USER MANUAL

AS THE ORIGINAL OPERATING MANUAL

DIN EN 15194 / DIN EN 82079-1

E-BIKE (PEDELEC/EPAC)

eVICTORIA® STEPS

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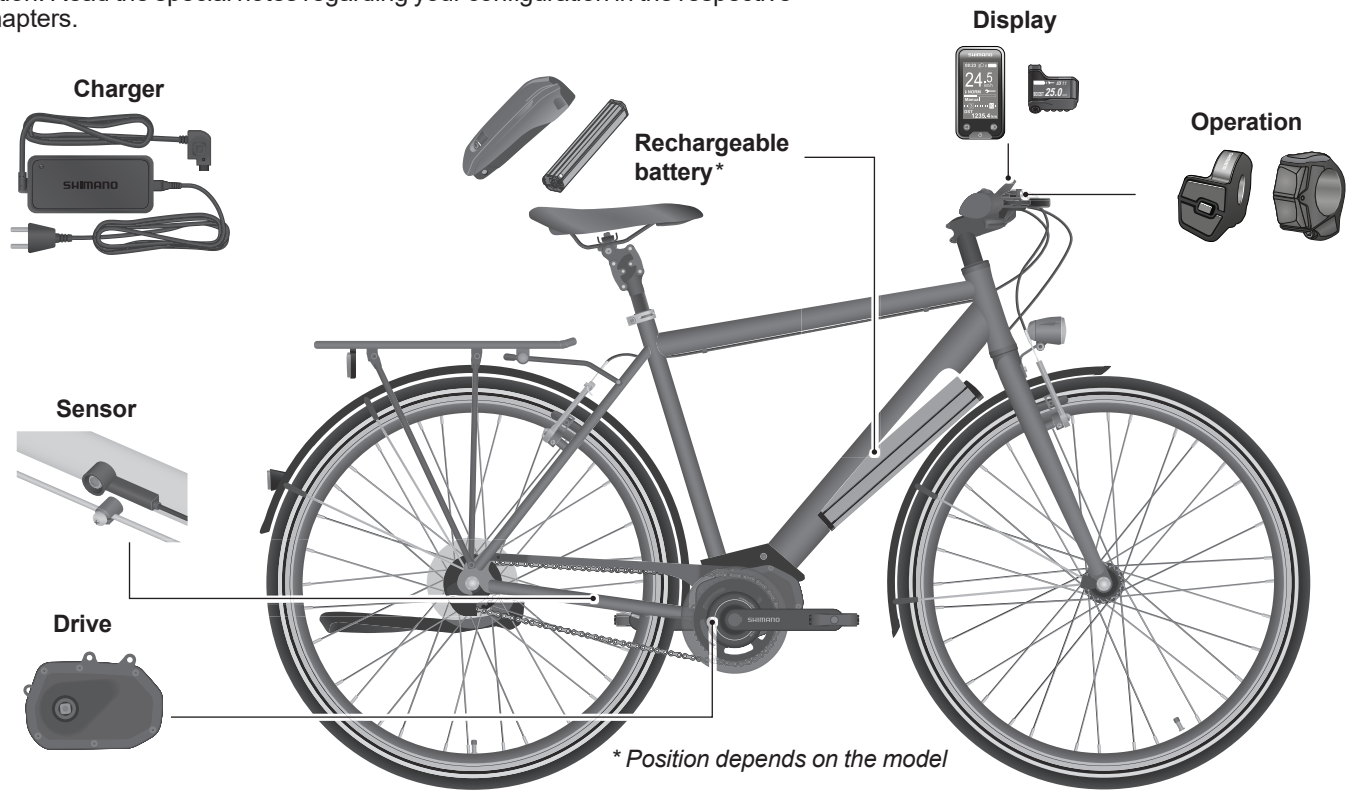
VICTORIA®
BICYCLES EST. 1886

Note: The figure may vary depending on your model or the selected configuration. Read the special notes regarding your configuration in the respective chapters.



2 In an emergency

You can find notes on handling the rechargeable battery in this user manual. Despite compliance with all safety measures, the rechargeable battery may pose a risk, e.g. if it catches fire (see Chapter *“Residual risks” on page 12*).

- In an emergency, act in such a way that you do not at any time endanger yourself or other persons.
- In an emergency, follow the instructions on this page.
- Immediately read these instructions so that you can concentrate and respond in a calculated manner in the event of an emergency.
- We recommend keeping a suitable fire extinguisher readily available at all times.

2.1 General protective measures

If you identify defects or damages to the rechargeable battery:

1. Do not use the rechargeable battery.
2. Wear protective gloves when you touch the rechargeable battery.
3. Do not inhale any gases or vapours that are emitted.
4. Avoid contact between your skin and any liquid that is leaked.

2.2 In the event of excessive heat

If you notice that excessive heat is being generated by the rechargeable battery:

1. Have the rechargeable battery checked by your specialist dealer immediately. Inform your specialist dealer about the rechargeable battery’s status prior to transport.
2. For short-term temporary storage, select an outdoor location and, if possible, place the rechargeable battery in a fire-proof container or on the soil.
3. If you store the rechargeable battery outdoors, clearly secure the area with ample space around the storage location.

2.3 In the event of deformation, odour, liquid

If you identify any deformation, odour or leaking liquids on the rechargeable battery:

1. If you are not put at risk and you are physically capable of doing so, place the battery in a fire-proof and acid-resistant container (e.g. made of stone or clay) and cover the rechargeable battery with sand.
2. If you are not put at risk and you are physically capable of doing so, use a fire extinguisher to put out a fire.
3. Have your specialist dealer dispose of the rechargeable battery immediately.
4. Select a location outdoors for short-term temporary storage.
5. If you store the rechargeable battery outdoors, clearly secure the area with ample space around the storage location.

2.4 If the rechargeable battery catches fire

1. Call the fire brigade immediately.
2. If you are not put at risk and you are physically capable of doing so, use a suitable fire extinguisher to put out a fire.
3. If you are not put at risk and you are physically capable of doing so, cool off the rechargeable battery by putting it in a fire-proof container filled with water. The water must cover the rechargeable battery completely.
4. If you are not put at risk and you are physically capable of doing so, cover the rechargeable battery completely with sand.

3 Tuning or manipulations

WARNING

Tuning or manipulating your e-bike's speed settings may have a negative impact on your bicycle's braking or riding performance and may lead to accidents and injury.

Risk of accident and injury!

- Do not make any structural modifications.

CAUTION

The e-bike may respond in a manner other than that which you expect if the drive system has been manipulated.

Risk of injury!

- Do not make any structural modifications to the drive system.

NOTICE

You can cause irreparable damage to your e-bike by tuning it.

Risk of damage!

- Do not make any structural modifications to the drive system.

– You can cause irreparable damage to your e-bike by tuning it.
– The frame, wheels and brakes are not designed for higher speeds.
– Any change to the drive system renders the warranty or other claims for damages invalid.
– Tuning your e-bike has legal consequences.
– Operating an e-bike at speeds of over 25 km/h requires a driving licence and an insurance policy as well as a registration plate.
– E-bike operators travelling at a speed of over 25 km/h are required to wear a helmet.
– Any change made to the drive system will result in the loss of the driving licence.

– Any change made to the drive system will result in loss of insurance cover (personal liability insurance).
– A criminal record entry may also be made in the case of a repeat offence (previous conviction)!
– Any change made to the drive system will result in the loss of the Declaration of Conformity (CE).
– Modifications to the drive system preclude participation in road traffic.

4 Safety

4.1 Be absolutely sure to read the warning notes

Read all warnings and notes in this user manual with care before you operate the e-bike for the first time. This user manual is a supplementary manual and integral part of the e-bike user manual. Keep all user manuals so that they are handy and available at all times. Include the user manual when passing the e-bike on to third parties.

4.2 Categorisation of warning notes

The warning notes are intended to draw your attention to potential hazards. Your complete attention is required when reading the warning notes; the statements must be understood completely. Failure to follow a warning note may result in injury to yourself or other persons. The warning notes alone cannot prevent dangers. Follow all warning notes to avoid a risk when using the e-bike.

WARNING

This signal word indicates a hazard with moderate degree of risk, which, if not avoided, may result in death or severe injury.

CAUTION

The signal word designates a hazard with low degree of risk which, if not avoided, may lead to minor or moderate injury.

NOTICE

This key word warns of possible damage to property.

4.3 Use

WARNING

The e-bike, rechargeable battery and charger may only be used by persons who are able to act without restriction with respect to their mental and physical abilities.

There is a high risk of injury for persons with restricted mental and physical capacities.

Risks for children and persons with impaired physical, sensory or mental capacities or lack of experience and knowledge, e.g. children or persons with impaired mental and physical capacities.

- Only allow the e-bike, rechargeable battery and the charger to be used by persons briefed on safe and proper use and who understand the risks arising in connection with it.
- Do not let children, young persons and persons without a driving licence play with the e-bike.

WARNING

Improperly performed repairs may cause accidents.

Risk of accident and injury!

- Do not repair the e-bike yourself.
- Have repairs performed by your specialist dealer.

NOTICE

High or low temperatures could restrict the functioning of the e-bike or damage it.

Risk of damage!

- Take note of the temperature limits.
- Do not park the e-bike near heat sources.

4.4 Rechargeable battery

WARNING

Internal damage to the rechargeable battery may cause the rechargeable battery to overheat, emit gases or leak liquids even a significant amount of time after the damage occurred.

Risk of fire and explosion!

- Have your specialist dealer inspect the rechargeable battery after falls or severe impacts.
- Do not open, dismantle, drill through or deform the rechargeable battery.

WARNING

Rechargeable batteries that have caught fire are very difficult to extinguish; the cells affected must burn down in a controlled manner. Responding properly may prevent severe damages.

Risk of fire and explosion!

- Read Chapter *“In an emergency” on page 7* in order to be prepared for such an event.

CAUTION

Lithium could be leaked if the rechargeable battery is damaged. Lithium causes severe burns to the skin.

Risk of injury!

- Do not touch the damaged rechargeable batteries with bare hands.

NOTICE

Improperly charging the rechargeable battery can damage the rechargeable battery and the drive.

Risk of damage!

- Do not charge the rechargeable battery if you suspect that it is damaged.
- Before charging the rechargeable battery for the first time, be absolutely sure to read the Chapter *“Charging the battery” on page 26*.
- Only use the original charger to charge the rechargeable battery and only under supervision.
- While charging the rechargeable battery, always place it on non-flammable materials (e.g. stone, glass, ceramics).
- If you are not absolutely sure how to handle lithium-ion rechargeable batteries, have a qualified specialist explain how to do so.

NOTICE

Incorrect use of the rechargeable battery could cause damage to the rechargeable battery, the drive or surrounding objects, e.g. due to overheating.

Risk of damage!

- Only use the rechargeable battery included in the product contents for the original drive.
- Only use original rechargeable batteries approved for use with the original drive.
- Keep the rechargeable battery away from fire and other heat sources; protect it against exposure to intense sunlight.
- Protect the rechargeable battery against moisture. Never clean or spray the rechargeable battery with liquids.
- Do not use the rechargeable battery if you notice any unusual warmth, odour or discolouration and/or if the rechargeable battery exhibits obvious damages.

4.5 Charger

WARNING

Incorrect handling of electrical current and corresponding components poses a risk to life due to electric shock.

Risk to life!

- Check the charger, mains cord and mains plug for damage before each use.
- If you identify or suspect damages, do not use the charger.
- Only use the charger indoors.
- Only connect the charger to a properly installed power supply: in Europe “220 to 240 V ~ (50 Hz)” (see section *“Technical specifications” on page 47*).
- Position the charger in such a way that it cannot become moist or wet, e.g. due to splashing water.
- Never clean or spray the charger with liquids.
- While charging, always place the charger on non-flammable materials (e.g. stone, ceramics).
- Do not open, dismantle, drill through or deform the charger.
- Only have the charger repaired by qualified professionals with original spare parts.
- Only use the charger to charge the original rechargeable battery or equivalent replacement rechargeable batteries.
- Always pull the mains plug out of the socket after use.
- Read the additional safety notes on the housing of the charger.
- If applicable, label the charger to prevent confusion with chargers from other manufacturers.

4.6 Residual risks

Using the e-bike is associated with the following unforeseeable residual risks despite compliance with all safety notes:

4.6.1 Risk of injury

– Gases, vapours and liquids could leak out of the rechargeable battery due to internal, invisible damages and in the event of fire. Injuries to external and internal organs are possible, for example, in the event of contact with skin or inhalation of the gases (see Chapter *“In an emergency” on page 7*).

4.6.2 Fire hazard

– Internal, invisible damage can cause the rechargeable battery to catch fire and ignite objects in the surrounding area (see Chapter *“In an emergency” on page 7*).

4.6.3 Risk of damage

– If the rechargeable battery catches fire, hydrofluoric acid leaks out with the smoke gas. Hydrofluoric acid is highly corrosive and causes permanent damage to surfaces (see Chapter *“In an emergency” on page 7*).

5 Basic information

5.1 Symbols on the products

The following symbols are located on the packaging, the rechargeable battery or the charger.

Label for electrical devices that you must not dispose of with household waste. You are obligated by law to dispose of correspondingly labelled products at suitable recycling points for environmentally-friendly recycling.

Label for rechargeable batteries and batteries that you must not dispose of with household or other garbage. You are obligated by law to dispose of correspondingly labelled products at suitable recycling points for environmentally-friendly recycling.

Label for environmentally-harmful hazardous substances. Exercise special caution when handling products labelled as such. Observe disposal guidelines!

Label for waste materials intended for recycling. Sort the packaging before you dispose of it. Dispose of cardboard and carton as waste paper and foils via the recyclable material collection service.

Symbol confirming conformity with guidelines for products corresponding to the requirements of the European General Product Safety Directive.

Labelling for products that may only be used indoors.

The 230 V ~/50 Hz mains connection corresponds to protection class II.

Symbol for direct current (DC).

Symbol for alternating current (AC).

5.2 Symbols in this manual

1. Instructions for steps to be performed in a particular order begin with a number.

• Steps to be performed in no particular order begin with a dot.

– Lists begin with a so-called dash.

Note: Supplementary notes regarding steps to be performed or use.

5.3 Terms

Terms with "nominal": Nominal output, nominal capacitance etc. are values stipulated according to the design. The actual values may differ from the nominal values depending on operating conditions.

E-bike (Pedelec/EPAC): An e-bike is a bike powered by an electrical auxiliary motor. E-bikes of this kind are also referred to as pedelecs (pedal electric cycle) or EPAC (electric power assisted cycles). The term "e-bike" will be used hereinafter.

Capacitance: The amount of electrical charge expressed in the unit "Ah" if the rechargeable battery has been completely charged (see Chapter *"Units" on page 14*).

Charging cycle: Refers to fully charging a completely depleted rechargeable battery.

Memory effect: Refers to the loss in the capacitance of rechargeable batteries if they are not completely charged (does not apply to lithium-ion rechargeable batteries).

Pedal drive: Assembly consisting of pedal, crank arm and chain wheel.

Temperature limits: Minimum and maximum temperature at which the corresponding component may be used. At the same time, both the temperature limits for the component as well as for the ambient temperature may be specified.

Pedalling frequency: Number of revolutions of the pedal drive in one minute expressed in the unit "1/min".

5.4 Written labels

– Image captions and references in the text are rendered in *italics*.

5.5 Units

Unit	Meaning	Unit for
1/min	per minute	Revolutions
A	Amperes	Electrical current (= W/V)
Ah	Ampere hour	Electrical charge (= Wh/V)
g	Gram	Weight (= kg/1000)
Hz	Hertz	Frequency (Hz = vibrations/sec)
kg	Kilogramme	Weight (= g×1000)
Nm	Newton meter	Torque
V	Volt	Electrical voltage (= W/A)
W	Watt	Electrical power (= V×A)
Wh	Watt hour	Electrical capacity (= V×Ah)

6 Notes on the e-bike

6.1 Differences between a bicycle and an e-bike

The additional components of the electric drive constitute the major differences between a conventional bike and an e-bike.

– The e-bike is significantly heavier and its weight distribution is different from conventional bicycles. This results in different handling.
– The drive has a significant effect on braking characteristics.
– E-bikes require greater braking forces. This may result in greater wear than with conventional bicycles.
– The electrical assistance will increase your average speed.
  • You should therefore cycle attentively. Keep in mind that other road users must get used to the increased speed of the e-bike.
– The bike's handling and braking as well as handling of the rechargeable battery and charger require an appropriate level of knowledge.
  • Familiarise yourself with the characteristics of your e-bike even if you already have some experience with electrically power-assisted bicycles (see Chapter *“Before each ride” on page 20*).

6.2 Functionality

The drive only provides you with riding assistance when you pedal. The intensity of assistance is automatically adjusted depending on the selected riding mode, the pressure applied when pedalling, the load and the speed. The drive assists you up to a speed of 25 km/h.

The A-weighted emission sound pressure level at the height of the bike operator’s ears is less than 70 db(A).

6.3 Range

The drive is an assistive motor. The range is affected by your pedalling intensity.

• Set the assistance as low as possible.

The lower the pedalling frequency of the pedal drive the higher the energy requirement for the drive.

• Use the gear shift as you would without assistance.
• For inclines, head wind or a heavy load, use the lower gears of the gear shift.

The drive requires a large amount of energy when starting.

• Always start in a low gear and apply as much pressure to the pedal as possible.
• Before travelling uphill, switch to a lower gear in time.
• Ride with foresight to avoid any unnecessary stops.

The energy consumption will increase with high loads.

• Do not transport any unnecessary loads.

Lack of care and maintenance may reduce the range.

- Handle the e-bike with care and observe all notes regarding the rechargeable battery in this user manual.
- Check the tyre pressure regularly.
- Comply with the maintenance intervals.

Temperatures below +10 °C may negatively affect the performance of the rechargeable battery during operation. When you are not using your e-bike:

- At low outdoor temperatures, take the rechargeable battery out of the holder and put it in storage (see Chapter *"Storing the rechargeable battery" on page 17*).
- Only put it back in the holder directly before cycling.

6.4 Cycling with an empty rechargeable battery

If the rechargeable battery is completely used up during the ride, you can use your e-bike as you would a normal bike (see Chapter *"Charging indicator" on page 25*).

Note: If the battery charge has been used up, the drive will switch off. The lights will be supplied with energy for another 2 hours.

6.5 Drive overheat protection

CAUTION

The drive and rechargeable battery can become very hot if a fault is at hand. You could injure yourself in the event of contact with your skin.

Risk of injury!

- Do not touch the drive and rechargeable battery.

The drive is automatically protected against damage caused by overheating. If the temperature of the drive is too high, the drive will automatically switch off.

- To prevent the drive from overheating, set a low level of assistance at high outdoor temperatures or roads or paths with a substantial incline (see Chapter *"Setting the level of assistance" on page 35*).
- If the drive is switched off when the rechargeable battery is charged and at a speed of under 25 km/h, do not use the e-bike temporarily to allow the drive to cool off.
  - If allowing the drive to cool off does not resolve the disturbance, have your specialist dealer inspect the e-bike.

7 General notes on the rechargeable battery

Your e-bike is equipped with a high-quality lithium-ion rechargeable battery (Li-ion rechargeable battery). Li-ion rechargeable batteries are safe if used properly. Li-ion rechargeable batteries have a relatively high energy density. Therefore, this rechargeable battery must be handled with great care. For your safety, be absolutely sure to observe the following notes to ensure reliable operation and a long life-cycle:

Partial charging does not damage the rechargeable battery as it does not have a memory effect. Partial charging is evaluated according to its capacitance (a charge of 50% corresponds to a ½ charge cycle).

! NOTICE

Self-discharge of the rechargeable battery for technical reasons may cause irreparable damages.

Risk of damage!

- Immediately recharge the rechargeable battery if empty.

- Take note of the temperature limits of the rechargeable battery (see Chapter *"Technical specifications" on page 47*).
  - Please note that outside temperatures under +10 °C may reduce the rechargeable battery's performance.
- Please note that the rechargeable battery's performance declines with age.
- Keep in mind that you will get used to cycling with electrical assistance after a while. This may result in a perceived drop in the output of the rechargeable battery.
- If there is a loss of power or the operating time is significantly reduced, contact your specialist dealer.
- Never perform any modifications on the rechargeable battery.

Note: You can find more information about the rechargeable battery in Chapter *"Rechargeable battery" on page 22*.

7.1 Charging times

If the rechargeable battery is empty, a full charge cycle requires 4 to 7.5 hours. The duration of the rechargeable battery charge cycle depends on the following factors:

– Charge level of the rechargeable battery.
– Temperature of the rechargeable battery and surroundings.

7.2 Storing the rechargeable battery

If you do not use the rechargeable battery for a prolonged period of time, please store it as follows:

- Charge the rechargeable battery to approximately 70% of its capacitance.
- For storage, take the rechargeable battery out of the holder and place it in a safe location.
- Store the rechargeable battery so that there is no risk of it falling down and so that it is out of reach of children and animals.
- If possible, store the rechargeable battery at room temperature in a dry, well ventilated area.

- If you are not using the rechargeable battery for a prolonged period, it is best to store the rechargeable battery in a well-ventilated location (e.g. basement) at approx. +10°C to +20°C.
- Protect the rechargeable battery against moisture and water.
- Make sure that the upper and lower temperature limit is not exceeded or underrun during storage (see Chapter *"Technical specifications" on page 47*).
- For storage exceeding 3 months, please recharge the rechargeable battery every quarter to half year depending on storage conditions. Then charge the rechargeable battery again to approx. 70% of its capacitance.
  - After the charging process, always disconnect the charger from the rechargeable battery and pull the mains plug out of the socket.

7.3 Transporting or shipping the rechargeable battery

Lithium-ion rechargeable batteries are subject to the requirements of dangerous goods legislation. The private user may transport undamaged rechargeable batteries on the road without any further requirements.

- Please note that the special requirements for packaging and labelling e.g. during air transport or shipping orders apply for commercial transport.
- Contact the forwarding company or your specialist bicycle dealer directly for information regarding the transportation of the rechargeable battery and suitable transport packaging.

Note: Read Chapter *"Transport" on page 20* for information on how to transport the e-bike.

7.4 Temperature monitor

The rechargeable battery is equipped with a temperature monitor. It can only be charged at temperatures between 0 °C and +40 °C. If the rechargeable battery is outside of the charge temperature range, the charging process will automatically end.

1. Pull the mains plug out of the socket.
2. Once the rechargeable battery has cooled off, pull the charging plug out of the charging slot.
3. Have your specialist dealer inspect the rechargeable battery.

⚠ CAUTION

Temperatures of over 40°C can cause injury to the skin.

Risk of injury!

- If you would like to end the charging process prematurely, let the rechargeable battery cool off.

1. Pull the mains plug out of the socket.
2. Once the rechargeable battery has cooled off, pull the charging plug out of the charging slot.
3. Have your specialist dealer inspect the rechargeable battery.
   - Inform your specialist dealer about the rechargeable battery's status prior to transport.

8 Notes on use

8.1 Information regarding road traffic

The assistance provided by e-bikes is effective up to a speed of 25 km/h. The technical configuration of your e-bike complies with the European standard EN 15194 for electrically power assisted bicycles and the bicycle standard DIN EN ISO 4210.

- Seek information regarding the relevant applicable road traffic regulations for your respective country or the region, for example, from the Ministry of Transport.
- Ensure that you regularly obtain information regarding changes to the content of the regulations currently in force.

8.2 Areas of application of the rechargeable battery and charger

The drive unit, rechargeable battery and charger are configured for use with one another and are approved only for use with your e-bike.

8.3 Insurance

- Check whether the conditions of your insurances adequately cover damages, e.g. liability insurance or household insurance.
- In case of doubt, contact your insurer.

8.4 Lights

Your e-bike is equipped with rechargeable battery-powered lights. The rechargeable battery must always be inserted when using public roads so that the lights are operational at all times.

8.5 Permissible total weight

The total admissible weight of your e-bike is specified on the CE sticker. The CE sticker is located on the down tube or back of the chain stays.

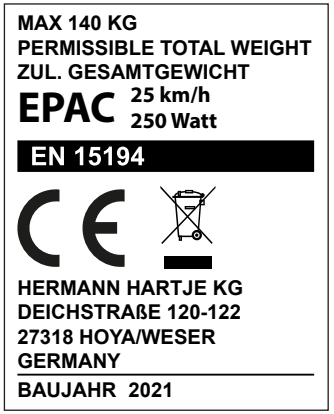


Fig. CE sticker (example)

8.6 Exclusion of wearable parts

In addition to the wearable parts listed in the user manual for the bicycle, the rechargeable battery – with the exception of production defects – is not covered by the warranty.

8.7 Disclaimer

The manufacturer cannot be held liable for damages or breakdowns resulting from direct or indirect use of the e-bike.

9 Transport

CAUTION

The lithium-ion rechargeable battery is considered a dangerous good and may be damaged if exposed to shocks and impacts without such damages being externally apparent.

Risk of short-circuiting and fire!

- When transporting your e-bike, remove the rechargeable battery and store it separately.
- Transport the rechargeable battery with special care.

- To rule out any risks and damages, transport the e-bike as follows:
  - Remove the rechargeable battery prior to transport (see Chapter *"Transporting or shipping the rechargeable battery" on page 18*).

9.1 By car

- Store the rechargeable battery so as to prevent slipping and collision with other objects during the trip.
- Properly secure the load to protect the rechargeable battery against compressive loads and avoid shocks.
- Store the rechargeable battery so that it is unable to be heated up by exposure to the sun or other heat sources.

With e-bikes, the forces from braking and lateral forces that act on the bike rack are stronger than with conventional bicycles.

- Check whether your bike rack is suitable for e-bikes.
- Ask your specialist dealer about suitable bike racks for your e-bike.

9.2 Using other forms of transportation

When transporting e-bikes with the rechargeable battery installed, special guidelines, which are constantly being expanded or updated, apply. These guidelines may differ from one another depending on the form of transportation.

- Contact the airline, train or ferry company in due time to ascertain the valid provisions that apply for transporting e-bikes. Have the technical data handy for this purpose.

9.3 Shipping

- If you ship your e-bike, ship the rechargeable battery separately and well-packed in a suitable transport container (see Chapter *"Transporting or shipping the rechargeable battery" on page 18*).

10 Start-up

10.1 Before each ride

- Check your e-bike according to the Chapter *"Inspection instructions" on page 21* in this user manual and in the user manual for your bicycle.

CAUTION

The e-bike may respond in a manner other than you expect if operated incorrectly.

Risk of injury!

- Read the Chapter “Operation” completely before you switch it on for the first time.

- Fully charge the rechargeable battery before your first ride (see Chapter *“Operation” on page 22*).

10.2 Your first ride

- Practice operating and using it in an open area away from public traffic.
  - Practice on level, solid ground with adequate grip.

1. Select the lowest level of assistance on the control unit (see Chapter *“Setting the level of assistance” on page 35*).
2. Start slow.
3. Operate the brakes with care and get used to the braking effect.
4. Once you are able to safely operate the brakes, familiarise yourself with the fully automatic assistance.
5. Once you are able to ride safely, repeat the familiarisation phase and test the brake in other riding modes.
6. Practice using the walk assistance function (see Chapter *“Walk assistance” on page 37*).

10.3 Inspection instructions

1. Check whether the rechargeable battery lock is engaged.
2. Check the rechargeable battery for any damage (visual inspection).
3. Check the drive for any damage (visual inspection).
4. Check the cables and plug connections for damage and make sure they are securely fastened (visual check).
   - If you discover any missing or damaged parts, do not use the e-bike.
   - Have your specialist repair the e-bike.

10.4 Preparations

1. Read the entire user manual before you use the e-bike.
2. Prepare the rechargeable battery and the charger for the start-up of your e-bike.

10.4.1 Rechargeable battery

NOTICE

If the rechargeable battery is not fully charged before start-up, the nominal charge of the rechargeable battery will decrease.

Risk of damage!

- Before start-up, charge the rechargeable battery until the charging process automatically ends.

10.4.2 Charger

1. Read the information on the nameplate of the charger.
   - If the information does not correspond to the power supply, do not use the charger.
2. Insert the device plug in the mains connector jack of the charger (see *see Fig. “Charger”*).
3. Read Chapter *“Charging the battery” on page 26* before connecting the charger to the power supply.

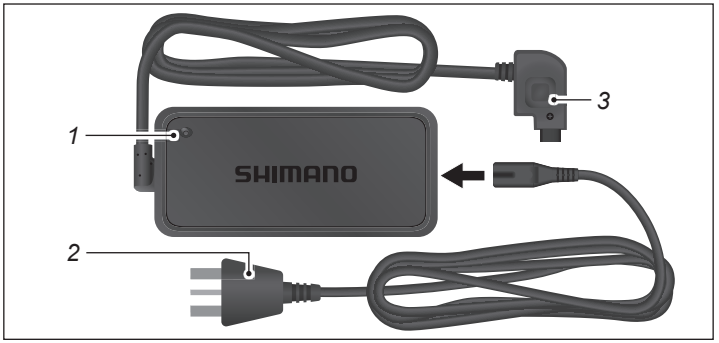


Fig. Charger

1 LED *2 Mains plug* *3 Charging plug*

11 Operation

11.1 Rechargeable battery

11.1.1 Removing the rechargeable battery

NOTICE

The electronic system could be damaged.

Risk of damage!

- Always switch off the e-bike before you take the rechargeable battery out of the holder.

1. Switch the e-bike off (see Chapter *“Switching off the e-bike” on page 30*).
2. Hold the rechargeable battery tightly by the handle.
3. Insert the key in the lock (see *Fig. “Frame rechargeable battery”* or *Fig. “Tube frame rechargeable battery”*).
4. Turn the key to the left to open the lock.
5. Frame rechargeable battery:
   - first tilt the frame rechargeable battery to the side and then pull it up and out of the holder (see *Fig. “Removing the rechargeable battery”*).
   - pull the rack rechargeable battery back and out of the holder.

5. Tube frame rechargeable battery:
   - Carefully tilt the rechargeable battery out of the top holder into the restraint. Press on the restraint from above and tip the rechargeable battery until you can pull it out of the frame (see *Fig. "Removing the rechargeable battery"*).
   - Pull the rechargeable battery up and out of the bottom holder.
6. To prevent damage, pull the key out of the lock.

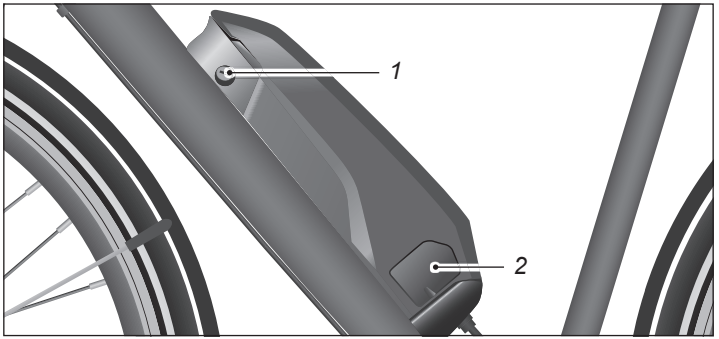


Fig. Frame rechargeable battery

1 Rechargeable battery lock *2 Charging slot*

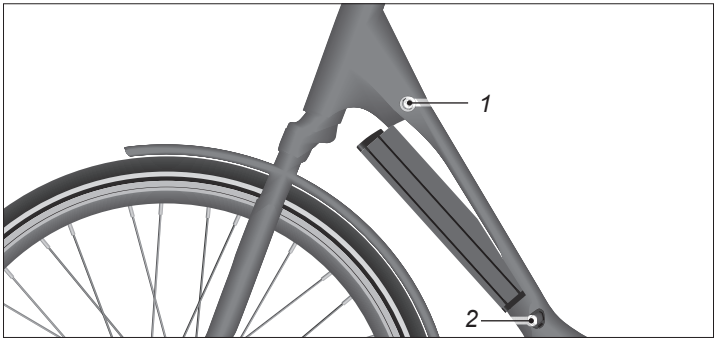


Fig. Tube frame rechargeable battery

1 Closure *2 Charging slot*

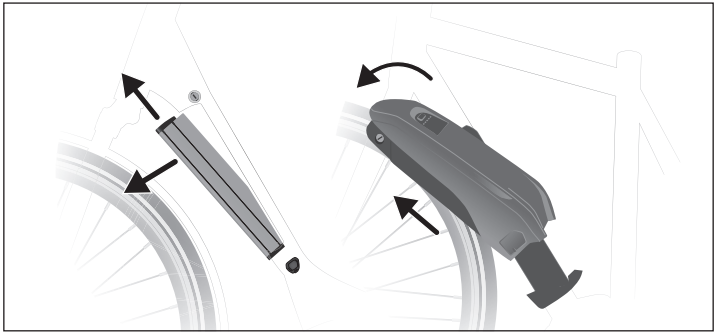


Fig. Removing the rechargeable battery

11.1.2 Inserting the rechargeable battery

Note: The rechargeable battery can also be inserted when the lock is engaged.

1. Frame rechargeable battery:

- Move the frame rechargeable battery from above up to the holder so that the groove in the rechargeable battery and the catch on the rechargeable battery holder line up.
- Set the rechargeable battery on the holder and tilt it to the right until it audibly and noticeably locks into place (see *Fig. "Inserting the rechargeable battery"*).

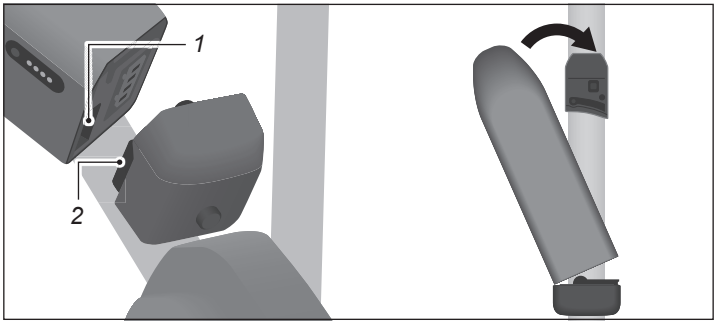


Fig. Inserting the frame rechargeable battery

1 Groove *2 Catch*

1. Tube frame rechargeable battery:
   - Place the rechargeable battery with the contacts on the bottom frame holder.
   - Press the rechargeable battery into the upper holder until it visibly and audibly reaches the stop point (see *Fig."Inserting the tube frame rechargeable battery"*).
2. After locking, always pull the key out of the rechargeable battery lock.

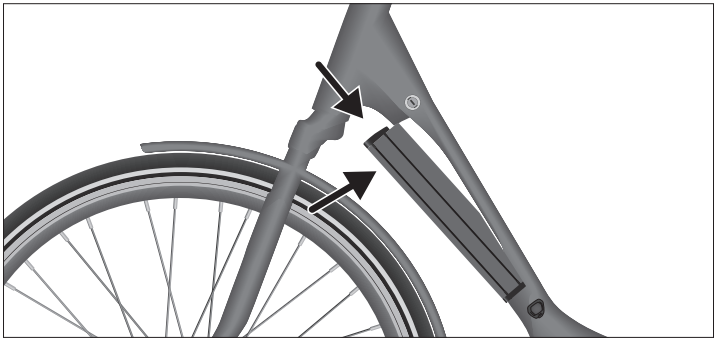


Fig. Inserting the tube frame rechargeable battery

11.1.2.1 Securing the rechargeable battery

WARNING

The lock could open. The rechargeable battery could fall out of the holder and be damaged.

Risk of damage resulting in fire!

- Check whether the rechargeable battery is securely fixed in the holder.

1. Pull the key out of the lock once you have inserted the rechargeable battery.
2. Hold the rechargeable battery by the handle and check if you can pull it out.

11.1.3 Charging indicator

The rechargeable battery has a charge indicator on the top (see *Fig. "On/Off button and charging indicator"*).

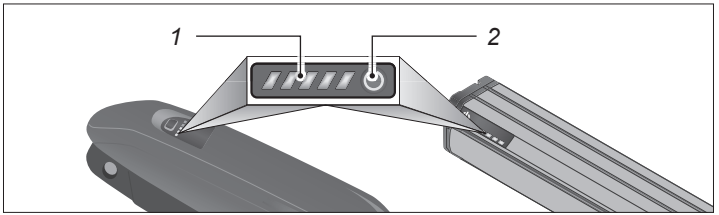


Fig. On/Off button and charging indicator

1 Charging indicator *2 On/Off button*

If an LED flashes, the battery charge for the drive has been used up. The drive will be deactivated.

11.1.4 Checking the charge level of the rechargeable battery

11.1.4.1 Rechargeable battery removed

1. Push the ⏻ **button** on the rechargeable battery for 2 seconds (see *Fig. "On/Of button and charging indicator"*).
2. Read the charge level on the rechargeable battery's charging indicator (see *Fig. "Partial charging"*).

1 LED flashes:	Charge level of 0 %	
1 LED is illuminated:	Charge level of 1 to	20 %
2 LEDs illuminate:	Charge level of 21 to	40 %
3 LEDs illuminate:	Charge level of 41 to	60 %
4 LEDs illuminate:	Charge level of 61 to	80 %
5 LEDs illuminate:	Charge level of 81 to	100 %

3. Read the Chapter *"Determining the charge level of the rechargeable battery" on page 26*.

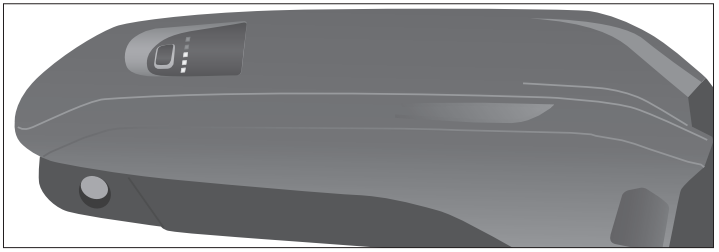


Fig. Partial charging

11.1.4.2 Inserted rechargeable battery

1. Push the ⏻ button on the rechargeable battery or on the display (see *Fig. "On/Off button and charging indicator"*)
2. Read the charge level on the display (see Chapter *"Standard indicators" on page 31*).

11.1.5 Determining the charge level of the rechargeable battery

If none of the LEDs on the charging indicator lights up, the rechargeable battery is either empty or it may be damaged.

- Charge the rechargeable battery (see Chapter *"Charging the battery" on page 26*).

If at least one, but not all LEDs on the charging indicator light up, the rechargeable battery is not fully charged.

- Fully charge the rechargeable battery before first use (see Chapter *"Charging the battery" on page 26*).

If all LEDs illuminate, the rechargeable battery has been fully charged.

11.1.6 Charging the battery

WARNING

If you notice heat, an odour or damages while charging:

Risk of fire and injury!

- Do not inhale gases that are emitted.
- Do not touch the charger and the rechargeable battery.
- Pull the mains plug of the charger out of the socket.

NOTICE

If the charging process takes an excessive amount of time, the rechargeable battery may be damaged.

Risk of damage!

- During excessively long charge cycles disconnect the rechargeable battery from the charger and contact your specialist dealer.

NOTICE

If the rechargeable battery is not completely discharged after the first charge, the rated capacitance will decrease.

Risk of damage!

- After the first charge, use the rechargeable battery until it is completely discharged.
- Then charge the rechargeable battery completely.

The rechargeable battery is charged with the rechargeable battery inserted on the e-bike with the rechargeable battery removed.

- Only charge the rechargeable battery in dry rooms.
- Remove any dirt on the charging slot and the contacts with a dry cloth.
- Only charge the rechargeable battery under supervision.

1. Prepare the charger (see Chapter *"Charger" on page 22*).
2. Place the rechargeable battery on a clean, solid and non-flammable surface.
3. Insert the charging plug into the charging slot on the rechargeable battery so that the marking on the charging plug points towards the top of the battery (see *Fig. "Rechargeable battery charging connection"*).
   - If the LED on the charger flashes, pull the charging plug out of the rechargeable battery.
   - Pull the mains plug out of the socket.
   - Read the Chapter *"Charger" on page 45*.

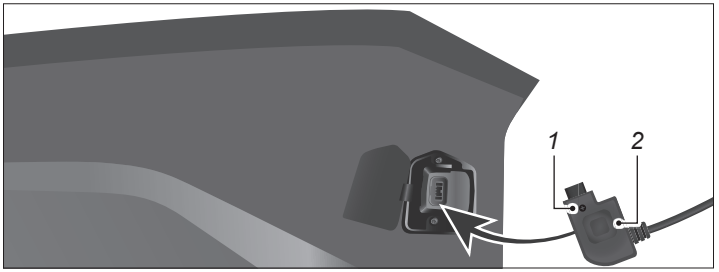


Fig. Rechargeable battery charging connection

1 Plus marking *2 Charging plug*

4. Monitor the charging process.
   Depending on the charge level, the LEDs on the charging indicator on the rechargeable battery light up or blink as follows:

1 LED flashes:		charge level of 0 to 20%
1 LED is illuminated,	2nd LED flashes:	charge level of 21 to 40%
2 LEDs are illuminated,	3rd LED flashes:	charge level of 41 to 60%
3 LEDs are illuminated,	4th LED flashes:	charge level of 61 to 80%
4 LEDs are illuminated,	5th LED flashes:	charge level of 81 to 99%
5 LEDs illuminate:		charge level of 100 %
1 LED flashes, 2nd LED is illuminated:		charging error

   - Pull the charging plug out of the rechargeable battery.
   - Pull the mains plug out of the socket.
   - Read the Chapter *"Charger" on page 45*.

Once the rechargeable battery is fully charged, the LED on the charger will go out following an approx. 1-hour delay.

The charging process will end automatically. The charging times are provided in the technical specifications (see Chapter *"Technical specifications" on page 47).*

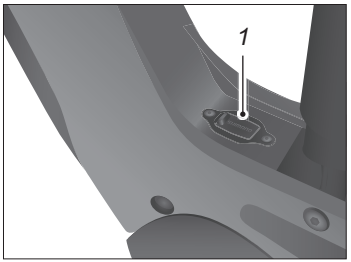


Fig. Rechargeable battery charging slot (example)

Depending on the model, the charging slot is located on the top or bottom of the frame.

1 Charging slot

- If the rechargeable battery is not fully charged after the charging time specified in the technical specifications, read Chapter *"Troubleshooting" on page 41*.

5. Once the rechargeable battery has been fully charged, pull the chargingplug out of the rechargeable battery.
6. Pull the mains plug out of the socket.

Note: You can also end the charging process before the rechargeable battery is fully charged (e.g. for storage) (see Chapter *"Storing the rechargeable battery" on page 17*).

11.2 E-bike

CAUTION

The e-bike may respond in a manner other than you expect if operated incorrectly.

Risk of injury!

- Read the Chapter *"Operation" on page 22* completely before you switch it on for the first time.

NOTICE

Improper operation may lead to malfunctioning and damage.

Risk of damage!

- Once the charging process is complete, wait one minute before switching on the e-bike.

11.2.1 Displays

Depending on the model, different displays may be installed. Please refer to Fig. *"Displays"* to see which display is built in to your e-bike.

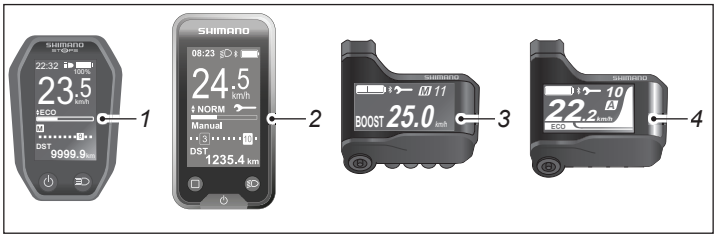


Fig. Displays (example)

1 E6010 display
2 E6100 display
3 E7000 display
4 SC-EM800 display

11.2.1.1 Removing and inserting the display

E6010 and E6100 displays can be removed and reinserted from/into the holder. E7000 and SC-EM800 displays are permanently built-in.

- To remove the display, press the lock and slide the display forwards (see *Fig. "Removing and inserting E6010 and E6100 displays"*).
- To insert the display, slide it forward into the holder until it audibly and noticeably locks into place.

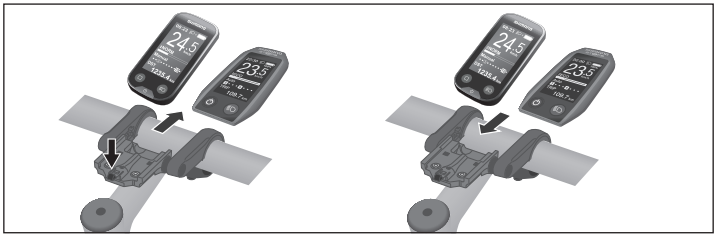


Fig. Removing and inserting the E6010 and E6100 display

11.2.2 Switching on the e-bike

Note: Do not apply pressure to the pedals during activation.

- Before you switch the e-bike on, check whether the rechargeable battery is charged and has been properly inserted (see Chapter *"Rechargeable battery" on page 22*).
- To switch on the e-bike, push the ⏻ button on the rechargeable battery for 2 seconds (see *Fig. "On/Off button"*). The five LEDs on the rechargeable battery will illuminate and the display will be activated.

If your e-bike is equipped with the E6010 or E6100 display, you can also use it to switch on the e-bike.

- To switch on the e-bike, push the ⏻ button on the display for 2 seconds (see *Fig. "Displays"*).

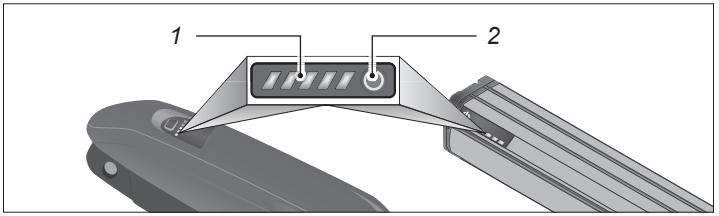


Fig. On/Off button

1 Charging indicator *2 On/Off button*

Note: The battery charge is shown on the display once the rechargeable battery is inserted (see Chapters *"Checking the charge level of the rechargeable battery" on page 25* and *"Standard indicators" on page 31*).

11.2.3 Using the drive

If the system is switched on, the drive activates as soon as you begin to pedal (except in the "Walk assistance" function).

Note: If the battery charge level is low, the level of assistance will automatically be reduced to increase the range.

As soon as you stop pedalling or as soon as you reach a speed of 25 km/h, assistance from the e-bike drive will be deactivated.

The drive will automatically reactivate as soon as you continue pedalling and the speed is under 25 km/h. You can use the e-bike like a bike at speeds of 25 km/h and above.

11.2.4 Switching off the e-bike

- To switch off the e-bike, push the ⏻ button on the E6010/ E6100 display or on the rechargeable battery.
  - In the case of built-in displays E7000 and SC-EM800, you can only switch off the e-bike on the rechargeable battery.
- **Note:** After some time of inactivity, the e-bike will automatically switch off.

11.2.5 Control units

- Use the buttons on the control unit to adjust the settings of the e-bike.

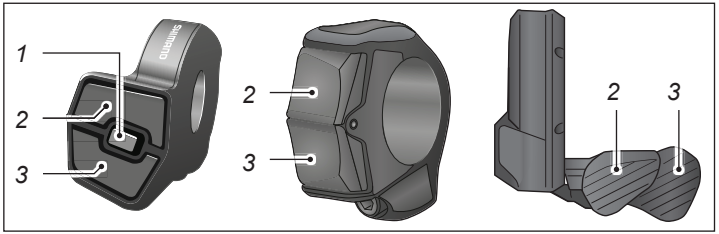


Fig. Control units (example)

1 Button 1: Menu control

2 Button 2: Shift up assistance/gear

3 Button 3: Shift down assistance/gear

11.2.6 Standard indicators

11.2.6.1 Rechargeable battery indicator

The rechargeable battery indicator will display the charge level of the rechargeable battery in accordance with the charging indicator on the removed rechargeable battery. Every illuminated segment corresponds to a charge level of approximately 20% (see Chapter *“Checking the charge level of the rechargeable battery” on page 25*).

If the charge for assistance from the drive is completely used up, assistance will be gently deactivated. The lights will continue to be supplied with power from a rechargeable battery reserve for approx. 2 hours.

11.2.6.2 Display content

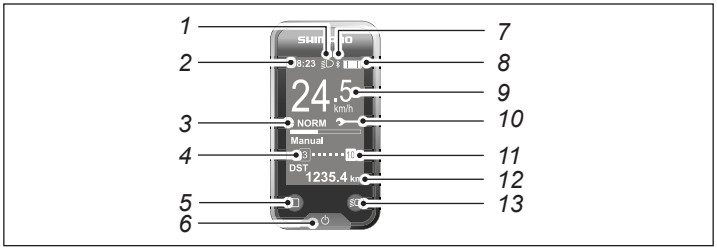


Fig. E6100 display

1 Light symbol
2 Time
3 Assistance
*4 Gear **
5 Function key
6 On/Off button
7 Bluetooth symbol
8 Rechargeable battery indicator
9 Speed
10 Maintenance indicator
11 Engaged gear
12 Travel data
13 Light button

*Only models with electronic gear shift/hub gear.

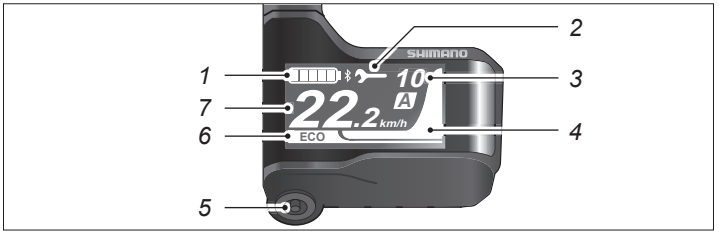


Fig. SC-EM800 display

1 *Rechargeable battery indicator*
2 *Maintenance indicator*
3 *Gear **
4 *Level of assistance*
5 *Function key*
6 *Assistance*
7 *Speed*

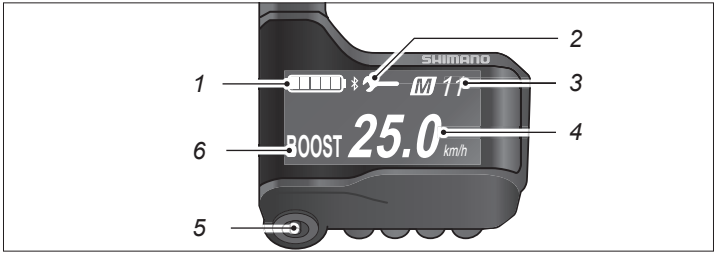


Fig. E7000 display

1 *Rechargeable battery indicator*
2 *Maintenance indicator*
3 *Gear **
4 *Speed*
5 *Function key*
6 *Assistance*

*Only models with electronic gear shift/hub gear.

Assistance: Displays the selected level of assistance.

- To select the level of assistance or deactivate assistance, read the Chapter *"Setting the level of assistance" on page 35*.

Gear when starting: Displays the selected gear in the menu setting "Start mode".

- To select or switch off the "Start mode", read the Chapter *"Menu settings" on page 32*.

Current gear: Shows the current gear selected (only for models with electronic gear shift).

Time: Displays the time (see Chapter *"Setting the time" on page 35*).

Speed: Displays the current speed.

- To change the unit (km/h), read the Chapter *"Menu settings" on page 32*.

11.2.7 Menu settings

Note: The e-bike can also be used without the following settings.

11.2.7.1 Displaying the settings menu

Note: The "Settings menu" can only be displayed when the e-bike has come to a complete stop.

1. Support the e-bike with its stand.
2. To switch the e-bike on, push the button ⏻ on the rechargeable battery for 2 seconds or read the Chapter *"Switching on the e-bike" on page 29*.

3. To display the “Settings menu”, simultaneously push **button 2** and **button 3** on the control unit for 2 seconds (see *Fig. “Control units (example)”*).

11.2.7.2 Selecting a menu item

1. Select a menu item with **button 2** or **button 3** (see *Fig. “Menu item ‘Settings’* and Chapter *“Menu settings” on page 32*).
2. Push **button 1** or the function key to confirm the selection.

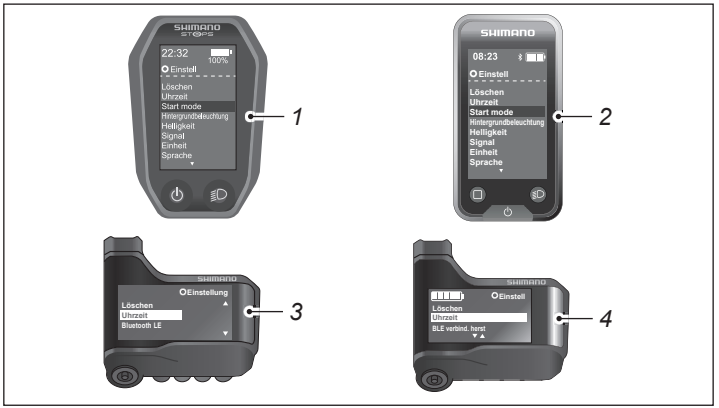


Fig. Menu item “Settings”

1 E6010 display
2 E6100 display
3 E7000 display
4 SC-EM800 display

11.2.7.3 Selecting a setting

1. Use **button 2** or **button 3** to select a setting (see *Fig. “Selecting a setting”*).
2. Push **button 1** or the function key to confirm the selection. The setting has been selected and the main screen will be shown.

Fig. Selecting a setting

1 E6010 display
2 E6100 display
3 E7000 display
4 SC-EM800 display

11.2.7.4 Exiting the settings menu

1. To switch from the “Settings menu” to the main screen, use **button 2** or **button 3** to select the menu item “Close” (see Chapter *“Menu settings” on page 32*).
2. Push **button 1** or the function key to confirm the selection.

11.2.7.5 Settings menu

Menu item	Settings	Description
Delete	Close	Back to the menu
	Trip	deletes the TRIP, TIME, Ø km/h and MAX [1)]
	Preset	Resets “Backlight”, “Signal”, “Unit” and “Language” to the factory default
Time	00:00	Setting the time
Start mode [2)]	OFF	OFF
	2	If a higher gear has been selected, the gear shift will select the gear set here when you stop. - Remove pressure from the pedal.
	3	
	4	
	5	
Backlight	On	Factory default
	Off	
	Manual	The backlight is switched on and off with the lights
Brightness	1 to 5	Factory default: 3
Signal (button tone)	On	Factory default
	Off	
Unit	km (kilometres)	Factory default
	mile	
Language	English	Factory default
	French	
	German	
	Dutch	
	Italian	
	Spanish	
Colour option	white / black	Factory default: white
Set [2)]		Configuration – only for specialist dealers.
Close		Closes the menu

1) see Chapter *“Cycling data” on page 36*.

2) only in connection with electronic “Di2” gear shift.

11.2.7.6 Setting the time

1. Select the menu item “Time” with **button 2** or **button 3**.
2. Push **button 1** or the function key to confirm the selection.
3. Increase or decrease the hour indicator with **button 2** or **button 3** (see *Fig. “Setting the time”*).

Note: Pushing **button 2** or **button 3** for a prolonged period rapidly cycles through indicators.

Fig. Selecting a setting

1 E6010 display
2 E6100 display
3 E7000 display
4 SC-EM800 display

4. Push **button 1** or the function key.
5. Increase or decrease the minutes indicator with **button 2** or **button 3**.
6. Push **button 1** or the function key to confirm the setting.

The time has been set and the main screen will be shown.

11.2.8 Setting the level of assistance

- When at a standstill or while riding, set the level of assistance from the e-bike drive when pedalling.
- Use **button 2** or **button 3** to select one of the following riding modes (see *Fig. “Control units (example)”*).

HIGH/BOOST: Powerful assistance for sportive riding on mountainous routes as well as for urban traffic.

NORM/TRAIL: Uniform assistance, for touring with a long cruising range.

ECO: Effective assistance with maximum efficiency for maximum range.

OFF: The drive is deactivated. You can propel the e-bike just like a bicycle.

WALK: Walk assistance is switched on (see Chapter *“Walk assistance” on page 37*).

11.2.9 Cycling data

Note: The cycling data TRIP, TIME, Ø km/h and MAX can be deleted or reset under the menu item “Delete”. These indicators can only be deleted collectively (see Chapter *“Menu settings” on page 32*).

- Push **button 1** or the function key repeatedly until the desired function indicator appears on the display.

Current gear: only with the electronic gear shift.

Gear when starting: only with the electronic gear shift.

TRIP: The trip since the last time “TRIP” was deleted (see Chapter *“Menu settings” on page 32*).

TOTAL: The total number of kilometres covered since start-up.

RADIUS: The remaining range (estimate). The rechargeable battery indicator and, if applicable, other indicators will be deleted when “RADIUS” is shown. “--” is shown when walk assistance is switched on.

RADIUS (high/norm/eco): Displays the remaining range if conditions remain the same (estimates).

TIME: Cycling time since the last time “TRIP” was deleted.

Ø km/h: Average speed since the last time “TRIP” was deleted.

MAX: Maximum speed since the last time “TRIP” was deleted.

11.2.10 Lights

WARNING

If you switch the lights on or off while riding, you will not be able to concentrate on road traffic.

Risk of accident and injury!

- Operate the lights only when you have come to a complete stop.

In order to be able to ride on roads, lights must comply with national and regional regulations.

- Be aware of and follow the applicable national and regional regulations regarding lighting equipment.
  - Please look into this matter before your first ride. If necessary, upgrade your bike in accordance with regulations. Contact your specialist dealer about this.

Note: If the battery charge has been used up, the drive will switch off. The lights will be supplied with energy for another 2 hours.

Your e-bike is equipped with a drive light powered by a rechargeable battery.

- To switch on the lights, press **button 1** on the control unit or the **light button** on the display. The light symbol on the E6100 and E6010 display will illuminate (see *Fig. “Lights”*).

- To switch off the lights, press **button 1** on the control unit or the **light button** on the display again. The light symbol on the display goes out (see *Fig. “Lights”*).

Note: E7000 and SC-EM800 displays do not provide you with any information about the lighting status.

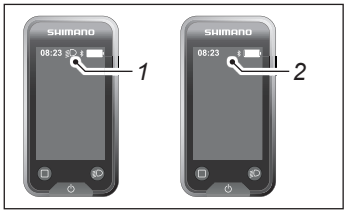


Fig. Lights

1 Switched on
2 Switched off

11.2.11 Walk assistance

CAUTION

If used incorrectly, your limbs could get caught in moving parts.

Risk of injury!

- Only use the walk assistance function when pushing the e-bike.
- Only use the walk assistance function on level and solid ground.
- Only use the walk assistance function if the e-bike is on both wheels.

Walk assistance helps you push the e-bike. With this function, the speed depends on the selected gear and may reach up to 6 km/h. The lower the selected gear, the lower the speed.

Note: Walk assistance will automatically switch off after one minute without use.

Stand next to the e-bike and hold the handlebar with both hands.

1. Fold the kickstand up.
2. Use **button 2** or **button 3** to switch “OFF” the assistance (see Chapter *“Setting the level of assistance” on page 35*).
3. Push **button 3** until “WALK” appears on the display panel. Walk assistance is switched on.
4. Push and hold **button 3**. Walk assistance is on and the bike moves forward independently.

Walk assistance will be deactivated as soon as one of the following events occurs:

– You release **button 3**.
– The wheels of the e-bike are blocked, e.g. by braking or running into an obstacle.
– The speed exceeds 6 km/h.

11.2.12 Switching between Auto/Manual

You can switch from manual shifting to automatic shifting if you have a control unit installed on the right handle.

- Simultaneously push **button 2** and **button 3** on the control unit on the right handle.

The mode is shown on the main screen.

Fig. Main screen display E6100

1 AUTO indicator

2 MANUAL indicator

The gears automatically shift in automatic mode.

In manual mode, the gears are shifted using **button 2** and **button 3** on the control unit on the right handle.

12 Settings

12.1 Di2 rear derailleur

The connection between the drive and Di2 rear derailleur may be disconnected if the bike is involved in a strong impact (e.g. falls over).

Reset the rear derailleur in order to restart the Di2 rear derailleur.

1. Support the e-bike with its stand.
2. To switch the e-bike on, push the button ⏻ on the rechargeable battery for 2 seconds.
3. To display the “Settings menu”, simultaneously push **button 2** and **button 3** on the control unit for 2 seconds (see *Fig. “Control units (example)”*).
4. Select the menu item “Rear derailleur reset” with **button 2** or **button 3**.
5. Confirm the selection with **button 1** or the function key.
6. With **button 2** or **button 3**, select
   - OK in order to reset the rear derailleur
   - or Cancel in order not to reset the rear derailleur (see Fig. “*Rear derailleur reset*”).
7. Confirm the selection with **button 1** or the function key.
8. Rotate the pedals to release the rear derailleur again (see Fig. “*Rear derailleur reset*”**).**

Fig. Rear derailleur reset

13 Speed sensor

If the spoke magnet slips on the spoke, it will not be recognised by the speed sensor. The warning “W011” will appear on the indicator.

- If the warning “W011” appears or the spoke magnet slips, adjust the spoke magnet:

1. Loosen the screw of the spoke magnet.
2. Adjust the spoke magnet on the spoke so that it moves past the speed sensor in the correct position (see *Fig. “Speed sensor”*).
3. Tighten the screw.
4. If the warning “W011” does not disappear, please consult your specialist dealer.

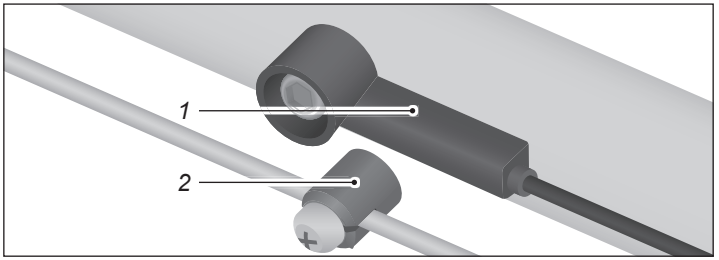


Fig. Speed sensor

1 Sensor *2 Spoke magnet*

14 Care

WARNING

When performing care, maintenance and repairs, there is a risk associated with the electrical current.

Risk of electric shock and short circuit!

- Make sure the mains plug of the charger has been pulled out off the socket.
- Remove the rechargeable battery.
- Do not clean the components with running water or other liquids.
- Do not use a high-pressure cleaner or water jet.

CAUTION

The drive and rechargeable battery can heat up through use. You could injure yourself in the event of contact with your skin.

Risk of injury!

- Let the drive and rechargeable battery cool off before performing care.

Regular care will ensure that your e-bike stays safe and reliable.

Wipe the e-bike components clean with a slightly dampened cloth.

- Use a mild cleaner.
- Check to make sure that all electrical lines, connections and contacts are not damaged and are clean (visual inspection).
  - Have damaged or corroded parts replaced by your specialist dealer.
- Prevent moisture or dirt from contaminating the contacts.

15 Notes on the key

- Take note of the key number(s) imprinted on the key.
- Contact your specialist dealer for a replacement key.

16 Disposal

- Read the explanation of the symbols printed or stamped on the packaging, the rechargeable battery and the charger (see Chapter *"Symbols on the products" on page 13*).
- Contact your specialist dealer or the appropriate authorities for information on disposal.

16.1 Disposing of the e-bike

(Applicable in the European Union and other European countries with systems for the separate collection of recyclable materials)

E-bikes must not be disposed of with household rubbish!

If the e-bike can no longer be used, you as a consumer are legally obliged to dispose of it as waste equipment separately from your household rubbish, e.g. at a recycling centre or a municipal/district waste collection point. This will guarantee that waste equipment can be correctly recycled and any negative impact on the environment can be avoided. Electrical devices are, therefore, labelled with this symbol.

In the case of e-bikes, all rechargeable batteries and batteries, as well as all control parts containing rechargeable batteries or batteries, must be removed before disposal.

Conformity with RoHS Directive: The product that you have purchased complies with the EU RoHS Directive (2011/65/EC). The product does not contain any of the hazardous or prohibited materials specified in this Directive.

16.2 Disposing of rechargeable batteries and chargers

Rechargeable batteries which supply the motor with energy and permanently installed display batteries are usually lithium-ion batteries that must be disposed of as hazardous waste.

- Dispose of rechargeable batteries and batteries at a recycling centre or a municipal/district waste collection point.

16.3 Disposing of the packaging

Sort the packaging before you dispose of it. Dispose of cardboard and carton as waste paper and foils via the recyclable material collection service.

17 Troubleshooting

WARNING

When working with an inserted rechargeable battery or connected charger, there is a risk of electric shock.

Risk of electric shock!

- Take the rechargeable battery out of the holder.
- Disconnect the charger from the power supply.

CAUTION

The drive and rechargeable battery may become very hot in the event of errors. You could injure yourself in the event of contact with your skin.

Risk of injury!

- Let the drive and rechargeable battery cool off before you touch them.

Depending on the type of error, the drive will be automatically deactivated if necessary. You can continue to cycle without the assistance of the drive.

- If the following measures do not help, please consult your specialist dealer.

17.1 General information

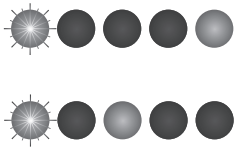
Fault	Cause	Measure
The display does not illuminate after activation.	The display is inserted incorrectly.	Read the Chapter *“Displays” on page 29*.
	The rechargeable battery is empty.	Charge the rechargeable battery.
	There is a connection error or the display is defective.	- 1) Switch the e-bike off. - 2) Remove the rechargeable battery. - 3) Check all cables and contact points for damage (visual inspection). - 4) If you do not discover any damage, insert the rechargeable battery and switch the e-bike on.
You hear unusual noises when cycling or shifting.	The e-bike or the gear shift has not been configured correctly.	Have your specialist dealer inspect the e-bike.
The gear set in the “Start mode” function is not set when you stop.	You are pedalling too hard.	Place your foot on the pedal without exerting pressure.
The level of assistance decreases after shifting.	The level of assistance is regulated depending on the gear shift.	It does not indicate an error when the assistance behaves like this.
When the switch is pushed, two beeps are emitted and the switch cannot be pushed.	There is a e-bike error or the display is defective.	- 1) Switch the e-bike off. - 2) Switch the e-bike on and check the function. - 3) If you hear the beeps again, have your specialist dealer inspect the e-bike.
The gear is not shown.	There is a connection error or the gear shift is defective.	Have your specialist dealer inspect the e-bike.
The lights cannot be switched on.	The rechargeable battery is empty.	Charge the rechargeable battery.
	The lights are defective.	Have your specialist dealer inspect the e-bike.

Fault	Cause	Measure
The range is too short.	The range depends on the road conditions, the level of assistance used, the lights used, etc.	Check the charge level of the rechargeable battery. Charge the rechargeable battery before each ride.
	The properties of the rechargeable battery deteriorate in winter.	It does not indicate an error when the rechargeable battery behaves like this.
	The rechargeable battery's performance declines with age.	It does not indicate an error when the rechargeable battery behaves like this. Replace the rechargeable battery once its performance has markedly deteriorated.
The assistance is not working.	The e-bike was not switched on correctly.	Do not push on the pedal when you are switching the e-bike on.
	The speed is greater than 25 km/h.	It does not indicate an error when the assistance behaves like this.
	A low or no level of assistance has been set.	Set the level of assistance to "NORM" or "HIGH".
	The rechargeable battery is empty.	Charge the rechargeable battery.
	The e-bike is defective.	Have your specialist dealer inspect the e-bike.

17.2 Rechargeable battery

Fault	Cause	Measure
The rechargeable battery gets warmer than usual.	The rechargeable battery or the charger is defective.	Read the Chapter *"In an emergency" on page 7*.
Gas or liquids leak out of the rechargeable battery.	The rechargeable battery is defective.	- 1) Move away and do not inhale the gases. - 2) Read the Chapter *"In an emergency" on page 7*.

17.3 Rechargeable battery charging indicator

Error message	Cause	Measure
 or	The e-bike has a connection error.	- 1) Check all cables and contact points for damage (visual inspection). - 2) Reattach any loose plugs. - 3) Have your specialist dealer inspect the e-bike.
	The rechargeable battery is too hot.	- 1) Let the rechargeable battery cool off. - 2) Observe the operating temperature (see Chapter *"Technical specifications" on page 47*).
	There is an error during the charging process.	- 1) Pull the charging plug out of the rechargeable battery. - 2) Pull the mains plug out of the socket. - 3) Push the rechargeable battery button. - 4) If the rechargeable battery displays another error message, have your specialist dealer inspect the rechargeable battery. - 5) If the error message goes out, reconnect the charger and pay careful attention to the process.
	There is an internal error affecting the rechargeable battery.	- 1) Do not use the rechargeable battery. - 2) Have your specialist dealer inspect the rechargeable battery immediately.

17.4 Charger

Fault	Cause	Measure
The LED of the charger flashes.	There is a general connection error.	- 1) Pull the charging plug out of the rechargeable battery. - 2) Pull the mains plug out of the socket. - 3) Reconnect the charger and check whether the LED is continuously illuminated when the rechargeable battery is connected.
	The rechargeable battery or the charger is defective.	If the LED also flashes after reconnecting, disconnect all connections and have your specialist dealer inspect the charger as well as the rechargeable battery.
The LED light on the charger is not illuminated.	Error affecting the power supply of the charger.	- 1) Check that the mains plug is connected with a properly installed socket. - 2) If the LED is not illuminated, have your specialist dealer inspect the charger.
	The rechargeable battery is charged.	Check the charge level of the rechargeable battery (see Chapter *"Checking the charge level of the rechargeable battery" on page 25*)
The charging process won't start.	The temperature limits for the surroundings, the charger or the rechargeable battery were not complied with.	- 1) Let the charger and the rechargeable battery reach room temperature. - 2) Observe the temperature limits for the surroundings, rechargeable battery and charger. - 3) If the charging process does not start, have your specialist dealer inspect the charger and rechargeable battery.
	The rechargeable battery is defective.	- See Chapter *"Rechargeable battery charging indicator" on page 44*.

The following messages will appear on the display instead of the time.

3 beeps will also signal the display of the message.

- If errors or warning messages reoccur, have your specialist dealer inspect the rechargeable battery.
- If the error “E010” appears on the entire screen, remove the rechargeable battery and insert it again (see Chapter *“Rechargeable battery” on page 22*).

Error message	Cause	Measure
W010	The drive is too hot (e.g. because the ambient temperature is very high).	- 1) Stop and let the drive cool off. - 2) Select a lower level of assistance and apply more pressure when pedalling.
W011	The speed cannot be measured.	Set the speed sensor (see chapter “Settings / Speed sensor”).
W012	The crank may have been incorrectly installed.	- 1) Switch the e-bike off. - 2) Install the crank in the correct position. - 3) Switch the e-bike off.
-	There is a communication error affecting the e-bike.	Have your specialist dealer inspect the e-bike.
W030, W031, E010–E14, E020–E022, E30–E33, E43	There is an electrical error.	- 1) Switch the e-bike off with the rechargeable battery button. - 2) Remove the rechargeable battery. - 3) Check all cables and contact points for damage (visual inspection). - 4) If you do not discover any damage, insert the rechargeable battery and switch the e-bike on with the rechargeable battery button. - 5) If the error message appears again, contact your specialist dealer.

18 Technical specifications

18.1 Rechargeable battery

	BT-E8014	BT-E8010	BT-E8036
Nominal voltage:	36 V ⎓	36 V ⎓	36 V ⎓
Nominal capacitance:	11.6 Ah	14 Ah	17.5 Ah
Energy:	417 Wh	504 Wh	630 Wh
Permissible charging temperature:	0 to +40 °C*	0 to +40 °C*	0 to +40 °C*
Operating temperature:	-10 to +50 °C	-10 to +50 °C	-10 to +50 °C
Storage temperature:	+5 to +23 °C	+5 to +23 °C	+5 to +23 °C
Weight:	3.0 kg	2.65 kg	3.7 kg

* The temperature of the rechargeable battery must be above +10 °C.

18.2 Charger

	EC-E6002	EC-E6000
Input voltage:	100–240 V ~ (50–60 Hz)	100–240 V ~ (50–60 Hz)
Output:	42 V ⎓ / 1.8 A	42 V ⎓ / 4.0 A
Permissible charging temperature:	0 °C to 40 °C	0 °C to 40 °C
Rechargeable battery type:	Lithium-ion	Lithium-ion
Charging time:	6.5 hours to 7.5 hours	4 hours to 5 hours

18.3 Drive

Nominal output:	250 W
Nominal voltage:	36 V ⎓
Operating temperature:	0 to +40 °C
Storage temperature:	-20 to +70 °C
Maximum torque:	DU-E5000 40 Nm DU-E6100 60 Nm DU-E7000 60 Nm DU-EP800 85 Nm
Weight:	DU-E5000 2.5 kg DU-E6100 2.88 kg DU-E7000 2.8 kg DU-EP800 2.5 kg

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EC DECLARATION OF CONFORMITY

according to EC directive 2006/42/EC on machinery (Annex II A)

Name and address of the manufacturer:
Hermann Hartje KG, Deichstr. 120 – 122, 27318 Hoya/Weser, Germany
This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user. The declaration is no more valid, if the product is modified.

Herewith we declare, that the product described below:

E-Bike VICTORIA model:

Avyon 2, Avyon 8, Touring 3, Touring 4, Touring 5, Touring 6

Modelyear 2023 + battery charger

is complying with all essential requirements of the Machinery Directive 2006/42/EC and Directive 2014/30/EU relating to electromagnetic compatibility.

The following technical standards were used:

DIN EN ISO 4210:2021-01 Cycles -- Safety requirements for bicycles
DIN EN 15194:2018-11(D) Electrically power assisted cycles (EPAC)

Hoya/Weser, August 2022

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20 Legal notice

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The user manual is a supplemental user manual for your bicycle and meets the requirements and the domain of validity of the DIN EN 15194 and DIN EN 82079-1 standards.

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