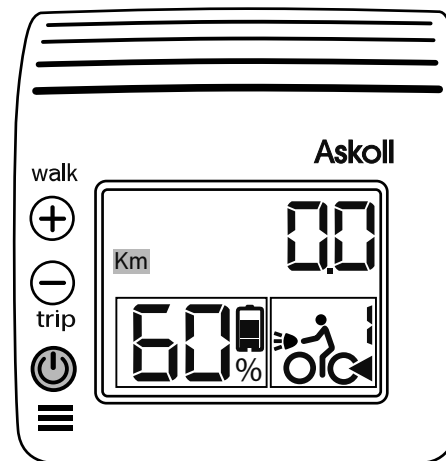
This screen displays the speed in km / h at which you are travelling.



Total distance screen

This screen displays the total distance covered in kilometres.

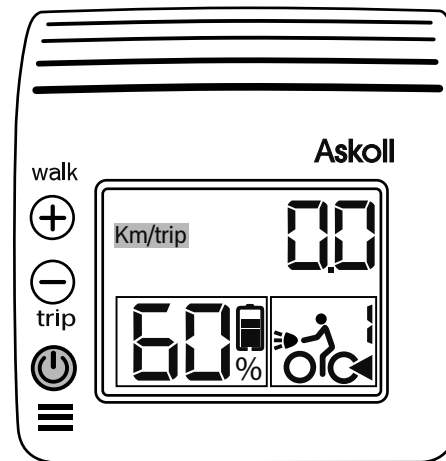
This value cannot be reset.



USE

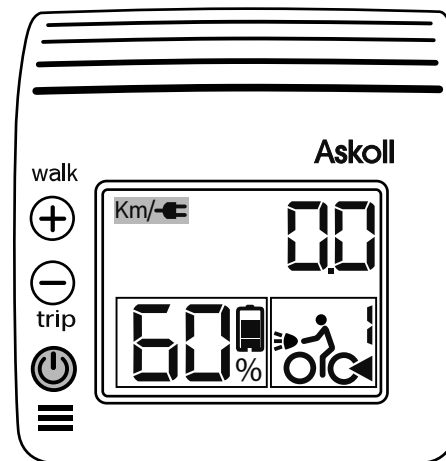
Partial distance screen

This screen displays the partial distance covered in kilometres. It is possible to reset this value by holding down the button ⊖ while viewing this screen.



Remaining distance screen

This screen displays the distance remaining in kilometres. This value is related to the level of power remaining in the battery and changes according to different conditions of use.



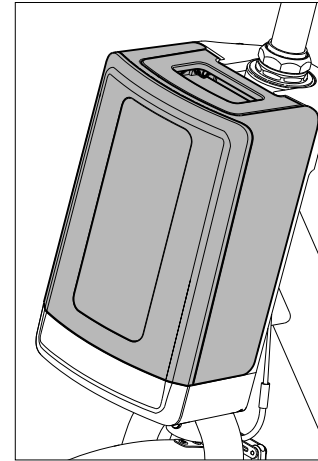
BATTERY

The vehicle is equipped with a lithium-ion battery (model TVC101) placed in front of the outer steering tube.

Weight of single battery: 2.6 kg.

Operating temperature: in operation from -20 °C to +45 °C.

All low-temperature batteries can show a reduced autonomy. For this reason it is recommended in the winter period, even for temporary stops to remove the battery from the bicycle and keep it in a dry indoor place, this prevents significant voltage drops caused by cold that can reduce the battery autonomy.



	Fully charge the battery before using the bicycle for the first time.
	Do not fully discharge the battery during use. When the charge indicator is at min. level, deactivate the pedal-assist function and continue cycling without it to avoid excessive or full discharge of the battery, so as to increase its service life.
	The battery autonomy values may take several complete cycles of battery charging/ discharging, thus allowing the system calibration.
	After charging and before removing the batteries, disconnect the power plug of the charger from the socket.
	If the electric bicycle is stored for a long time, recharge the batteries at least every three months and up to 50% of their capacity (MODE - HOLD)
	Respecting the environment, at the end of their life cycle, batteries must be collected and disposed of according to law.

BATTERY AND RECHARGE

Fire hazard

Do not disassemble or brake the battery.

As a result of an accident with serious mechanical damage to the battery, there could be short circuits within the battery itself and it may catch fire.

In case of an accident leave the vehicle outdoors for about an hour at a safe distance from any flammable material. With a finger touch the battery briefly and cautiously. If you sense an unusually high temperature, leave your vehicle where it is. Do not continue using it for any reason. As soon as the battery has cooled, take the vehicle to your dealer.



In the presence of flames or smoke rising from the battery, stop the vehicle immediately. Then turn off the fire with a fire extinguisher, if available. If a fire extinguisher is not available, wait until the fire has extinguished and all parts of the vehicle have cooled down. If there is a risk of fire from spreading to nearby objects, notify the Fire Department.



Do not use this battery for purposes other than those indicated. Use other than intended could result in short circuit within the battery which could catch fire.



Disassembling and/or tampering with the batteries will void the warranty.



Do not try to charge the battery using other devices.



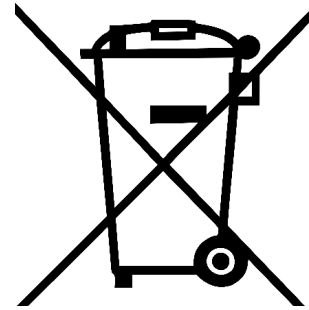
Do not recharge the battery in environments without proper ventilation or with high temperature.

Disposal of exhausted batteries

At the end of its useful life, a battery pack containing lithium batteries must be disposed of according to the Current Regulations and cannot be disposed of as simple waste.

The European Directive for this type of waste establishes that the States adhering to this convention undertake to adopt “appropriate measures” so that exhausted accumulators are collected separately, for the purpose of their possible recovery or disposal.

In any case, for more updated information on this topic, the user must contact the municipal office in charge of this concern.

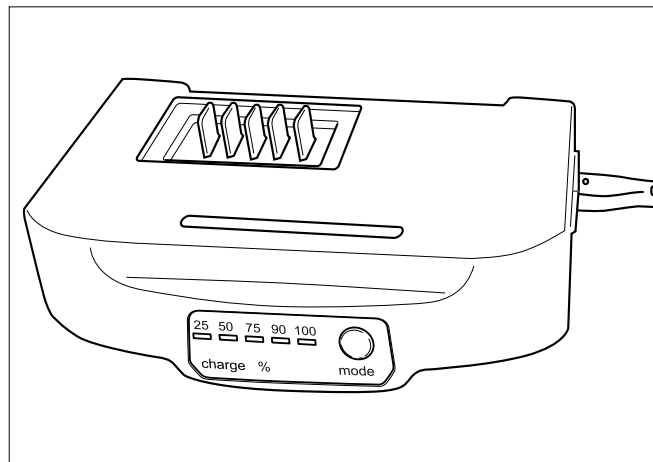


BATTERY AND RECHARGE

BATTERY CHARGER

The battery can be recharged only removing it from the bicycle and installing it on the specific charger supplied (mod. TVC201).

The charger must be connected to the 220V 50Hz mains using the supplied cable.



CAUTION

The charger is not intended to be used by persons with reduced physical, sensory or mental capacities, or lack of experience or knowledge, unless a person responsible for their safety has supervised or instructed them concerning the use of the charger. Children should be supervised to ensure that they do not play with the appliance.

CAUTION

Do not try to charge the battery using other devices.



This charger is to be used exclusively for charging batteries mod. TVC101 in indoor environments. Do not use the battery charger for purposes other than those indicated.

Risk of electric shock.

 CAUTION

- Connect the device to a power supply network protected by a differential switch with a sensitivity not exceeding 30mA.
- The electrical connection of the device must comply with the details on its electrical data label.
- Do not use extension cords. If the length of the power cord is not sufficient, consult an electrician or qualified installer.
- Do not cut or repair the power cord.
- This is a special type of power cord, if damaged it must be replaced by a cable supplied by a qualified dealer.

 WARNING

The battery is an always active component, so it may show light voltage drops even with the control panel off.

 WARNING

Battery management in the first period of use of the bicycle With new battery perform at least 5 charging/discharging cycles, bringing the charge to 100% and then discharging the battery to a value close to 0%.

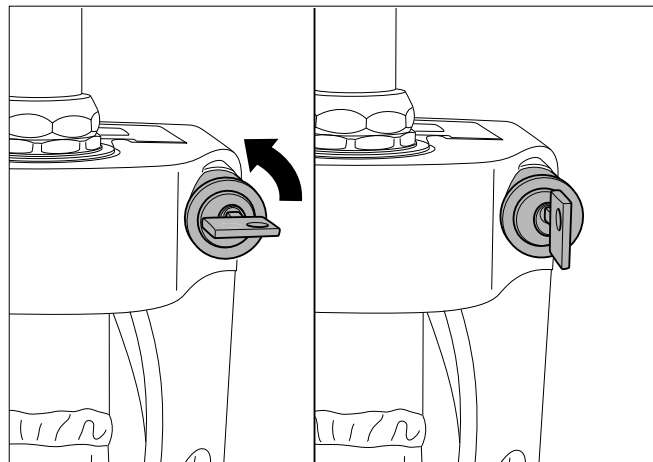
BATTERY AND RECHARGE

CHARGING THE BATTERY

Removing the battery support

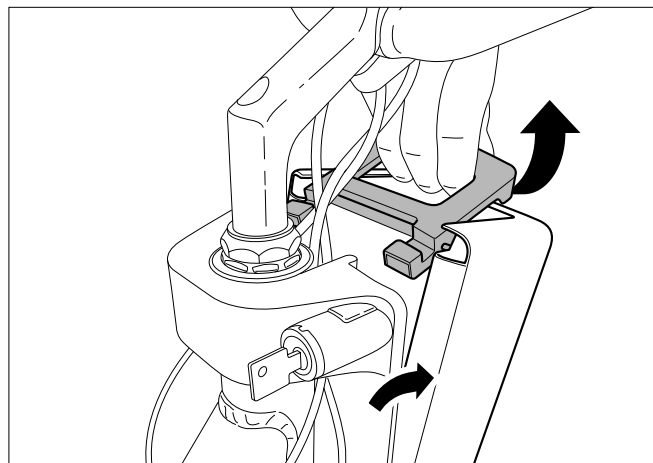
Insert the key into the ignition on the battery holder.

Turn it to the left and bring it to vertical position.



Firmly grasp the handle at the top of the battery and turn it upwards. Doing so will disengage the battery from its support.

Holding it securely, rotate the battery to the outside and simultaneously take it off upwards.



Battery installation on charger

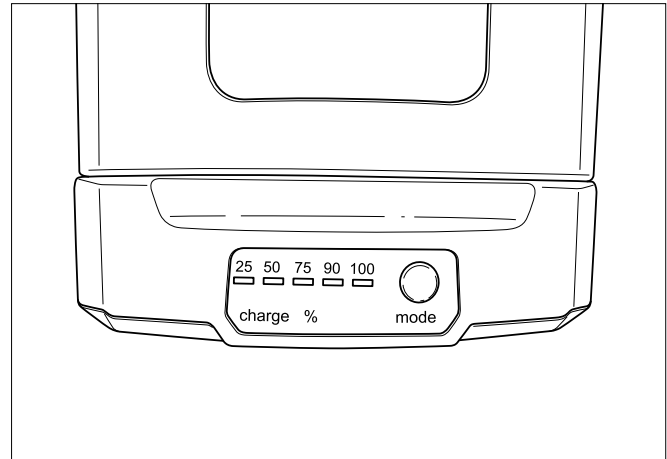
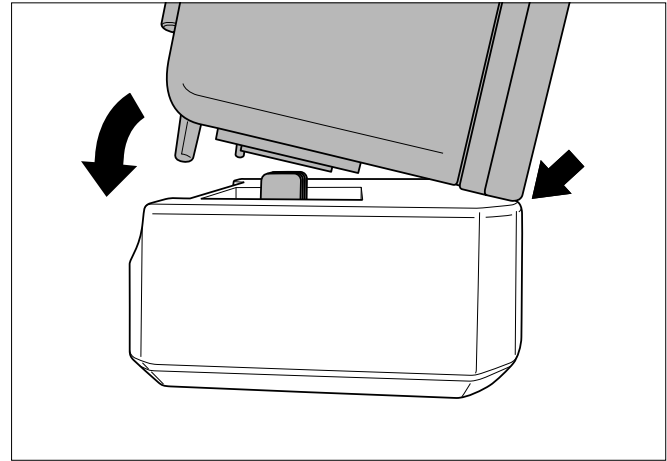
Place the charger firmly on a flat and heat resistant surface.

With battery charger powered install the battery on it, install the battery on the charger inserting first tooth at the bottom of the battery in the corresponding slot on the charger.

After installing the battery, the charger will perform a check on the remaining charge and all the warning lights will light up for a few moments. After the check, only the warning lights indicating the level of remaining battery will be on and the remaining ones will flash (up to the amount of charge of chosen charging mode).

Charging mode preset when feeding the battery charger is always **TOTAL CHARGE**, if the battery charger remains connected to the mains once the battery has been removed, the last charge mode set will be saved and reused at the next charge.

Following a period of inactivity, if the battery is not used or charged it will go to a standby state (minimum consumption): if the battery is first connected to the charger and then to the mains, you will need to disconnect and reconnect the battery to reactivate it and start charging. If the battery in standby is connected to the charger already plugged in, it will reactivate immediately and charging will begin immediately.



BATTERY AND RECHARGE

At this point, you can cycle through the type of charging mode by pressing **MODE**.

There are three different charging modes:

MAINTENANCE (50% charge): This mode is indicated for long periods of battery inactivity. It is recommended to check the battery charge every 2 months and keep the charge at 50%.

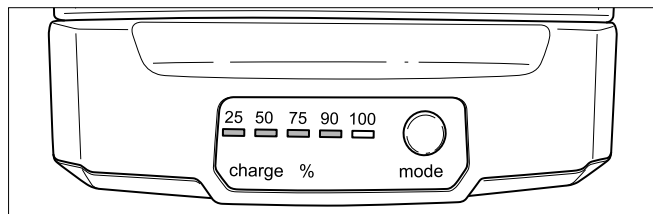
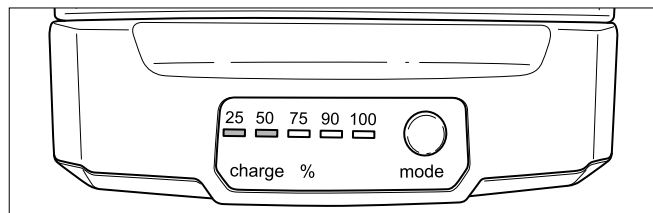
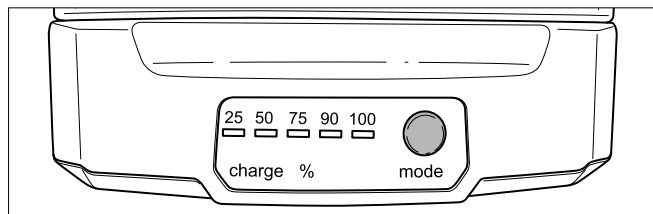
To select this mode, press **MODE** until the flashing lights up to 50%.

The battery will be charged up to 50% of its capacity, sufficient charge for long period storage.

LONG LIFE (90% recharge): this mode is recommended in periods when the scooter is frequently used to obtain the best and prolonged operation of the batteries. For maximum system efficiency, it is recommended to alternate 1 100% charge cycle every 10 90% cycles.

This procedure allows to obtain a high number of charge and discharge cycles of the batteries, maintaining a good performance over time.

To select this mode press **MODE** until 4 leds start flashing (up to 90).



TOTAL CHARGE: This mode allows for greater autonomy since the battery is fully charged.

To select this mode, press **MODE** until the flashing lights up to 100%.

Frequently using this mode, the battery will have a shorter life cycle than **LONG LIFE** charge.

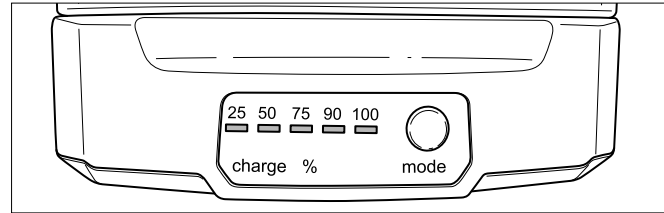
At the end of recharge, all warning lights corresponding to the level chosen will remain on, unplug the power plug of the charger and then remove the charged battery.

Recharge time: 2 to 6 hours (from flat to fully charged). Charging can take up to 7 hours for the eB_{5-U} and eB₅ models with 400 Ah battery.

Battery autonomy

The battery autonomy values vary depending on the service levels uses, it is possible to run from 40 km with service 4 up to 80 km with service 1.

These values can be affected by the weight of the person, by the route type, by the tires pressure and adverse weather conditions.



WARNING

Lithium-ion batteries undergo a progressive performance decay that reduces the initial autonomy values.



WARNING

Always remove the battery from the charger after charging.

BATTERY AND RECHARGE

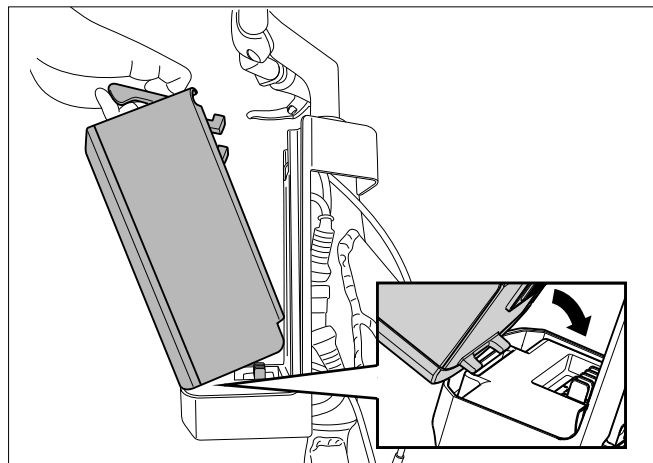
Installation on the holder

Firmly grasp the handle at the top of the battery.

Place the external lower side of the battery on the holder.

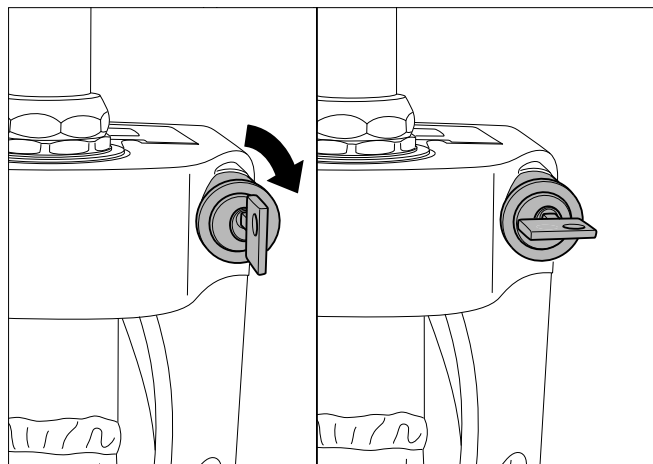
Set the battery permanently on its holder making sure it is in the right position, i.e. contact surfaces between the two elements fit together.

After verifying that the key is inserted into the key cylinder and in vertical position (open), release the handle at rest and constraint the battery and support to each other, when it returns in position you will hear a “click” that indicates the correct connection between the elements that ensure the engagement.



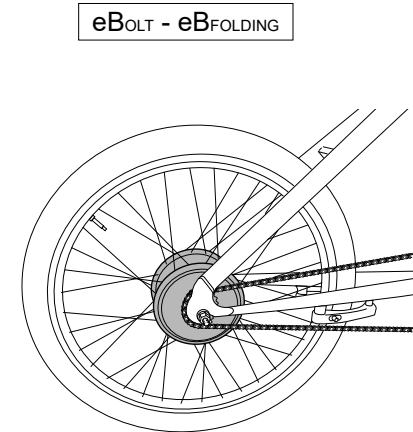
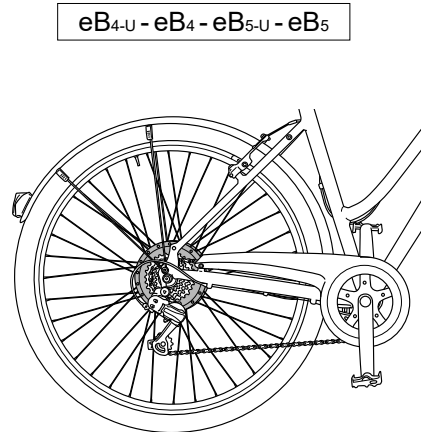
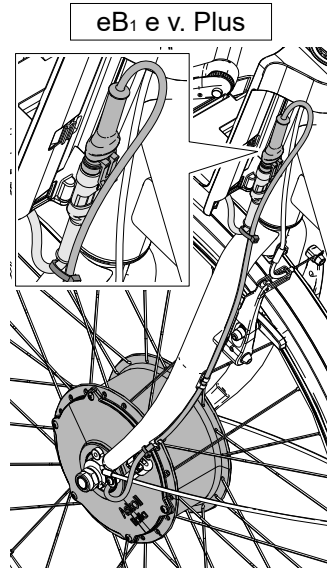
Turn the key to the right and bring it to horizontal position (closed).

Remove the key from the ignition.



ELECTRIC MOTOR

The bicycle drive unit is placed in the front wheel for the eB₁ models and Plus version and, while it is placed in the rear wheel for eB_{4-U}, eB₄, eB_{5-U}, eB₅, eB_{BOLT} and eB_{FOLDING} models. In both cases it is connected to the battery through a cable and a watertight connector attached to the rear of the battery support bracket.



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Do not open the electric motor in any case. The motor is maintenance-free and must be repaired only by qualified Askoll personnel using original spare parts. The unauthorized opening of the motor will invalidate the warranty. Do not make any changes to the system, or apply any other product to increase the power of the system.



In case of motor wheel replacement / maintenance, in the case of front wheel, pay attention to correctly reposition the lock washers in their seats (R = right, L = left).

ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

ASSEMBLY

This bicycle is delivered fully assembled, except for the pedals which are provided in a separate bag. However seat and handlebar may need adjustments to be adapted to your height and to your preference of use.

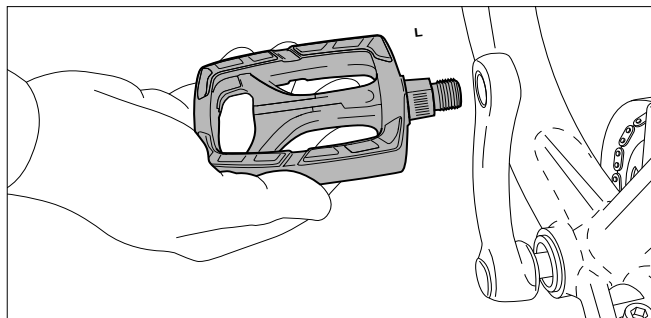
PEDAL ASSEMBLY

The two pedals, left and right, differing with regard to the direction of rotation of the screw pin thread.

Prior to installation check the letter on the head of the pin:

R = Right L = Left.

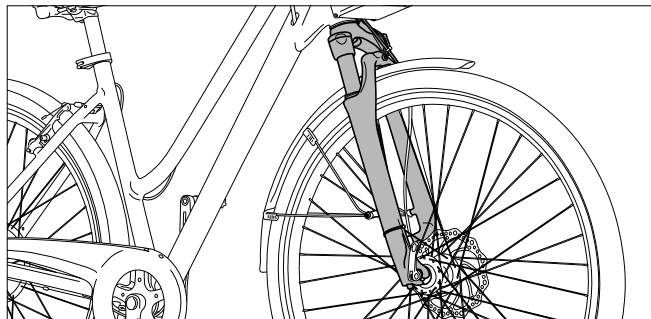
Once sides have been identified, screw the pedals into the corresponding metal rods and tighten them with a wrench.



SUSPENSION FORK

The eB4-U, eB4, eB5-U and eB5 model bicycles are equipped with a suspension fork.

For the fork use and adjustment, follow the instructions in the user manual in the fold format supplied with the specific manual present in the bicycle.



If you are not familiar with the use of mechanical tools and / or with the basic procedures of mechanical maintenance, please contact your Askoll dealer or a qualified mechanic. The following procedures are useful both for the assembly as for the adjustment of the main components for a safe and comfortable use of the bicycle.

CONTROLS, ADJUSTMENTS AND MAINTENANCE

To maintain your electric bicycle working efficiently, you must make periodic controls on mechanical parts subject to wear and carry out maintenance if necessary.

SEAT

Height adjustment

The various bicycle models may have different seatpost tube fastening terminals.

Version 1, loosen the screw on the tube collar

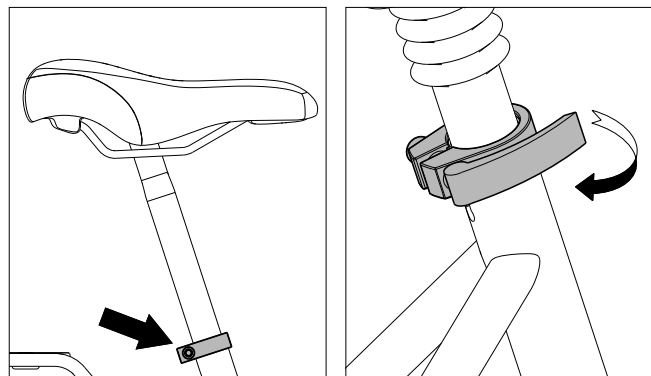
Version 2, release the clamp lever and adjust the height

Adjust the height depending on your height by sliding the tube inside the tube collar.

Align perpendicularly the seat from the handlebar.

Version 1, tighten the screw on the tube collar.

Version 2, close the clamp lever



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Height adjustment must be performed respecting MIN and MAX indications on the seatpost.



Tighten the screw on the collar of the seatpost at a recommended tightening torque of 8 – 10Nm.

ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

HANDLEBAR

Periodically check that all adjustment nuts are tightened and that the handlebar is properly aligned with the front wheel.

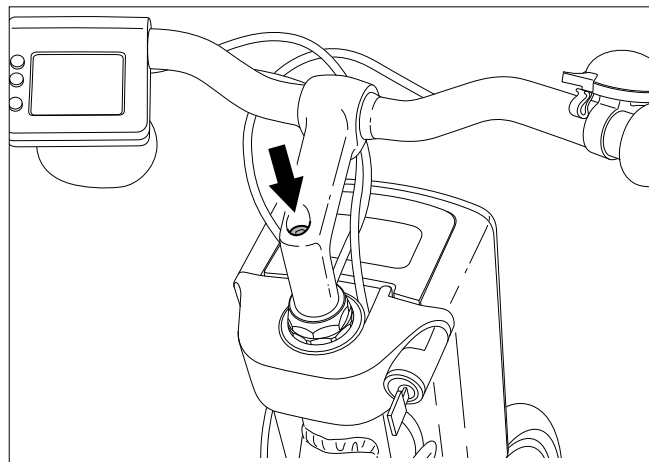
Height adjustment

Loosen the fixing screw of the handlebar stem to the steering seatpost.

Adjust the height of the handlebar depending on your preference by sliding the tube inside the seatpost.

Align the handlebar perpendicularly to the front wheel.

Tighten the screw.



Height adjustment must be performed respecting MIN and MAX indications on the seatpost.



It is recommended that both handlebar height adjustment screw and tightening nut for handlebar tilt adjustment are correctly tightened at a recommended torque of 18 - 20Nm.

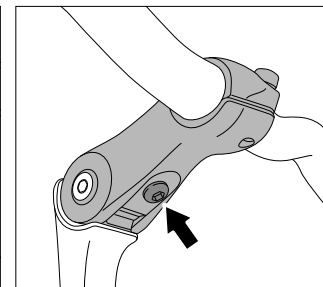
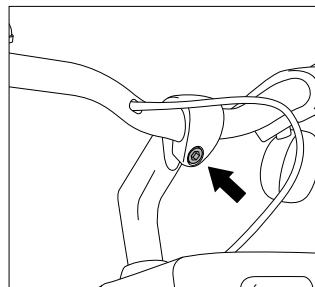
Tilt adjustment

Loosen the tightening nut.

Turn the handlebar forward or backward depending on your preference.

Version 1, tighten the lock nut.

Version 2, loosen the screw under the steering column and adjust its height to suit your preference.



BRAKES

The brake pads and disc brake pads are subject to wear, check their condition frequently and replace them at an authorized workshop before they are completely worn.

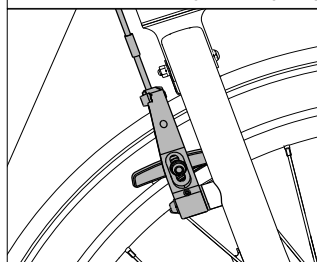
Check levers free travel, in case you need to adjust it act on the adjusting ring nuts at the ends of the handlebar:

Bicycle models can have different brake levers, for all brake lever models:

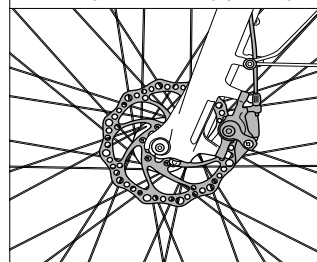
turn them clockwise to decrease travel and braking will be more efficient,

turn them anti-clockwise to increase travel and braking will be less efficient.

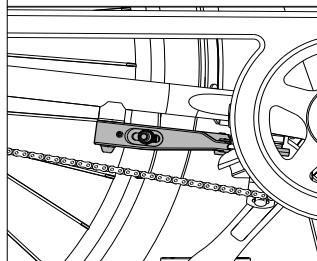
eB₁ e v. Plus - eB_{BOLT} - eB_{FOLDING}



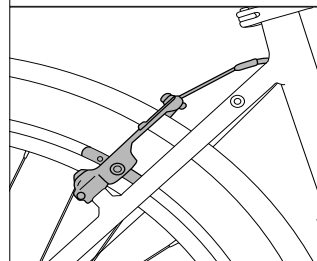
eB_{4-U} - eB₄ - eB_{5-U} - eB₅



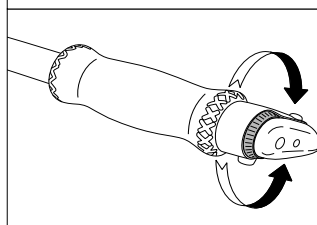
eB₁ e v. Plus - eB_{BOLT} - eB_{FOLDING}



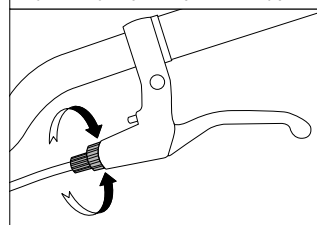
eB_{4-U} - eB₄ - eB_{5-U} - eB₅



eB₁ e v. Plus



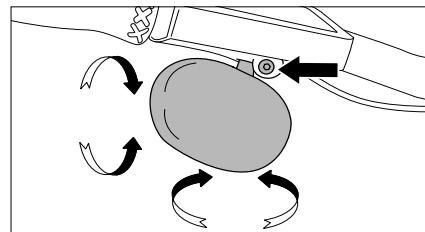
eB_{BOLT} - eB_{FOLDING} - eB_{4-U} - eB₄ - eB_{5-U} - eB₅



ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

HEADLIGHT

The headlight is connected to the control panel through a ball joint. Loosen the screw under the control panel, orient it to the new position and tighten the screw.



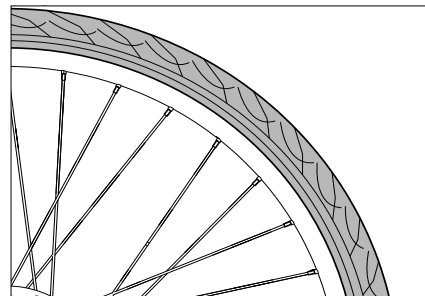
WHEELS AND TIRES

Periodically check tire wear and inflation pressure:

5 - 6 Bar front and rear (or value on tire shoulder) for eB₁ and Plus versions.

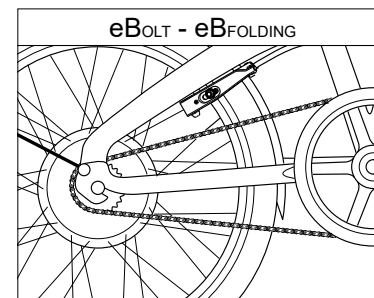
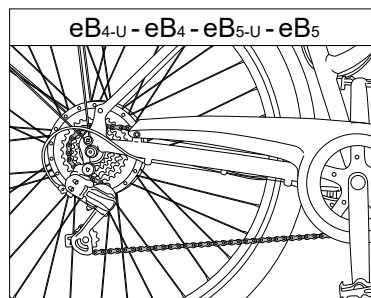
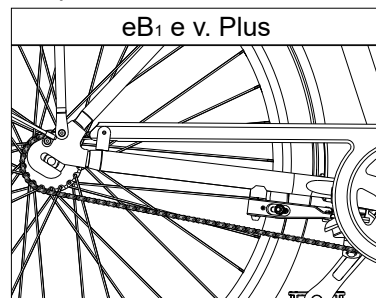
2,6 - 6 Bar front and rear (or value on tire shoulder) for eB_{4-U} - eB₄ - eB_{5-U} - eB₅ versions.

2 - 4 Bar front and rear (or value on tire shoulder) for eB_{FOLDING} - eB_{BOLT} versions.



CHAIN AND TOOTHED WHEELS

Keep the transmission clean and well lubricated.



TRANSMISSION AND AUTOMATIC GEAR SHIFT

The bicycles Askoll eB₁ and Plus versions are fitted with maintenance-free automatic gear shift at the rear hub. Plus models use a manually operated 5-speed automatic transmission hub. eB_{FOLDING} and eB_{OLT} bicycle models are not provided with gear shift and have a 1-speed transmission.

Models eB_{1M} eB_{1L}

They are fitted with 2 speed automatic gear shift model SRAM.

Models eB_{1M} eB_{1L} Plus versions

They are fitted with manually-operated 5 speed automatic gear shift.

Models eB_{4-U} eB₄

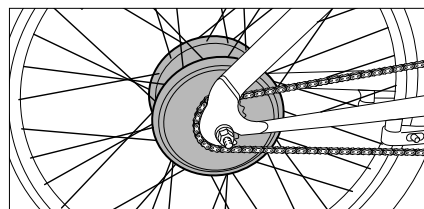
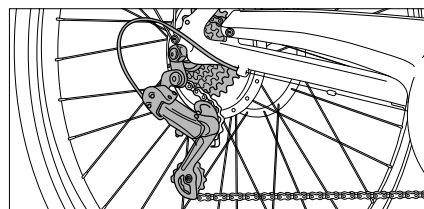
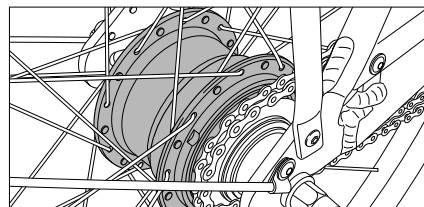
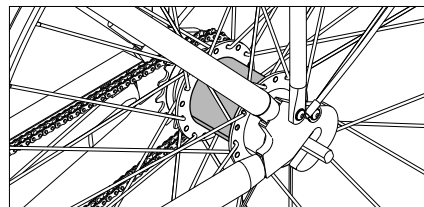
They use a manual 6-speed rear derailleur.

Models eB_{5-U} eB₅

They use a manual 7-speed rear derailleur.

Models eB_{OLT} eB_{FOLDING}

are not fitted with rear gear-shift.



ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

TPERIODIC MAINTENANCE TABLE

C: check; P: clean; R: adjust; L: lubricate; S: replace

Maintenance items	New	3 Months	6 Months	1 Year 1000 Km.	2 Years
Frame			P	P	P
Fork / Suspension fork			P/C	P/C	P/C
Tires	C			C	C
Brakes / brake pads and levers	C	C	C	C/S	C/S
Cables and sheaths				C	C
Chain	C	C/P/R	C/P/L	C/P/L	C/P/R
Gear shift adjustment	C		C/L	C/L	C/L
Handlebar	C				C
Pedals		C/L		C/L	
Seatpost	C/R				
Lights and reflectors	C	C	C	C	C
Nuts and bolts	C			C	C

ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

CLEANING THE VEHICLE

To avoid oxidation, wash the bike every time it is used in extreme weather conditions or roads sprinkled with salt or de-icing products, conditions of air pollution such as cities, industrial zones, areas of high salinity or moisture in the atmosphere such as maritime areas.

Keep the frame clean from long-accumulated dirt, residues of industrial dust, dead insects, bird droppings, etc.

Use a sponge soaked in water and shampoo to remove dirt deposited on the frame and on the other parts of the bicycle, to rinse always use a sponge and clean water until all shampoo has been eliminated and then wipe the bicycle with a suede.



Do not use high pressure water jets to washing, so as to prevent damaging delicate components of the vehicle.



During washing never direct the water jet directly on delicate components such as electrical wiring and their connections.



Never use rags soaked in gasoline, alcohol or potentially corrosive liquids to wash painted surfaces, plastic or the seat to avoid loss of gloss and mechanical properties of the materials, or even damaging them.



The bicycle must be washed in areas equipped for collecting and purifying the liquid used.

EN

ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

VEHICLE INACTIVITY

In preparation for a long period of inactivity it is advisable to:

- make a general clean up of the bicycle,
- store in a covered place,
- cover the bike with a canvas.

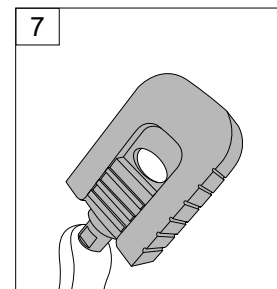
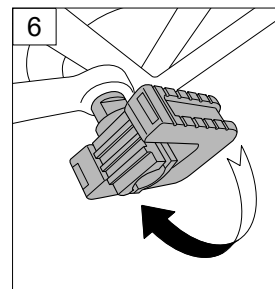
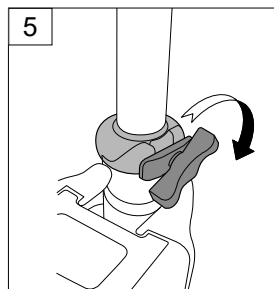
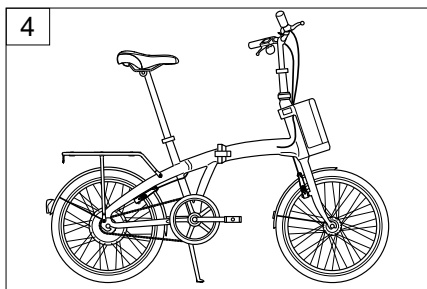
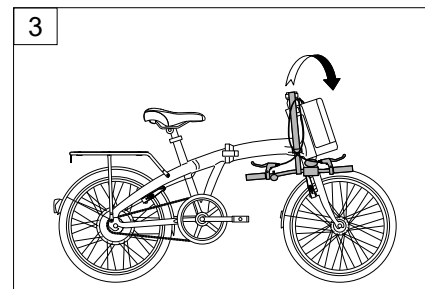
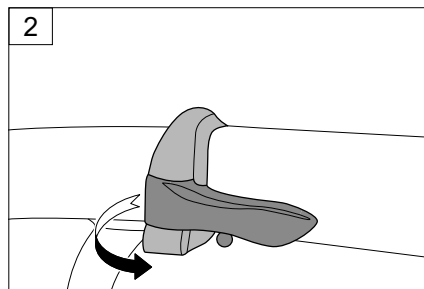
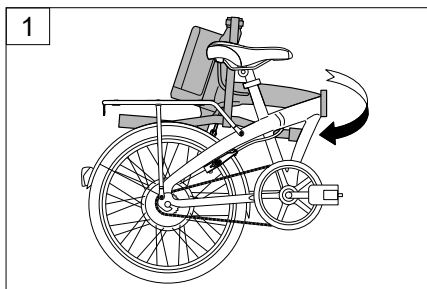
STORAGE

If the assisted pedalling bicycle is stored for a long time it does not need any special arrangements, however, it is advisable to store it in a dry place. For battery management, see the instructions in the specific paragraph.

Before re-using the bicycle, it is advisable to check/lubricate the mechanical parts.

ASSEMBLY, CONTROLS, ADJUSTMENTS AND MAINTENANCE

PUTTING ON THE ROAD eBFOLDING



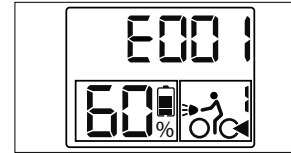
To open and close the eBFOLDING bicycle, see the instruction sheet attached to the bicycle.

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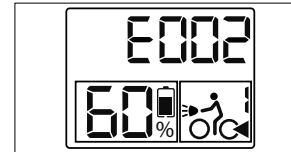
ERROR CODES AND ALARMS

ERROR CODES

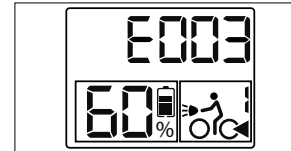
Battery malfunction: the system detects a failure on the battery pack. It is advisable to take the battery to an authorised workshop.



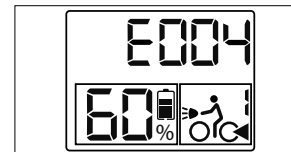
Inverter failure: the system detects a failure on the inverter board. It is advisable to take the bike to an authorised workshop.



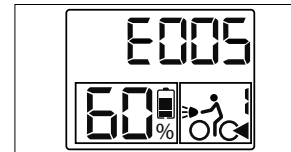
Display failure: the system detects a failure on the display board. It is advisable to take the bike to an authorised workshop.



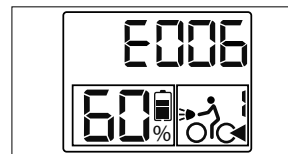
Power circuit failure: the system detects an abnormal absorption by the engine. For safety reasons, the system does not supply power. It is advisable to take the vehicle to an authorized workshop.



Communication system failure: detection of communication problems between intelligent units. It is advisable to take the vehicle to an authorized workshop

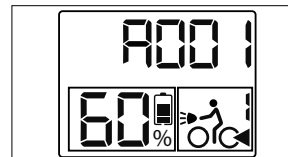


Speed reading sensor failure: the system detects that displayed vehicle speed is not reliable. Verify correct sensor housing on the fork. If necessary, take the vehicle to an authorised workshop. Operation security of the vehicle is not compromised.

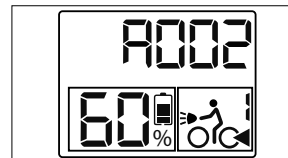


ALARM CODES

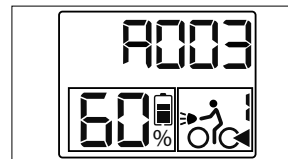
Battery overtemperature: the system detects excessive temperature on the battery hence reduces power supplied to the engine. Remove the vehicle from environments with high temperature and wait for the battery to cool down.



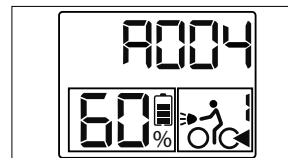
Inverter overtemperature: the system detects excessive temperature on the board. The system does not supply power until board temperature comes down. Remove the vehicle from sources of heat.



Engine overtemperature: the system detects excessive temperature on the engine. It can function at reduced power to allow cooling.



No power supply: the system detects an absence of power absorption by the engine which does not allow traction assistance. Verify that the engine is connected to the system with the appropriate connector.



TECHNICAL DATA

DIMENSIONS AND TECHNICAL DATA

NAME AND MODEL	eB _{1M}	eB _{1L}	eB _{2L}
LENGTH	1770 mm	1840 mm	1840 mm
WIDTH	655 mm	670 mm	670 mm
WHEELBASE HEIGHT	1095 mm	1134 mm	1134 mm
HEIGHT	1130 mm	1150 mm	1150 mm
FRAME TYPE	DUTCH		DUTCH MEN'S
FORK TYPE	RIGID		
HANDLEBAR CONNECTION	FIXED		
SEATPOST TUBE	FIXED		
BRAKES	V-BRAKE		
RIM AND TIRES	37-590 E.T.R.T.O.	35-700 E.T.R.T.O.	
TIRE PRESSURE	5 – 6 Bar		
BICYCLE MAX WEIGHT/LOAD	22 Kg / 120 Kg	23 Kg / 120 Kg	21,5 Kg / 120 Kg
GEAR SHIFT	SRAM AUTOMATIX M02.0200.001.000 - 2 SPEED		
MOTOR	250W BRUSHLESS WITH EXTERNAL ROTOR		

BATTERY	
MODEL	TVC101
CHARGE	9 Ah
WEIGHT	2,6 Kg
AUTONOMY (with assisted pedalling)	Up to 80Km (see autonomy paragraph)
Operating temperature	In operation -20 °C to +45 °C

DIMENSIONS AND TECHNICAL DATA

NAME AND MODEL	eB4 - eB4-U	eB5 - eB5-U
LENGTH	1820 mm - 1720 mm	1820 mm - 1720 mm
WIDTH	640 mm - 640 mm	720 mm - 720 mm
HEIGHT	1173 mm - 1070 mm	1113 mm - 1070 mm
FRAME TYPE	MAN - UNISEX	MAN - UNISEX
FORK TYPE	WITH SUSPENSION	
HANDLEBAR CONNECTION	ADJUSTABLE	
SEATPOST TUBE	FIXED	
BRAKES	Front mechanical DISK BRAKE / Rear V-BRAKE	
RIM AND TIRES	40-700 E.T.R.T.O.	
TIRE PRESSURE	2.6 – 6 Bar (see indications on the side of the tire)	
BICYCLE MAX WEIGHT/LOAD	23 Kg / 120 Kg	22 Kg / 120 Kg
GEAR SHIFT	MANUAL 6-SPEED	MANUAL 7-SPEED
MOTOR	250W Brushless Askoll with external rotor integrated in the rear hub	
BATTERY		
MODEL	LITHIUM IONS	
CHARGE	8,6 Ah	11,6 Ah
CAPACITY	300 Wh	400 Wh
WEIGHT	2,6 Kg	2,8 Kg
AUTONOMY (with assisted pedalling)	Up to 80Km	Up to 90Km
Operating temperature	In operation -20 °C to +45 °C	

TECHNICAL DATA

DIMENSIONS AND TECHNICAL DATA

NAME AND MODEL	eB_{FOLDING}	eB_{BOLT}
LENGTH	1500 mm	1470 mm
WIDTH	570 mm	700 mm
WHEELBASE HEIGHT	1105 mm	1035 mm
HEIGHT	1140 mm	1070 mm
FRAME TYPE	SIZE 20" FOLDING	SIZE 20"
FORK TYPE	FIXED	
HANDLEBAR CONNECTION	FOLDING	FIXED
SEATPOST TUBE	FIXED	
BRAKES	V-BRAKE	
RIM AND TIRES	44-406 E.T.R.T.O.	44-406 E.T.R.T.O.
TIRE PRESSURE	2 – 4 Bar	
BICYCLE MAX WEIGHT/LOAD	18,5 Kg	18,5 Kg
GEAR SHIFT	1 SPEED	
MOTOR	250W BRUSHLESS WITH EXTERNAL ROTOR	

BATTERY	
MODEL	TVC101
CHARGE	9 Ah
WEIGHT	2,6 Kg
AUTONOMY (with assisted pedalling)	Up to 80Km (see autonomy paragraph)
Operating temperature	In operation -20 °C to +45 °C

DECLARATION OF CONFORMITY



The undersigned		
name:	Elio Marioni	
legal representative of the		
manufacturer:	Askoll EVA Srl	
address:	Via Industria, 30 36031 DUEVILLE VI – Italy	
herewith declares that the product		
description:	EPAC	
model:	TE101	
serial number:	see label on this manual	
is in conformity with the provisions of the following Directives (including all applicable amendments)		
	Directive 2006/42/CE	
	Directive 2014/30/UE (and Directive 2004/108/CE)	
and all the following standards and / or technical specifications have been applied		
	EN 12100	
	EN 15194; EN 14764	
Identification of the person authorised to compile the technical file		
Name:	Giancarlo Oranges	
Place	Date	Signature
Dueville	1 gennaio 2016	

EN

DECLARATION OF CONFORMITY



The undersigned		
name:	Elio Marioni	
legal representative of the		
manufacturer:	Askoll EVA Srl	
address:	Via Industria, 30 36031 DUEVILLE VI – Italy	
herewith declares that the product		
description:	EPAC battery charger	
model:	TVC201	
is in conformity with the provisions of the following Directives (including all applicable amendments)		
	Directive 2014/35/UE (and Directive 2006/95/CE)	
	Directive 2014/30/UE (and Directive 2004/108/CE)	
	Directive 2011/65/UE	
and all the following standards and / or technical specifications have been applied		
	EN 60335-1; EN 60335-2-29	
	EN 61000-3-2; EN 61000-3-3; EN 55014-1; EN 55014-2	
	EN 62223	
	EN 50581	
Place	Date	Signature
Dueville	1 gennaio 2016	

Askoll EVA Spa
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