

T.E.C.

TAILORED
ENERGY
CONCEPT

FOR SHIMANO STEPS E8000

ORIGINAL USER GUIDE PEDELEC

EPAC ELECTRICALLY POWER ASSISTED CYCLE

| EN

BEFORE USING
YOUR PEDELEC FOR THE
FIRST TIME, READ THIS
USER GUIDE
CAREFULLY.

CONTENTS

I. Introduction	EN-4	3. Before your first ride	EN-15	3.8	Gears	EN-23		
I.I	Explanation of the safety information symbols	EN-4	3.1	Attaching the pedals	EN-16	3.9	Wheel	EN-23
I.II	The Pedelec Shimano Steps E8000	EN-5	3.2	Adjusting the saddle height	EN-16	3.9.1	Changing the wheel	EN-23
II. Information pack	EN-5	3.2.1	Determining the correct saddle height	EN-16	3.9.1.1	Wheel with axle nut*	EN-23	
II.I	Booklet and CD	EN-6	3.2.2	Adjusting the saddle height: Saddle clamp bolt(s)*	EN-17	3.9.2	Quick-release wheels*	EN-24
II.II	Component guides	EN-6	3.2.3	Adjusting the saddle height: Quick-release lever*	EN-17	3.9.3	Wheel with axle shaft*	EN-25
II.III	Service book	EN-7	3.3	Shifting and tilting the saddle	EN-18	3.9.4	Rims	EN-27
II.IV	EU declarations of conformity	EN-7	3.3.1	Single-screw supports: Shifting and tilting the saddle	EN-19	3.9.5	Tyres	EN-27
III. Cycle dealers	EN-7	3.3.2	Twin-screw supports: Shifting and tilting the saddle	EN-19	3.10	Suspension fork*	EN-27	
IV. Legal regulations for pedelecs	EN-7	3.3.3	Clamp attachment: Shifting and tilting the saddle	EN-20	3.10.1	Compression rate	EN-27	
IV.I	International	EN-7	3.4	Adjusting the sprung seatpost	EN-20	3.10.2	Rebound damping	EN-27
IV.II	Germany	EN-8	3.5	Adjusting the height and angle of the handlebars	EN-20	3.10.3	Lockout system	EN-28
IV.II.I	Lights	EN-8	3.6	Braking	EN-21	3.10.4	Air system*	EN-28
IV.II.I.I	Replacement bulbs	EN-9	3.7	Chain	EN-21	4. Before every trip	EN-28	
IV.II.II	Disposal	EN-9	3.7.1	Checking and adjusting the chain tension	EN-22	5. Quick-start guide	EN-29	
V. Intended use	EN-10	3.7.2	Checking for chain wear	EN-22	5.1	Charging the battery	EN-29	
VI. Pedelec weight*	EN-10	3.7.3	Chain cleaning and maintenance	EN-22	5.2	Switching on the pedelec	EN-30	
VII. The pedelec and its components	EN-11				5.3	Battery charge level	EN-31	
1. General safety information	EN-12				5.4	Changing assist mode	EN-31	
2. Protection from theft, manipulation and loss	EN-14				5.5	Activating push assistance	EN-33	
					5.6	Changing the ride data display	EN-34	
					5.7	Configuring settings in the main menu	EN-34	
					5.7.1	Accessing the main menu	EN-34	
					5.7.2	Navigating within a menu	EN-34	
					5.7.3	Returning from a menu	EN-35	
					5.8	Switching off the pedelec	EN-35	



6. Drive unit, display and easy-reach control

EN-35

6.1 Safety information

EN-35

6.2 Technical details

EN-36

6.3 Overview and basic functions

EN-37

6.3.1 Menu structure

EN-38

6.3.1.1 Clearing trip data

EN-39

6.3.1.2 Time

EN-39

6.3.1.3 Bluetooth LE

EN-40

6.3.1.4 Bluetooth LE/ANT

EN-41

6.3.1.5 Brightness

EN-42

6.3.1.6 Signal

EN-42

6.3.1.7 Unit

EN-43

6.3.1.8 Language

EN-43

6.3.1.9 Settings

EN-43

6.3.1.10 Derailleur reset

EN-43

6.3.1.11 Quit

EN-44

6.4 Tips

EN-44

6.4.1 Transporting your pedelec

EN-44

6.4.2 Storage

EN-45

6.4.3 Cleaning

EN-45

7. Battery

EN-46

7.1 Safety information

EN-46

7.2 Technical data - battery

EN-48

7.3 Tips

EN-48

7.3.1 Range

EN-48

7.3.2 Storage

EN-49

8. Battery charger

EN-49

8.1 Safety information

EN-49

8.2 Technical details

EN-51

8.2.1 LED display on the charger

EN-52

8.3 Tips

EN-52

8.3.1 Cleaning

EN-52

8.3.2 Storage

EN-52

9. Fault

EN-53

9.1 Codes

EN-53

9.1.1 Warning codes

EN-53

9.1.2 Error codes

EN-54

9.2 Drive unit, display and support switch

EN-55

9.3 Battery

EN-56

9.4 Charger

EN-57

9.5 Gear changes

EN-58

10. Torque settings

EN-59

I. Introduction

This user guide contains information on how to use, maintain and look after your Shimano Steps E8000 pedelec.



DANGER

Before using your pedelec for the first time, carefully read this user guide. Please also read the other items in the information pack ⇒ II. Information pack Page EN-5. Familiarise yourself with the appearance and meaning of the safety information symbols. Ensure to contact your cycle dealer ⇒ III. Cycle dealers Page EN-7 in the event clarification is required. Failure to comply with safety symbols and instructions can result in death, very serious injuries and/or damage to the bicycle. The manufacturer's liability and any warranty are deemed null and void for any damage or injury caused by a failure to adhere to safety symbols and instructions.

Ensure that your cycle dealer has provided you with all the documents included with the bike upon delivery. Keep this user manual and the other documents in the information pack for future reference. Please pass on the user manual and information pack to other people who will use, maintain or repair this pedelec. Refer to your dealer for mountings and installations which are not described in the user guides. Failure to do so can lead to uncertainty which may cause death, severe injuries and/or damage to equipment.



You can download this guide, the “Original User Guide | General” and parts of the information pack as PDFs from our website (www.derby-cycle.com/en/downloads/downloads.html). There you will also find links to the websites of the various component manufacturers.



You will find a dealer's user guide for our cycle dealers on si.shimano.com.

I.I Explanation of the safety information symbols



DANGER

This symbol  combined with the signal word "DANGER" indicates a potentially dangerous situation. Failure to comply with this safety instruction can result in death or very serious injuries.



WARNING

This symbol  in conjunction with the signal word "WARNING" indicates a potentially dangerous situation. Failure to comply with this safety warning can result in serious injury.

CAUTION



This symbol  combined with the signal word "CAUTION" indicates a potentially dangerous situation. Failure to comply with this safety instruction can result in minor injuries.

IMPORTANT



This symbol  combined with the signal word "IMPORTANT" indicates a potentially dangerous situation. Failure to comply with this safety instruction can result in damage to the pedelec and its components.



This symbol indicates helpful tips, useful or important information about the product or its additional uses. It does not indicate a dangerous or harmful situation.

I.II The Pedelec Shimano Steps E8000

Your Pedelec Shimano Steps E8000 is an EPAC (electrically power assisted cycle). When the assist mode is switched on, the electric motor provides assistance as long as you are pedalling. You can control the degree of assistance, which is adjusted using various assist modes ⇒ [5.4 Changing assist mode Page EN-31](#). The drive assistance is dependent on the force and speed of your pedalling and the speed you are travelling. Motor assist stops as soon as you stop pedalling and when the battery is discharged or if you reach a speed of 25 km/h. So pedalling harder is required if you want to travel faster than 25 km/h.

II. Information pack

In addition to this user guide, your Pedelec Shimano Steps E8000 comes with a booklet and CD, service book, two declarations of conformity and component guides. The following points describe the contents of the information pack in more detail.

II.I Booklet and CD

The booklet contains a “Quick-start guide” describing how to check the torque settings, attach the pedals and adjust the height of the saddle. At the back of the booklet is a CD. The CD includes the "Original User Manual | General" in several languages, which provides general information on the different types of bikes and their components. If you go online you can follow a link to our website. The CD can be played on any standard PC or laptop. Proceed as follows:

Method A

1. Insert the CD.
2. Left-click the shelexec.exe file twice.
3. Select the required language.
4. Select "Open User Guide from CD" or "Check Online for New Version of User Guide".

Method B

1. Insert the CD.
2. Right-click once "Open Folder to Show Files".
3. Left-click "Start" twice.
4. Select the required language.
5. Select "Open User Guide from CD" or "Check Online for New Version of User Guide".



You will need the Adobe Acrobat Reader software to read the manuals. It is included on the CD; you can also download it for free from <https://acrobat.adobe.com/uk/en/acrobat/pdf-reader.html>.

The paper version of ‘Original User Guide | General’ can be ordered free of charge from:

Derby Cycle Werke GmbH
Siemensstraße 1-3
49661 Cloppenburg, Germany
info@derby-cycle.com

II.II Component guides

In the component guides you will find important information on using and maintaining the components of your pedelec. They often also provide information on any warranties. If there is no specific user guide included for the particular component you are interested in, look in our “Original User Guide | General” (CD) ⇒ [II.I Booklet and CD Page EN-6](#) or on the component manufacturer's website. You can also find a list of our component manufacturers at [www.http://www.derby-cycle.com/en/downloads/downloads.html](http://www.derby-cycle.com/en/downloads/downloads.html).



II.III Service book

In the accompanying service book, you will find the warranty terms, a list of wearing parts, a cycle passport, and forms to use for initial sale, maintenance and owner changes.



DANGER

Keep the service book appropriately up-to-date and adhere to the maintenance intervals. Components can fail if wear and damage are not identified in good time. If this happens whilst you are cycling, you could injure yourself very seriously or even die. Replace any worn, damaged or bent components before using the bike again.

II.IV EU declarations of conformity

EU declarations of conformity confirm that we have complied with all of the safety requirements of the regulations applicable to the pedelec and the battery charger.

III. Cycle dealers

Refer to your dealer in the event of faulty operation or other problems. On page 63 you will find a link to the brand website with all cycle dealers in your region.

*dependent on model

IV. Legal regulations for pedelecs

IV.I International



DANGER

Never ride "hands free". You could fall off and seriously injure or even kill yourself – and also be liable for prosecution. You must always have at least one hand on the handlebars.

Always observe the relevant national traffic regulations. Otherwise you run the risk of a serious accident. Before using your pedelec abroad, find out about the regulations applicable in that country.

Like all bicycles, the pedelec must comply with the respective national road traffic regulations and applicable standards. If you carry out any technical modifications, bear in mind the relevant national traffic regulations and applicable standards. If the cut-off speed exceeds 25 km/h and/or the speed of the push support exceeds 6 km/h, the pedelec will become liable to mandatory registration and insurance. Technical modifications can impair the function of your pedelec, resulting in damage to components. If this happens while you are riding the bike you could be severely injured or killed. Furthermore, it will invalidate the manufacturer's liability, warranty and guarantee (where applicable).



Observe the respective national regulations regarding the disposal of the drive system, display, easy-reach control, pedelec battery and charger. Otherwise you will be committing an offence and run the risk of a fine.

IV.II Germany

The following regulations (not exhaustive) were applicable in Germany when this guide was compiled (12/2016):

- » The motor may only be used as an aid to pedalling, i.e. it may only "help" when the rider is actively pedalling.
- » The average motor power must not exceed 250 W.
- » The motor power must continue to fall as the speed of the bike continues to increase.
- » The motor must cut out automatically at 25 km/h.

For you, this means:

- » There is no obligation to wear a helmet.



DANGER

In the interests of your own safety, a suitable helmet should always be worn. A cycle helmet can protect you from severe injuries. Make sure that the helmet fits properly.

- » You do not require a driving licence.
- » There is no requirement for compulsory insurance.
- » The use of cycle paths is regulated as for normal bicycles.

IV.II.I Lights

In Germany, the requirements for lights on bicycles is regulated in Section 67 of the Road Traffic Licensing Regulation (StVZO) and in the Technical Requirements for vehicle parts. Lights include both battery and dynamo-powered lights, and include reflectors that work without a power supply and simply reflect external light.

Light type	Number	Position	Characteristics
Front light	1	Front	White light
			The illuminance must be at least 10 lux at the centre of the beam at a distance of 10 metres.
Reflector	At least 1	Front	White
			The reflector can be integrated into the front light.
Rear light	1	Rear	Red light
			The lowest point of the illuminating surface must not be lower than 250 mm above the road surface.
			A parking light function is also permitted.
Reflector	At least 1	Rear	Red
			The highest point of the illuminating surface must not be higher than 600 mm above the road surface.
Large reflector	1	Rear	Red
			The large reflector is marked with a Z.
			It can be integrated in the rear light.
Reflector	2	Per pedal	Yellow
			They reflect light in both directions (forwards and backwards).

Light type	Number	Position	Characteristics
Reflector (or reflective wheel stripe)	At least 2	Per wheel	Yellow
			Attached to the spokes at an angle of 180°.
			They reflect light to the sides.
Reflective stripe (or wheel reflector)	1	Per wheel	Ring-shaped reflecting white stripe.

IV.II.I.I Replacement bulbs

The replacement bulbs you will need depend on the type of lights fitted on your bike. The table below tells you what type of bulb you need:

Type	Power supply	
Front light (LED, incandescent)	6 V	2.4 W
Front light halogen	6 V	2.4 W
Rear light	6 V	0.6 W
Rear light with parking light	6 V	0.6 W
Lighting with LED lamps	LED lamps are not replaceable	
Hub dynamo	6 V	3 W

IV.II.II Disposal

Do not dispose of the drive system, display, easy-reach control, pedelec battery or charger in the household waste. Hand them in at the designated places (such as a recycling centre, battery collection point or cycle dealer). This icon is only applicable in the EU. Comply with local regulations when disposing of used batteries. If you are unsure, contact your dealer.



Electrical devices marked with this symbol must not be disposed of in household waste.

V. Intended use

This bicycle is not designed and equipped for use on public roads. The equipment stipulated must be fitted to the cycle before it may be used on public roads. It is designed to be used off-road, but not for competitions. The manufacturer and dealer accept no liability for damage resulting from any use beyond this definition and/or failure to comply with the safety information and instructions in the user guide. This applies particularly to the use of this bicycle in competitions, overloading and the failure to properly rectify faults. Also included in the definition of intended use are conformance to the operating, maintenance and repair conditions in the user guide and service book ⇒ [II.III Service book Page EN-7](#) stipulated by the manufacturer. Fluctuations in consumption and battery power, and a reduction in capacity due to the cycle's age, are commonplace and technically unavoidable and as such do not represent material defects.

VI. Pedelec weight*



Pedelecs are heavier than normal bicycles. The exact weight depends on the equipment fitted. If you want to know the precise weight of your pedelec, we recommend having it weighed by a cycle dealer. Most dealers have a professional and accurate cycle weigher.

VI.I Overall weight



DANGER

Do not exceed the permitted overall weight of the pedelec as this can result in fracturing or failing of important safety parts (such as the brakes). If this happens while you are riding the bike, it can lead to severe falls – with fatal consequences.

Total weight = Pedelec weight + Weight of rider + Weight of luggage

Bike type	Overall weight permitted	Weight of rider**
Pedelec Shimano Steps E8000	120 kilograms	Max. 99 kilograms

** for a pedelec weighing 21 kilograms.

VII. The pedelec and its components



- | | | | |
|----|------------------|----|-----------------------------------|
| 1 | Seat post clamp | 16 | Spokes |
| 2 | Seat post | 17 | Motor |
| 3 | Saddle | 18 | Crank |
| 4 | Rail binder bolt | 19 | Chain |
| 5 | Handlebar stem | 20 | Axle nut |
| 6 | Shifter | 21 | F.O.L.D* spring |
| 7 | Handlebars | 22 | Seat tube |
| 8 | Display | 23 | Down tube with integrated battery |
| 9 | Brake lever | 24 | ⏻ button |
| 10 | ⊕/⊖ button | 25 | Charging socket |
| 11 | Suspension fork | | |
| 12 | Disc brake | | |
| 13 | Front wheel hub | | |
| 14 | Tyre | | |
| 15 | Wheel rim | | |

*dependent on model

1. General safety information

Comply with the safety and user instructions at the start of the following sections.



DANGER

We discourage allowing children under the age of 14 years to ride pedelecs. They may not be able to cope with the speed. Serious accidents and falls might result.

Wear a cycle helmet. While there is no legal obligation to wear one, you should always wear a suitable cycle helmet for your own safety. A cycle helmet can protect you from severe injuries. Make sure that the helmet fits properly.

Keep your hands and other body parts and clothing away from moving parts, otherwise you can become ensnared, have a serious fall and injure yourself.

Adapt your riding style to the prevailing traffic conditions, otherwise you could fall off and involve yourself and others in a serious accident. Take into consideration the longer braking distances needed on wet or icy roads. Think ahead, anticipating the actions of other road users and reduce your speed. Avoid sudden jerky movements of the handlebars and braking actions. Dismount if you ever feel unsafe.

Only use the bicycle for its intended purpose ⇒ [V. Intended use Page EN-10](#), otherwise component failure may result. If this happens whilst you are cycling, you could injure yourself very seriously or even die.



DANGER

Check that the brakes work and that the handlebars can move freely before every ride. Do not use the bike if it is not in perfect technical condition. If you are unsure, ask your cycle dealer to check it over.

Inspect your pedelec before every trip, and after each time it has been transported anywhere or left unattended ⇒ [4. Before every trip Page EN-28](#). Components might fail if wear and damage are not detected early enough. If this happens whilst you are cycling, you could injure yourself very seriously or even die. The additional power means higher loads are applied to wearing parts on a pedelec than on a normal cycle. Replace any worn, damaged or bent components before using the bike again.

Do not exceed the overall weight permitted for the pedelec because parts important for safety might fracture or fail ⇒ [VI.I Overall weight Page EN-10](#). If this happens while you are riding the bike, severe falls might result – with fatal consequences.

Contact your cycle dealer when wearing parts and other components need to be replaced. We recommend asking your cycle dealer to assemble and adjust the bike.

Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something yourself, a full list of torque settings is in Section ⇒ [10. Torque settings Page EN-59](#) (strict adherence to which is a requirement).

DANGER



Only use original replacement parts. Replacement parts from other manufacturers can impair the function of your pedelec. Serious accidents can result.

Ask your cycle dealer to show you how to use, and explain, the special features of the components. Please also follow the component guides. We recommend asking your cycle dealer to assemble and adjust the bike. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something yourself, a full list of torque settings is in Section ⇒ [10. Torque settings Page EN-59](#) (strict adherence to which is a requirement).

WARNING



Do not ride in unfavourable lighting conditions (fog, rain, dusk, darkness) without adequate lights ⇒ [IV.II.1 Lights Page EN-8](#). Failure to do so can result in accidents and serious injuries.

Always switch off the pedelec and unplug the motor plug on the motor before starting work on the pedelec. You risk being seriously injured if the system is still switched on.

1. Switch off the pedelec using the  button.
2. Remove the motor casing.
3. Unplug the round power supply plug on the motor.

CAUTION



Do not open up the motor, display, battery or charger as you could injure yourself. Parts might also be damaged beyond repair, invalidating the warranty. Contact your cycle dealer when problems arise.

IMPORTANT



Always park your pedelec so that it cannot tip over. Components can be damaged if the bike tips over. If your bike is not equipped with a kick stand, one can be fitted if required. Please contact your cycle dealer.

Do not clean the pedelec with a water hose or high pressure washer. Although the components are sealed, damage to the cycle may still result. Clean the pedelec with a soft damp cloth.

Handle the product with care and avoid heavy shocks.

2. Protection from theft, manipulation and loss

DANGER



Protect your pedelec from unauthorised access. Serious injury may result if third parties modify components (e.g. the brakes) without your knowledge. Inspect your pedelec before every trip, and after each time it has been transported anywhere or left unattended ⇒ [4. Before every trip Page EN-28](#). If your bike is damaged, only ride it again once the damage has been rectified. Your bike will not be replaced under warranty if lost or stolen.

The following measures can help you to protect your pedelec from theft and manipulation and to recover it if it has been stolen:



Always lock the bike and battery even if you leave it for a short while. Ideally, the lock(s) should block the wheel powered by the motor. Do not leave the key in. To be on the safe side, you can also remove the battery. A pedelec must also be secured with a lock when parked outside residential areas (e.g. in a shed or basement).

Do not park your pedelec in deserted locations – especially for long periods. If possible, park your pedelec in private or communal garages or individual bike lockers which have surveillance.



Attach your pedelec to a fixed object (such as a tree, street lamp or fence) so that it cannot be carried away.

Quick-release wheels should be attached to a fixed object together with the frame. This prevents the wheel from being stolen. Alternatively, the quick-release levers can be replaced by an anti-theft device. Contact your cycle dealer if you have questions on this.

Use a high-quality bike lock. Invest about 10% of the purchase price of the bike in locks. Your cycle dealer will be able to fit a suitable frame lock if your bike does not already have one. You can also use other types of bike lock. Ask your cycle dealer for advice.

Make a note of the important details of your pedelec (e.g. in the service book ⇒ [II.III Service book Page EN-7](#), bike passport) and have it registered by the police. This makes it easier to describe and identify if stolen.



Have the police code your pedelec; the address and initials of the owner are engraved on the frame in an encrypted form. Coding makes the illegal resale of a bike more difficult and deters thieves. A coded bike also makes it easier to identify the owner.

Bicycle theft is often covered by household contents insurance. Check the terms of your insurance policy as soon as possible.

3. Before your first ride

Make sure that your pedelec is adjusted to your height and ready to use. Familiarise yourself with the basic functions of your pedelec.



DANGER

Ask your cycle dealer to show you how to use, and explain, the special features of the pedelec and its components. Please also follow the component guides. We recommend having your cycle dealer perform all assembly and adjustment work. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die. If you do have to tighten something yourself, a full list of torque settings is in Section ⇒ [10. Torque settings Page EN-59](#) (strict adherence to which is a requirement).



DANGER

Adjusting the pedelec to your height. If the bike is not correctly adjusted to your height, you can lose control of the bike and fall badly.

Practise braking and riding with the assist function in a safe place before venturing into traffic. If you do not familiarise yourself with the operation and higher speed of your pedelec, you could cause a serious accident. Ride in ECO mode until you feel confident enough to try the higher modes ⇒ [5.4 Changing assist mode Page EN-31](#). Dismount if you ever feel unsafe.



IMPORTANT

Do not turn the bike upside down. This may damage the display or gear lever.

3.1 Attaching the pedals

1. Screw the right-hand pedal (marked 'R') into the right-hand pedal crank in a clockwise direction.
2. Screw the left-hand pedal (marked 'L') anticlockwise into the left-hand pedal crank.



DANGER

Screw the pedals in straight, otherwise you could damage the thread on the pedal crank; if this happens when you are cycling, a severe fall could result.

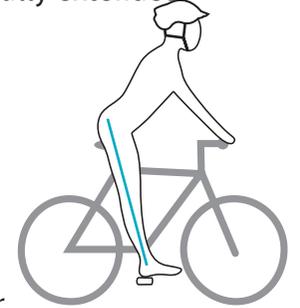
3. Tighten both pedals towards the front wheel with a torque setting of 35-55 Nm.

3.2 Adjusting the saddle height

3.2.1 Determining the correct saddle height

1. Sit on the pedelec and at the same time lean against a wall.
2. Turn the foot pedal on the opposite side to the wall to its lowest point.
3. Place your heel on the pedal. Your leg should be fully extended.

4. If your leg is not fully extended when your heel is on the pedal, raise the saddle. Lower the saddle if you cannot reach the pedal. The following sections explain how to adjust the saddle height on your bike. The seatpost can be fastened using the saddle clamp bolt ⇒ [3.2.2 Adjusting the saddle height: Saddle clamp bolt\(s\)* Page EN-17](#) or quick-release lever ⇒ [3.2.3 Adjusting the saddle height: Quick-release lever* Page EN-17](#).



For 3. Extend leg

WARNING



Seatpost marking

The seatpost is marked to indicate how far you may pull it out from the frame. Never pull the seatpost further out than the marking. This could cause it to bend or break, and cause you to fall.

3.2.2 Adjusting the saddle height: Saddle clamp bolt(s)*

1. Undo the saddle clamp bolt(s) by turning it/them anticlockwise with an Allen key.
2. Move the seatpost into the right position.
3. Tighten the saddle clamp bolt(s) again by turning it/them clockwise ⇒ 10. *Torque settings Page EN-59.*
4. Test the tightness of the saddle by trying to twist it.



For 1. Loosen the saddle clamp bolt(s)



For 3. Tighten the saddle clamp bolt(s)

3.2.3 Adjusting the saddle height: Quick-release lever*

DANGER



The quick-release lever must be correctly closed before you set off. Otherwise the seatpost can loosen or fracture – if that happens while you are riding the bike you could fall off, resulting in serious injuries.

1. Open the quick-release lever by swinging the lever by 180°. You will now usually be able to see the word 'OPEN' on the inside of the lever.
2. Close the quick-release lever by swinging the lever by 180°. You will now usually be able to see the word 'CLOSE' on the outside of the lever.



For 1. Quick-release lever open



For 2. Quick-release lever closed

*dependent on model



DANGER

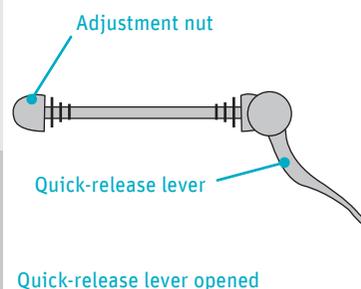
It should be hard enough to close the quick-release lever that you need to use the ball of your hand (120 N: corresponds to a weight force of 12 kg). You should have the mark of the lever imprinted on your hand. Otherwise, it could open when you are cycling, which could lead to the seatpost coming loose and causing you to fall. If you close the quick-release lever too tightly, the seatpost can break; if this happens when you are cycling, you could fall.

Quick-release lever is too easy to close

1. Turn the adjustment nut **clockwise**.
2. Swing the quick-release lever closed again.

Quick-release lever is too stiff to close

1. Turn the adjustment nut **anticlockwise**.
2. Swing the quick-release lever closed again.



3. Try to twist the saddle to check that it is firmly fixed.

3.3 Shifting and tilting the saddle



DANGER

Never clamp the saddle in the curve of the saddle rail; always do it in the straight section. Only shift the saddle within the straight section (fig. 1). Saddles that stay clamped outside this area can fail (fig. 2).

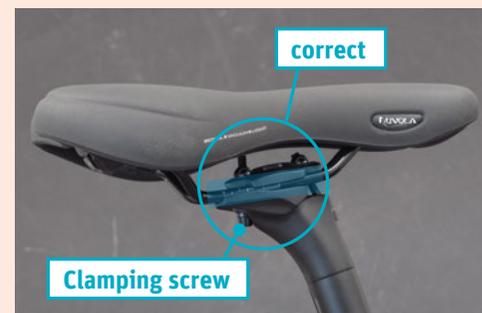


Fig. 1



Fig. 2

Use a torque wrench to tighten the clamping screws. Observe the specified torque setting. If no value is shown on the component, use the torque settings from the following table:

Thread	Tightening torque [Nm]
M5 / M6 / M8	M5: 5.5 / M6: 5.5 / M7: 14 / M8: 20

Failure to comply can result in screws/bolts becoming loose, tearing away or fracturing. If that happens while you are riding the bike, components may come off and you could have a severe crash. If screws are overtightened, components can also be damaged.

3.3.1 Single-screw supports: Shifting and tilting the saddle

1. Loosen the clamping screw by turning it anticlockwise. Turn the screw completely two to three times at most or the whole mechanism could fall apart.
2. Move the saddle backwards or forwards as required.
3. Tilt the bicycle saddle to the desired angle.
4. Tighten the clamping screw by turning it clockwise with a torque wrench.
5. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.



For 1. Loosen the clamping screw

3.3.2 Twin-screw supports: Shifting and tilting the saddle

DANGER



Screw the clamping screws fully in a straight position in the nuts.
Failure to do so can result in the screws tearing out of the nuts.



1. To move the saddle, loosen the front and rear screws by turning them anticlockwise. Turn the screws completely two to three times at most or the whole mechanism could fall apart.



For 1. Loosen screws

2. Move the saddle backwards or forwards as required.
3. Tighten the screws using a torque wrench to turn them clockwise.
4. To alter the angle of the saddle, loosen the front screw by turning it anticlockwise. Turn the screw completely two to three times at most or the whole mechanism could fall apart.
5. Tighten the front screw by the same number of turns.
6. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.

3.3.3 Clamp attachment: Shifting and tilting the saddle

1. Turn the clamping nut clockwise to loosen it. You may need to keep the nut on the other side in place with a second key.
2. Move the saddle backwards or forwards as required.



For 1. Loosen clamping nut

3. Tilt the bicycle saddle to the desired angle.
4. Turn the clamping nut clockwise to tighten it. You may need to keep the nut on the other side in place with a second key. Observe the correct torque setting.
5. Ensure that the newly-tightened saddle does not tip; test it by pressing down on the front and back alternately.

3.4 Adjusting the sprung seatpost

DANGER



It is best to ask your cycle dealer to adjust the suspension elements of the seatpost.

1. Remove the seatpost.
2. Tighten the suspension adjustment screw with an Allen key (6 mm AF) in the clockwise direction to reduce the suspension or loosen anticlockwise to increase the suspension.

DANGER



The suspension adjustment screw must not protrude from the seatpost, otherwise the screw/seatpost can loosen – if this happens while riding you could fall off, resulting in serious injuries.



Suspension adjustment screw

Screw must not protrude from the seatpost

3.5 Adjusting the height and angle of the handlebars

DANGER



Ask your cycle dealer to perform these adjustments. You can otherwise run the risk of loosening the handlebars which could lead to a fall causing severe injuries.

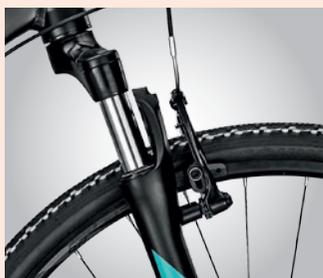
3.6 Braking

Make sure that you can always reach the brakes comfortably and that you are familiar with their operation and position. Note which brake lever operates the front and rear brakes. If your pedelec is fitted with a back pedal or coaster brake, you can operate it by pedalling backwards.

DANGER



Practise braking in a safe place before venturing into road traffic. In some instances, the braking effect can be different or stronger than what you are used to. If you do not take the time to familiarise yourself with the braking effect, you could cause a serious accident. Practise until you feel safe. Dismount if you ever feel unsafe.



Rim brake

Rim brakes: Avoid continual, uninterrupted braking on long downhill stretches because it causes the braking effect to diminish and/or tyre damage. Brake intermittently with intervals in between to allow the airflow to cool the braking system. If necessary, make regular stops to ensure adequate cooling.

Replace the brake pads when they reach the safe wear limit. Using worn brake pads can result in serious injuries with fatal consequences.

CAUTION



Disc brake

Disc brakes: Avoid touching the brake discs after intensive use of the brakes – they can become very hot. You could burn yourself if you touch them.

3.7 Chain



Bicycle chain

WARNING



Always switch off the pedelec and unplug the motor plug on the motor before starting work on the pedelec. You risk being seriously injured if the system is still switched on.

1. Switch off the pedelec using the  button.
2. Remove the motor casing.
3. Unplug the round power supply plug on the motor.

CAUTION



Check the chain for signs of wear before every trip. A worn or damaged chain can break. If this happens while you are riding the bike, you can easily injure yourself.

3.7.1 Checking and adjusting the chain tension

Measuring the chain tension

1. Switch off the pedelec.
2. Press the chain up or down at its tautest point. The tension is correct if you can move the chain up and down by about 5 mm.
3. Check the chain at four or five points over a complete revolution of the crank.

Adjusting the chain tension

1. Switch off the pedelec.
2. Undo the rear wheel nuts.
3. Remove the brake anchor as required.
4. Pull the rear wheel back in the drop-outs until the chain just has the permissible amount of play.
5. Carefully tighten all bolts in a clockwise direction to a torque setting of 35 – 40 Nm. Make sure the wheel is refitted straight.

3.7.2 Checking for chain wear

1. Switch off the pedelec.
2. Check chain wear with a chain wear indicator or a vernier calliper.
3. Replace the chain if it is worn.

3.7.3 Chain cleaning and maintenance



Lubricate the chain after riding in the rain. Clean and lubricate it when you clean the wheel. Under no circumstances use basic or acidic cleaners to remove rust. Using cleaners of this kind can damage the chain.

1. Switch off the pedelec.
2. Brush the chain coarsely with a hand brush.
3. Then remove the old chain oil with a dry cloth.
4. Now you can oil the chain. Follow the application instructions from the chain oil supplier.
5. When you have finished, turn the crank to distribute the chain oil.

3.8 Gears

The gears are operated by controls (gear lever, twist grips, buttons, etc.) on the handlebars. Switching gears allows you to change gears on your bicycle and hence adapt the transmission ratio to riding conditions. For a straight, level stretch, a high transmission ratio (high gear) makes sense in order to achieve higher speeds and avoid having to pedal too much. Once you go up a slope, a lower transmission ratio (lower gear) is more useful, as this allows you to climb the slope with less effort. Select the gears so that your legs are always moving at a steady pace.

Derailleur

This system lifts the chain on to a sprocket when the gear is changed. The chain must continue moving so that the teeth of the sprocket can engage with the chain links easily and smoothly. For a successful gear change, therefore, you must keep pedalling forwards, never backwards – but at the same time pedal lightly without force.



Derailleur

IMPORTANT



You should clean the pinions at regular intervals with a neutral cleaner. Cleaning with a neutral cleaner and then lubricating can effectively extend the life span of the pinions and chain.

3.9 Wheel

DANGER



Check that the wheels are securely mounted on the bicycle before riding. If the wheels are not securely mounted, they can come loose during the ride and cause serious injury.

3.9.1 Changing the wheel

3.9.1.1 Wheel with axle nut*

Removing the rear wheel

1. Switch off the pedelec.
2. Change the gear to the one recommended by the gear manufacturer for disassembly.
3. Remove the gear shift cable from the rear wheel.
4. Undo the axle nuts using a 15 mm spanner, turning anticlockwise.
5. Take off the chain.
6. Remove the rear wheel.

*dependent on model

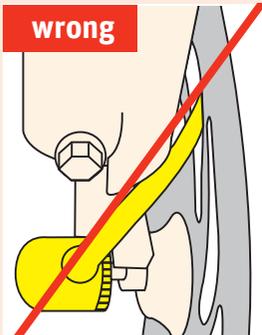
Replacing the rear wheel

1. Attach the chain.
2. Insert the rear wheel centrally in the drop-outs as far as it will go.
3. Re-attach the gear shift cable.
4. If necessary, fasten the brake anchor.
5. Tighten the axle nuts using a 15 mm spanner, turning clockwise.
6. Reinsert the battery.

3.9.2 Quick-release wheels*



DANGER



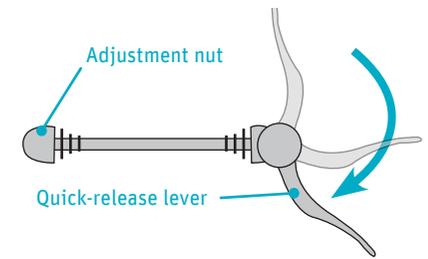
Quick-release lever and brake disk collide

Front wheel: The quick-release lever must be positioned on the opposite side to the brake disc (where fitted). If the quick-release lever is on the same side as the brake disc, there is a risk that they can clash and lock the front wheel (see diagram), which can cause a serious accident.

All quick-release systems must be correctly tightened before you set off. Otherwise the components can loosen – if that happens while riding you could fall off, resulting in serious injuries.

Removing the front wheel

1. Switch off the pedelec.
2. Open the axle lever by folding it by 180°. You will now usually be able to see the word 'OPEN' on the inside of the lever.
3. Undo the adjustment nut by turning it slightly **anticlockwise**.



For 2. Open the quick-release lever

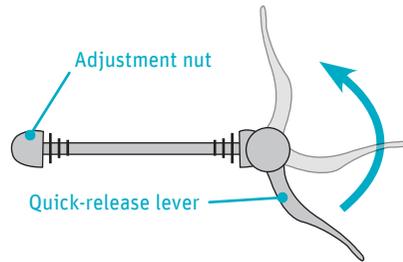


If your bike is fitted with rim brakes it is sensible to release them before you remove the front wheel. Otherwise you may not be able to remove the front wheel.

4. Remove the front wheel.

Replacing the front wheel

1. Insert the wheel into the front fork ends.
2. Gently turn the adjustment nut on the quick-release lever in a **clockwise** direction.
3. Close the quick-release lever by swinging the lever back 180°. You will now usually be able to see the word 'CLOSE' on the outside of the lever.



For 3. Close the quick-release lever

DANGER

It should be hard enough to close the quick-release lever that you need to use the ball of your hand (120 N: corresponds to a weight force of 12 kg). You should have the mark of the lever imprinted on your hand. Otherwise it could open when you are cycling, which could lead to the wheel becoming loose and cause you to fall.

Quick-release lever is too easy to close

1. Open the quick-release lever.
2. Turn the adjustment nut **clockwise**.
3. Swing the quick-release lever closed again.
4. Repeat if necessary.

Quick-release lever is not easy to close

1. Open the quick-release lever.
2. Turn the adjustment nut **anticlockwise**.
3. Swing the quick-release lever closed again.
4. Repeat if necessary.



Quick-release levers cannot be closed by simply turning the lever.

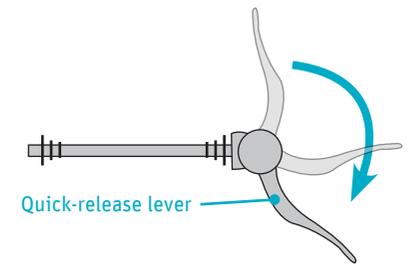
DANGER

If you have released the rim brakes to remove the wheel, you must close them again, otherwise you will not be able to brake and run the risk of serious injury.

3.9.3 Wheel with axle shaft*

Removing the front wheel

1. Switch off the pedelec.
2. Open the quick-release lever on the front wheel by turning it down 180°.
3. Hook the quick-release lever into the slot and turn it anticlockwise until the quick-release axle protrudes from the axle hole about 1 cm.
4. Lift out the front wheel and remove the quick-release axle.



For 2. Open the quick-release lever

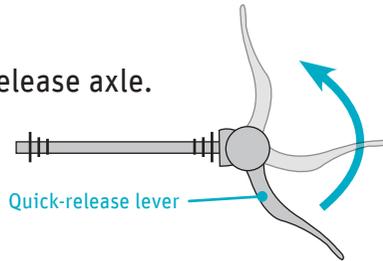


If your bike is fitted with rim brakes you must release them. Alternatively, you can deflate the front tyre. Otherwise you may not be able to remove the front wheel.

5. Remove the front wheel.

Replacing a wheel

1. Apply a thin layer of grease to the quick-release axle.
2. Push the wheel into the front forks and align with the axle holes.
3. Reinsert the quick-release axle.
4. Move the quick-release lever to the open position.
5. Hook the quick-release lever into the slot and turn it clockwise. This will screw the axle in the thread. Ensure that the wheel is correctly centred.
6. Close the quick-release lever by swinging the skewer back 180°.



For 6. Close the quick-release lever

DANGER



It should be hard enough to close the quick-release lever that you need to use the ball of your hand (120 N: corresponds to a weight force of 12 kg). You should have the mark of the lever imprinted on your hand. Otherwise it could open when you are cycling, which could lead to the wheel becoming loose and cause you to fall.

Quick-release lever is too easy to close

1. Open the quick-release lever.
2. Hook the quick-release lever into the slot and turn it clockwise. This will screw the axle in the thread. Make sure that your wheel is correctly centred.
3. Close the quick-release lever.
4. Repeat if necessary.

Quick-release lever is not easy to close

1. Open the quick-release lever.
2. Hook the quick-release lever into the slot and turn it anticlockwise until the quick-release axle protrudes slightly from the axle hole.
3. Close the quick-release lever.
4. Repeat if necessary.

3.9.4 Rims

Cleaning

1. Switch off the pedelec.
2. Brush the rims with a hand brush. Heavier soiling can be removed with a soft, damp cloth.

IMPORTANT



When you are cleaning the rims, make sure that no water gets into the motor. Water ingress can damage the motor.

3. Leave to dry.

3.9.5 Tyres

DANGER



Do not either overinflate or underinflate the tyres. If the air pressure is too high, this could lead to a worst-case scenario of the tyres bursting and you could fall. On the other hand, if the air pressure is constantly too low, the tyre can wear prematurely. The maximum permissible pressure is marked on the side of the tyre in bar and psi (pounds per square inch). You can measure the tyre pressure yourself by using a tyre gauge. Alternatively, you can contact your cycle dealer.

3.10 Suspension fork*



Please observe the contents of the fork manufacturer's user guide!

3.10.1 Compression rate

The compression rate refers to the speed at which a spring is compressed. To adjust the compression rate, move the rotary controller towards - (= greater compression rate) or + (= lower compression rate).



Adjust the compression rate

3.10.2 Rebound damping

Rebound damping describes the speed at which a spring expands. To adjust the rebound damping, rotate the red setting wheel on the underside of the fork to the open position (= greater spring expansion speed) or to the closed position (= lower spring expansion speed).

3.10.3 Lockout system

If your suspension forks are fitted with a lockout system, it is possible to lock the suspension. There are some riding situations where that can be useful: for example, if you are riding up a hill or if you are standing up from the saddle when accelerating. To switch the suspension to fixed, turn the rotary control to 'LOCK' (or alternatively: ). To reactivate the suspension, turn the control to the 'OPEN' position.



Locking the suspension

LOCK/ 

Suspension locked

OPEN

Suspension activated

DANGER



Do not ride over rough terrain with the suspension locked. It can damage the suspension forks. A broken fork could cause you to fall off and seriously injure yourself.

3.10.4 Air system*

On some suspension forks it is possible to alter the air pressure. You will need assistance from your cycle dealer to do this, or if you feel confident of doing it yourself, a suspension fork pump with a pressure gauge and the suspension fork manufacturer's installation manual. The valve with cap (e.g. marked 'AIR') is usually located on the left-hand side of the fork.



Adjust air pressure

4. Before every trip

DANGER



Replace any damaged (e.g. cracks, grooves) or bent components before using the bike again. Not doing so can lead to essential parts failing and cause a serious fall.

Do not use the bike if it is not in perfect technical condition. If you are unsure, ask a cycle dealer to check it over.

We recommend asking your cycle dealer to assemble and adjust the bike. Otherwise, components could become loose due to a faulty assembly. If this happens whilst you are cycling, you could injure yourself very seriously or even die.

Inspect your pedelec before every trip, and after each time it has been transported anywhere or left unattended. Use the following checklist to help you.

Checklist

Type	Characteristics
Frame / forks	Check the frame and forks for visible warping, cracks and damage.
Handlebars / front stem	Check they are seated securely. Check that the bell is working and attached correctly and securely.
Saddle / seatpost	Check that the quick-release levers / through-axles (if available) are secure.
Wheels	Check the condition (damage, foreign bodies), concentricity and pressures of the tyres.
	 The maximum permissible pressure is marked on the side of a tyre in bar and psi (pounds per square inch). Tyres should not be inflated above or below this pressure.
	Check the valves are seated securely.
	Visually inspect the rims for damage and wear.
	Check that the quick-release levers / through-axles (if available) are secured correctly.
Chain	Check the chain, pinions and sprockets for wear and damage.
Brakes	Check that the brake system (including brake levers) is working and attached correctly and securely.
	Visual inspection of the brake pads/disks.
Lighting*	Check that the light system is adjusted and in working order.
	Check that reflectors are affixed in accordance with applicable national traffic regulations.
Threaded joints	Check that all threaded joints are tightened as specified.
Luggage	Check it is attached securely.

*Before use on public roads

5. Quick-start guide



DANGER

When riding your pedelec, make sure that you are completely familiar with the starting characteristics of the vehicle before riding on public roads with multiple lanes and footpaths. If the bicycles start suddenly, this can cause accidents.

Do not pay excessive attention to the display while riding, as this can lead to accidents.

5.1 Charging the battery



DANGER

Read and follow the information on the charger specification plate, otherwise there is a risk of misuse resulting in serious injuries.

Damaged batteries must not be charged.

1. Connect the power cable to the battery charger.
2. Connect the charging cable to the charging socket on the top tube (it clicks into place).



Charging socket on down tube

For 2. Charging the battery

3. Insert the mains plug into a power socket. The green LED on the charger flashes continuously . The  button on the top tube is lit blue.
4. The charger switches off once the battery is fully charged. The green LED on the charger is continually on . The  button on the top tube is lit blue.



If the charger remains connected to the battery, the charger regularly checks whether the battery is still fully charged. The LED on the battery charger then begins to flash green again. After checking and ascertaining that the battery is full, the charger switches back and is continuously lit.

5. Remove the power cable from the socket after completing the charging process.
6. Remove the charging cable from the charging socket on the top tube.

5.2 Switching on the pedelec

DANGER



Only ride the pedelec when you can safely reach the brakes ⇒ 3.6
Braking Page EN-21.

IMPORTANT



Do not put your feet on the pedals when switching on the system. This can cause system errors.

If error W013 appears, please switch the system off and on again – after removing your feet from the pedals.

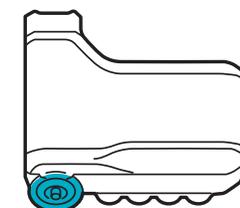


The system can only be activated if the battery is sufficiently charged.

1. Press and hold the button until the  button is lit blue.

Switching on from Sleep mode (waking up)

If the bicycle has not been used for more than 2 hours, press the  button on the top tube for three seconds. Wake-up is indicated by the brief flashing of the  button before System start-up. Please press the  button for three seconds. An acoustic signal is heard. The Shimano Steps logo appears on the display monitor, followed shortly thereafter by the main page.



Display button



 button

Switching on from standby

Press the  button on the top tube for two seconds. The  button is lit blue. An acoustic signal is heard. The Shimano Steps logo appears on the display monitor, followed shortly thereafter by the main page.



Shimano Steps logo



Main page

5.3 Battery charge level



Display of battery charge level

The battery charge level is shown in the top left of the display. Information is displayed on a battery-shaped icon with five segments, telling you how full the battery is charged. The lower the battery charge level, the fewer segments are displayed. If the battery drops below its minimum charge level, the support system will first switch to ECO, and if the charge drops further, the motor support will switch off.

Symbol	Battery charge level
	81 – 100 %
	61 – 80 %
	41 – 60 %
	21 – 40 %
	1 – 20 %*
	0 %

* The battery charge level display flashes red when the remaining charge falls below this level.

5.4 Changing assist mode

1. You must be in the start menu to change the assist mode. Select the level of assist you require by briefly pressing the / buttons.



For 1. Press the / button

You can choose between:

Display message	Assist	Power consumption	Tip
BOOST 	Assist function is working hard.	High	Use BOOST when climbing steep hills, for example.
TRAIL 	Assist is working with medium power.	Medium	Use TRAIL on gentle slopes or even surfaces, for example.
ECO 	Assist is working with low power	Low	Use ECO on extended even surfaces, for example.
	When the charge level drops below 10%, the system switches automatically to ECO mode. Assist is working with low power.	Low	Use ECO on extended even surfaces, for example.
OFF	This mode provides no pedal assistance when the system is switched on.	Very low	Set the assistance to OFF to reduce battery consumption (for example, when the charge level is low).
GO	Push assistance ⇒ 5.5 Activating push assistance Page EN-33		

- Assist starts working as soon as you start pedalling. Assistance is deactivated as soon as you stop pedalling or you reach a speed of 25 km/h.

5.5 Activating push assistance

Push assistance helps you when you are pushing the bike.

WARNING



Push assistance may only be used when pushing the pedelec.

Otherwise you could seriously injure yourself. Push assistance is not designed to be used when someone is sitting on the pedelec.



Push assistance helps you when pushing the bike (up to max. 6 km/h). This is particularly helpful when you want to push your pedelec uphill. Push assistance can be activated from any mode.

1. Press and hold the ⊖ button until **GO** is displayed.



For 1. Keep the ⊖ button pressed



If it is not possible to switch to **GO** mode, a warning sound will be heard. This can occur for example when the bicycle is underway, or when pressure is being exerted on the pedals.

2. Release the ⊖ button once **GO** is displayed.
3. Press and hold the ⊖ button again to activate push assistance. Push assistance remains active as long as the ⊖ button is pressed.



For 2. Push assistance display



If the bicycle is not moved once **GO** has been activated, push assistance deactivates automatically. To activate **GO** mode again, release the ⊖ button briefly and then press and hold it again.

If the ⊖ button is not pressed for one minute or longer, the support mode which was activated before switching to **GO** will appear once again.

4. To quit push assistance, release the ⊖ button and press the ⊕ button briefly. The support mode which was activated before switching to **GO** mode will now be displayed.

Intelligent push assistance

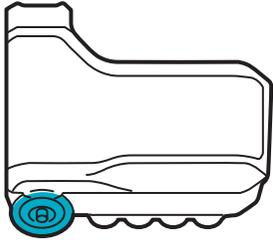
Intelligent push assistance is activated when an electrical switching system (XT Di2, XTR Di2) is connected. The system provides individual drive assistance in order to recognise the gear ratio. The function provides the rider with greater torque on sharp inclines in low gear.

5.6 Changing the ride data display



Ride data display

If you want to display different ride data on the main page, press the Display button briefly. Each press will display new ride data. This always appears in the same sequence:



Press the display button briefly

TRIP	Driving route
TOTAL	Total kilometres
RADIUS	Range
TIME	Travel time
∅ km/h	Average speed
MAX	Maximum speed
PEDAL FREQUENCY	Number of crank rotations
TIME	Current time

5.7 Configuring settings in the main menu

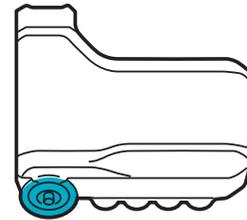


You cannot navigate to the main menu, nor can you configure any settings in this menu when the bicycle is being moved or ridden.

To configure settings in the main menu, the system must be switched on, and the start screen must be visible.

5.7.1 Accessing the main menu

1. If the start screen is displayed, press the Display button for three seconds. You are now in the main menu.



Press the display button for three seconds



Main page



Main menu

5.7.2 Navigating within a menu

1. Use the ⊕/⊖ buttons to navigate to the required option. The option selected is shown with a light background.
2. To confirm your selection, press the Display button briefly. You will then either move to the next lowest menu level or confirm your setting.

5.7.3 Returning from a menu

1. Use the ⊕/⊖ buttons to navigate to the “Quit” option. It has a light background when selected.
2. Confirm by pressing the Display button. You return to the next highest level.

5.8 Switching off the pedelec

1. Press the ⏻ button on the top tube for two seconds. The Shimano Steps E8000 switches off.



You can switch your Pedelec Shimano Steps E8000 off from any menu level. The start menu does not need to be displayed for this.

The last configured settings remain saved.

If the pedelec is not moved for 10 minutes or so, the Shimano Steps E8000 switches to Standby mode after 10 minutes. After two hours, the Pedelec switches to Sleep mode.

6. Drive unit, display and easy-reach control

6.1 Safety information



DANGER

Do not let yourself become distracted by the display. If you do not fully concentrate on the traffic, you risk being involved in a serious accident or fall with fatal consequences.



WARNING

Do not attempt any modifications to the drive unit. For example, it is not permitted to raise the cut-off speed above 25 km/h. Furthermore, the speed of the push assistance must not exceed 6 km/h. Pedelecs with modified drive power may no longer comply with the legal requirements of their relevant country. You may be liable to prosecution if you ride on public roads with a “tuned” pedelec. There is also the risk of a technical failure. Modified bikes of this type are excluded from the warranty and guarantee.

Never attempt to modify the system yourself, as this can cause problems with the system's operation.

CAUTION



Do not open the drive unit. There is a risk of electric shock. It will also invalidate any warranty claim. Only have repairs to the drive unit carried out by trained cycle dealers.

Do not touch the motor after riding at full load. It can become very hot. You could burn yourself if you touch it.

IMPORTANT



All components mounted on the drive unit, and all other drive components, may only be replaced with identical components or those approved specially for your pedelec by the manufacturer. Otherwise it may result in overloading and damage.

Do not open the display; you may damage it beyond repair.



At low temperatures, the display can react slowly. Observe the operating temperature of the display ⇒ [6.2 Technical details Page EN-36](#).

6.2 Technical details

Drive unit

Type	Brushless electric motor (DU-E8000) Free-wheel
Nominal power	250 W
Max. torque	70 Nm
Nominal voltage	36 V
Cut-off speed	25 km/h
Permissible ambient temperature in operation	-10 to +40 °C
Storage temperature	-10 to +50 °C
Recommended storage temperature	18 to 23 °C
Protection class	IP 54
Weight	2.88 kg

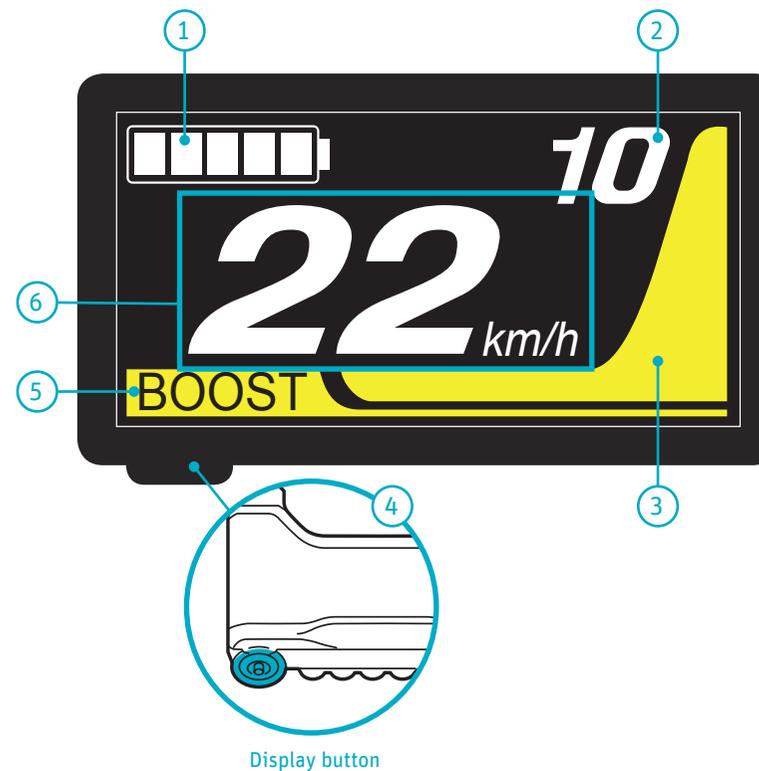
Display

Type	Colour LCD display (SC-E8000)
Permissible ambient temperature in operation	-10 to +40 °C
Storage temperature	-10 to +50 °C
Recommended storage temperature	18 to 23 °C
Protection class	IP 54
Languages	EN FR DE NL IT ES

+/- buttons

Type	Easy-to-reach control with two buttons (SW-E8000-L)
Permissible ambient temperature in operation	-10 to +40 °C
Storage temperature	-10 to +50 °C
Recommended storage temperature	18 to 23 °C
Protection class	IP 54

6.3 Overview and basic functions



Display

No.	Function
1	Battery charge level ⇒ 5.3 Battery charge level Page EN-31
2	Gear ratio (only when the DI2 electronic control system is in use) ⇒ 3.8 Gears Page EN-23
3	Assist
4	Display button
5	Assist mode ⇒ 5.4 Changing assist mode Page EN-31
6	Ride data ⇒ 5.6 Changing the ride data display Page EN-34



+/- buttons

Button	Function
+ button	a) ↑ Increase value / scroll up.
- button	a) ↓ Decrease value/scroll down. b) Push assistance

6.3.1 Menu structure

Main menu	Sub-level 1	Sub-level 2
Delete ⇒ 6.3.1.1 Clearing trip data Page EN-39	Quit	
	Trip	OK Cancel
Time ⇒ 6.3.1.2 Time Page EN-39	Hour: 00 to 23	
	Minute: 00 to 59	
Bluetooth LE ⇒ 6.3.1.3 Bluetooth LE Page EN-40	Start	
	Cancel	
Bluetooth LE/ANT ⇒ 6.3.1.4 Bluetooth LE/ANT Page EN-41		
Brightness ⇒ 6.3.1.5 Brightness Page EN-42	1 to 5	
Signal ⇒ 6.3.1.6 Signal Page EN-42	ON	
	OFF	
Unit ⇒ 6.3.1.7 Unit Page EN-43	km	
	mile	
Language ⇒ 6.3.1.8 Language Page EN-43	English	
	Français	
	Deutsch	
	Nederlands	
	Italiano	
	Español	
Settings ⇒ 6.3.1.9 Settings Page EN-43	OK	
	Cancel	
Derailleur reset ⇒ 5.7 Configuring settings in the main menu Page EN-34	OK	
	Cancel	
Quit ⇒ 6.3.1.11 Quit Page EN-44		

6.3.1.1 Clearing trip data

Under this main menu item, you can reset the ⇒ [5.6 Changing the ride data display Page EN-34](#) TRIP (travel route), TIME (travel time), Ø km/h (average speed) and MAX (maximum speed) ride data to their default values.

Proceed as follows:

1. Navigate to the "Delete" item as described in "Configuring settings in the main menu".
2. Select "TRIP" using the ⊕/⊖ buttons. The selection is highlighted white.
3. Confirm by pressing the Display button.

You can choose between:

OK	TRIP, TIME, Ø km/h and MAX are deleted.
Cancel	The deletion process is interrupted.

4. Select the required option using the ⊕/⊖ buttons. The selection is highlighted white.
5. Confirm by pressing the Display button. You return to sub-level 1.

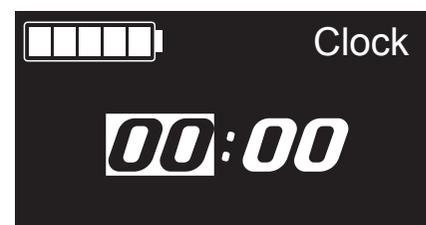
6.3.1.2 Time

Proceed as follows to set or change the time:

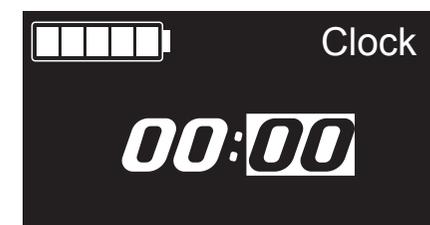
1. Navigate to the "Time" item as described in "Configuring settings in the main menu".

You can choose between:

Hour	00 to 23
Minute	00 to 59



Set hours



Set minutes

2. Use the ⊕/⊖ buttons to select the values required. The selection is highlighted white.



Press the ⊕ or ⊖ button down continuously to change the values rapidly.

3. Confirm by pressing the Display button briefly. You move to the next option.
4. Once you confirm the minutes by pressing the Display button, you will return to the main menu.

6.3.1.3 Bluetooth LE

Bluetooth LE is radio technology which allows devices within a radius of approximately 10 metres to connect to each other. You can connect the Pedelec display via Bluetooth LE to your smartphone or tablet and exchange data between the two. To do this, you must however first install the "E-Tube Project" app on your smartphone or tablet.

Download and install "E-Tube Project"

1. You can download the "E-Tube Project" app from e-tubeproject.shimano.com. You will also find installation and operating instructions for the app there.

Connecting the Pedelec display to the smartphone/tablet



No connection can be established between the display and your smartphone/tablet while loading.

To connect your Shimano Steps E8000 to a PC, you will need SM-PCE1 and SM-JC40/JC41.

1. Launch "E-Tube Project" on your smartphone or tablet.
2. Set the app to receive Bluetooth LE signals.
3. Switch the Shimano Steps E8000 system on using the button. The Bluetooth LE connection launches automatically. Once the connection is successful, the Shimano Steps logo will appear on the display screen. Then appears the name of the unit in "E-Tube Project".



Bluetooth LE: connected

The Pedelec display does not connect to the smartphone/tablet

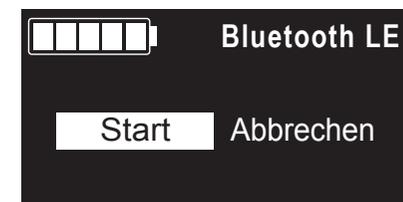
If the connection cannot be established successfully, for example if the signal is too weak, the connection can also be launched from the "Bluetooth LE" main menu item.

1. Navigate to "Bluetooth LE" as described in [⇒ 5.7 Configuring settings in the main menu Page EN-34](#).

You can choose between:

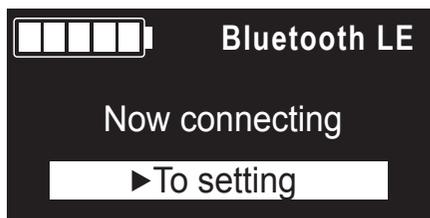
Start	Start the Bluetooth LE transfer.
Cancel	The connection process is interrupted.

2. Select "Start" using the buttons. The selection is highlighted white.

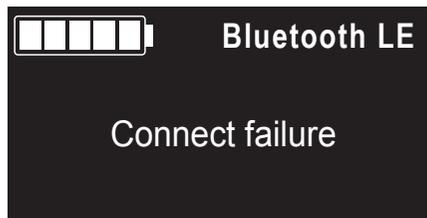


For 2. Bluetooth LE: Start transfer

- Confirm by pressing the Display button. The Bluetooth LE connection starts. Once the connection is successful, select the device name from the list on screen. If the connection is not successful, "Connection failure" will appear on the display.



For 3. Bluetooth LE connection initiating



For 3. Bluetooth LE connection failure

- Regardless of whether the connection is successful or not, press the Display or ⊕/⊖ buttons. Otherwise, the display screen will switch back automatically to the menu overview after a short time.

Interrupt the connection between the Pedelec display and smartphone/tablet

You have three ways in which to interrupt the Bluetooth LE connection:

Pressing the Display button

Press the Display button. The connection is interrupted and the main menu appears.

Cancel

Otherwise, navigate from the "Bluetooth LE" main menu item to "Cancel".

Stop transfer from smartphone/tablet

Otherwise, interrupt the transfer from your smartphone or tablet. The display exits connection mode and switches to normal operating mode.

6.3.1.4 Bluetooth LE/ANT

Exactly like Bluetooth LE, ANT is radio technology for transferring data between different devices. This launches automatically when the system is switched on using the ⏻ button. ANT sends the following information to the display: Battery charge level, setting values and positions for front derailleur and rear derailleur.

You can display the current status of the wireless connection on the display screen. Proceed as follows:

- Navigate to "Bluetooth LE/ANT" as described in ⇒ [5.7 Configuring settings in the main menu Page EN-34](#).
- Press the Display button to display the current status of the wireless connection.

Three different display texts may appear:

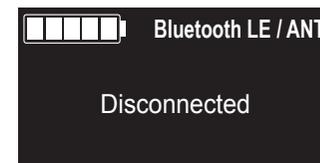
Display	Connection status
Shimano Steps logo	Connected via Bluetooth LE
ANT	Connected via ANT
Not connected	Not connected



Connected via Bluetooth LE



Connected via ANT



Not connected

- Confirm and return to the main menu by pressing the Display button.



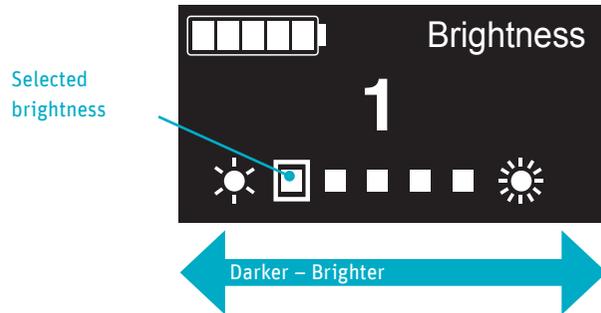
Very rarely, certain equipment (televisions, PCs, radios, etc.) or places (level crossings, TV broadcast stations, radar stations, etc.) can cause electromagnetic waves and interference which can disrupt the transfer.

6.3.1.5 Brightness

You can adjust the brightness of the display to improve legibility:

1. Navigate to "Brightness" as described in ⇒ [5.7 Configuring settings in the main menu Page EN-34](#).

You can choose between:



2. Use the ⊕/⊖ buttons to select the brightness required. The selected brightness is shown in a framed box.
3. Press the Display button to confirm. You return to the main menu.

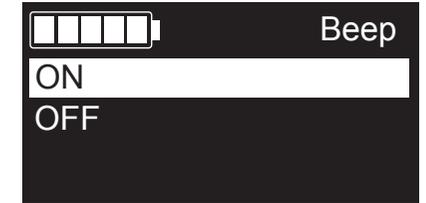
6.3.1.6 Signal

The beeping tone which is heard when any button is pressed can be deactivated.

1. Navigate to "Signal" as described in ⇒ [5.7 Configuring settings in the main menu Page EN-34](#).

You can choose between:

ON	Activate acoustic signal
OFF	Deactivate acoustic signal



Activate acoustic signal

2. Press the Display button to save the settings. You return to the main menu.



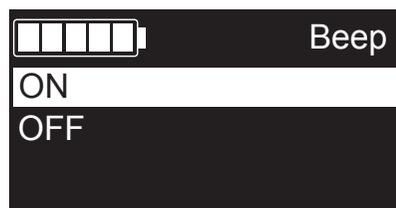
Even when the acoustic signal is deactivated, a signal will be heard when an operating error, system error, etc., occurs.

6.3.1.7 Unit

1. Navigate to the "Unit" item as described in "Configuring settings in the main menu".

You can choose between:

km	Display in kilometres
mile	Display in miles



Activate km

2. Use the ⊕/⊖ buttons to select the unit required. The option selected is shown with a white background.
3. Press the Display button to confirm. You return to the main menu.

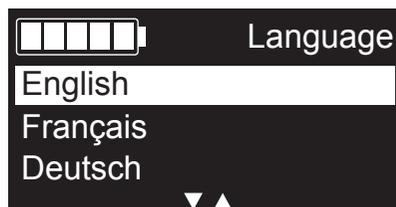
6.3.1.8 Language

The "Language" main menu item allows you to select the language in which the display text appears.

1. Navigate to "Language" as described in ⇒ [5.7 Configuring settings in the main menu Page EN-34](#).

You can choose between:

- » English
- » Français
- » Deutsch
- » Nederlands
- » Italiano
- » Español



Select English

2. Use the ⊕/⊖ buttons to select the language required. The language selected is shown with a white background.
3. Press the Display button to confirm. You return to the main menu.

6.3.1.9 Settings

You can use the "Settings" main menu item to set the electronic gear shift on your Pedelec – if you have one.

6.3.1.10 Derailleur reset

A violent fall can disrupt the mechanical connection in the derailleur, and the derailleur can easily fold inward. Proceed as follows to return this to the correct position:

1. Navigate to the main menu item "Derailleur reset" as described in ⇒ [5.7 Configuring settings in the main menu Page EN-34](#).



For 1. Bring derailleur back to the correct position

You can choose between:

OK	The derailleur returns to the correct position.
Cancel	The adjustment process is interrupted.

2. Use the ⊕/⊖ buttons to select the desired option. This has a white background.
3. Press the Display button to confirm.



The derailleur can be finely adjusted using the ⊕/⊖ buttons. The pedals should be rotated during this process. This step is normally only required if the chain has become tangled, or if other parts, for example the hanger as well as the derailleur, have been pressed inward.



Making fine adjustments to the derailleur

6.3.1.11 Quit

Return to the main menu screen. Closes the menu display and returns to the start page.

6.4 Tips

6.4.1 Transporting your pedelec

WARNING



Remove panniers and other attachments when transporting the pedelec, as they can come off and cause serious accidents.

By car: The bike rack must be designed for the higher weight of the pedelec ⇒ *VI.I Overall weight Page EN-10*, otherwise it can break and cause a serious accident. It is imperative to follow the guidance of the bike rack manufacturer.

IMPORTANT



Pedelecs carried on a rear-mounted bike rack must have suitable weather protection. Water ingress can damage the motor and its components. Suitable covers are available from your dealer and online.



Bus, train and plane: Find out from your travel company well in advance if their regulations allow you to take your pedelec with you.

6.4.2 Storage

1. Store the pedelec in a dry, not excessively warm room. The battery should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.

6.4.3 Cleaning

WARNING

Before cleaning, switch off the system using the  button on the top tube. Warning: Accidental activation of the  button can result in severe injuries.

IMPORTANT

Do not clean the pedelec and its components with a water hose or high pressure washer. Damage may still result even though the components are sealed. Clean the bike with a soft damp cloth.

Do not immerse the drive unit or components into water. Damage may still result even though the components are sealed.

Do not use any cleaners which contain alcohol or solvent, or which scour. No coarse sponges or brushes may be used either. They leave scratches and cause the surface to become matt. Clean the bike with a soft damp cloth.



Do not allow dirt to dry out. It is best to clean the cycle immediately after your ride.

Drive unit

CAUTION

Do not clean the drive unit when it is warm (e.g. straight after a ride). You may burn yourself otherwise. Wait until the drive unit has cooled down.

1. Switch off the system using the  button on the top tube.
2. Clean the outside of the drive unit with a soft, damp cloth.

Display and easy-reach control

1. Clean the outside of the display and easy-reach control with a soft, damp cloth.

7. Battery

7.1 Safety information

WARNING

Only operate your pedelec with a suitable original battery. The use of other batteries can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of approved batteries in ⇒ [7.2 Technical data - battery Page EN-48](#).

Only use the correct original battery charger to charge your battery. The use of other battery chargers can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of permitted chargers in ⇒ [9.4 Charger Page EN-57](#).

Keep batteries away from sparks and fires. Prevent batteries from heating up too much. They can explode and cause serious burns and fires. Further consequences can include malfunctions and a limited battery life. Keep batteries away from sources of heat (e.g. direct sunlight and radiators). When charging the battery, ensure there is adequate ventilation and observe the permitted ambient temperature range: 0 - 40 °C. Do not extinguish a burning battery with water, only the surrounding burning material. Fire extinguishers with metal fire powder (Class D) are more suitable.

WARNING

Batteries must not be destroyed, shredded, taken apart, opened up or repaired. They can leak, explode and cause serious burns and fires. Contact your cycle dealer for help if you have problems with the battery.

Damaged batteries must not be charged, used or transported.

- » They can explode and cause serious burns and fires.
- » Gases can be released and irritate the airways. Ensure there is a supply of fresh air and consult a doctor in the event of discomfort.
- » Liquid can escape and cause skin irritation. Prevent contact with it. In the event of any contact, rinse the liquid off your skin and clothing with clean water (such as tap water). If the liquid gets into the eyes, flush out with plenty of water without rubbing, and seek medical help.

Do not send batteries by post. Batteries are dangerous goods that under certain conditions may explode, causing severe burns and fires. Only trained personnel may prepare and transport batteries. If you have a complaint about a battery, please always go through your cycle dealer. Dealers are able to have batteries collected free of charge under hazardous goods regulations.

CAUTION



Batteries must not be immersed in water. This presents a risk of explosion. Do not extinguish a burning battery with water, only the surrounding burning material. Fire extinguishers with metal fire powder (Class D) are more suitable. If it is possible to take the battery safely outside, smother the fire with sand. But you need not be afraid of the battery exploding under you when you ride the cycle through rain. The battery is sealed to prevent moisture and spray water from entering.

IMPORTANT



Batteries must not be subjected to mechanical impact. This poses a risk of damage. A battery can still be damaged after a drop or impact even if there are no visible signs of damage. A battery which looks fine on the outside should therefore also be subjected to an inspection. Please contact your cycle dealer.

Perform a 'learning cycle': A new, **fully charged** battery should be run down once until the motor assist stops and without recharging in between. In that way the battery 'learns' its capacity, and the actual capacity will agree with the level indicated on the battery status display. As soon as the battery enters Sleep mode, press the battery button for one second. Then the learn cycle can be continued. Please perform a learn cycle every six months or 5,000 kilometres. When the battery becomes older and you do not repeat the cycle from time to time, the difference between actual battery capacity and charge level display will become greater and greater.

IMPORTANT



Only use the battery to operate this pedelec, otherwise there is a risk of damage to the device.



Batteries are subject to the dangerous goods regulations. Private users are permitted to transport them on the road without further conditions. When transported by commercial third parties (such as by air, freight forwarders and logistics firms), special requirements of packaging and labelling must be observed. Please contact your cycle dealer if you have any questions about transportation.

7.2 Technical data - battery

* With a 4 A charger, until battery is fully charged (95% battery capacity).



Type	DCW-03 lithium ion battery (optional external additional battery DCW-04)
Position	Down tube (completely integrated)
Nominal capacity	10.5 Ah
Power	378 Wh
Nominal voltage	36 V
Weight	2100 g
Charge time*	Approx. 3 hours
Charge cycles	1100
Cell	Li-ion
Permissible ambient temperature in operation	-10 to +40 °C
Permissible ambient temperature for charging	0 to 40 °C
Storage temperature	-10 to +50 °C
Recommended storage temperature	18 to 23 °C

7.3 Tips

7.3.1 Range

Various factors determine how far you can go with your battery:



When you go on a long trip it is worth taking a spare battery or battery charger with you.

Assist mode: You consume the most battery power in the highest assist mode. The range decreases, the higher the selected assist mode.



Vary the assist modes you use. If there is a tailwind when going downhill or on the level, you can still go fast with a lower assist mode.

Tyre pressure: If the tyre pressure is too low it is harder for the tyres to rotate. The drive unit needs to provide more assistance and the range decreases.

Riding style: A low pedalling speed combined with high gears results in high power consumption.



Change down in good time to maintain constant cadence, especially when starting.

Your fitness level: The fitter you are, the less assistance you will need.

Total weight: The lower the total weight supported by the bike, the easier it will be to ride ⇒ [VI.I Overall weight Page EN-10](#).

Outside temperatures: The lower the outside temperatures (e.g. cold in winter), the shorter the range.

Route selected: You need to pedal harder when cycling uphill or against strong head wind. This is registered by the power sensor, which in turn requires the motor to work harder.

7.3.2 Storage

1. Store the pedelec in a dry, not excessively warm room. The battery should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.

IMPORTANT



The battery should not be stored in a fully charged state. A charge level between 50 and 70% is ideal. Since the battery loses charge very slowly, you should recharge it when only one or two segments are lit, but after six months at the latest.

8. Battery charger

8.1 Safety information



DANGER

Battery chargers are not a toy and must not be used by children under the age of 8 years. Older children must be sufficiently trained on how to use the battery charger. People who, because of their physical, sensory or intellectual capabilities, or because of their lack of experience or knowledge, are unable to use battery chargers, are prohibited from using them unless supervised or under the instruction of a responsible person. Otherwise there is a risk of mishandling with consequential very serious injuries.

WARNING



Only use the correct, original charger to charge the battery. The use of other battery chargers can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of permitted chargers in ⇒ [9.4 Charger Page EN-57](#).

Only charge the correct, original battery with the charger. The use of other batteries can cause explosions, serious burns and fires. Further consequences can include malfunctions and a limited battery life. You can find a list of approved batteries in ⇒ [7.2 Technical data - battery Page EN-48](#).

WARNING



Check the charger, cable and plug before each use. Do not use the charger if you detect signs of damage. Do not open the charger yourself, and only have it repaired by qualified experts using original spare parts. This poses a risk of fire and explosion. Damaged chargers, cables and plugs also increase the risk of electric shock.

The charger is only intended to be used indoors. Keep the charger away from rain and moisture, and high air humidity. Do not use it on a damp surface. If water gets into the charger there is a risk of electric shock. If water has penetrated the casing, unplug the device immediately and have it checked out by your dealer. Condensation might form on the charger when the temperature suddenly changes from cold to warm. When this happens, wait about an hour. This is the time a charger needs to reach the temperature of the warm surroundings. Prevent this happening by storing the charger where it is used.

The plug must not be plugged in or removed when wet. Failure to comply with this point can cause an electric shock. If water escapes onto the plug, dry this thoroughly before plugging in.

WARNING



The charger may not be covered during the charging process. Do not use the charger on materials which can catch fire easily (such as paper and textiles) or within a combustible environment. This also applies when the battery is charged when fitted to the pedelec. In this case, the pedelec must be positioned such that a potential fire cannot spread quickly (exercise caution with carpeted floors). Do not expose the battery and pedelec to direct sunshine above 40 degrees. The charger heat generated during the charge process represents a risk of fire. When the temperature is higher than 85 °C, or there is smoke or an unusual smell, immediately unplug the mains connector of the charger from the socket and disconnect the battery from the charger. An overheated battery is damaged and may not be used again. Always stay with the charger when it is in use.

Keep battery chargers away from sparks and fires. It can explode causing severe burns and fires. Further consequences can include malfunctions and a reduced service life. Ensure there is adequate ventilation for charging.

IMPORTANT



The mains voltage must match the supply voltage of the battery charger, otherwise there is a risk of damage to the device. The supply voltage for the charger is specified on the label on the back of the device.

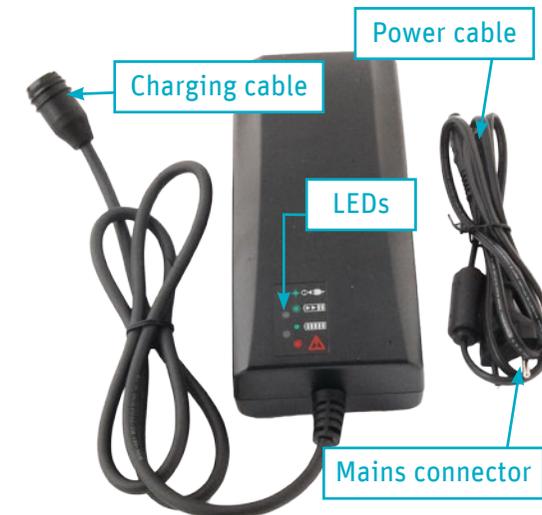
Do not charge batteries for a long period if they are already fully charged or are not being used. Electrical storms, voltage fluctuations and short circuits can damage the battery.

Keep the battery charger clean. If the contacts are dirty, the dirt can burn during charging, leaving burn marks. The charger may need to be replaced in such cases ⇒ [8.3.1 Cleaning Page EN-52](#).

8.2 Technical details

Battery charger

Battery voltage	36 V
AC input voltage	230 - 240 V
Frequency	50 - 60 Hz
Max. DC output voltage	42 V
Max. charge current	4 A
Dimensions (L W H)	206 mm 94 mm 61 mm
Permissible ambient temperature when charging	0 to +40 °C
Storage temperature	-10 to +50 °C
Recommended storage temperature	18 to 23 °C
Weight	753 g
Protection class	 The charger is only intended to be used indoors. Keep the charger away from rain and moisture. Water penetrating into the charger poses a risk of electric shock.





The charging display symbols can vary. If you are not sure what the symbols mean, contact your cycle dealer.

8.2.1 LED display on the charger

The LEDs on the battery charger display the state of the charger.

Symbol	Description	Meaning
	The green LED flashes.	The battery charger is connected to the mains network.
	The green LED flashes rapidly.	The battery is charging.
	The green LED is lit continuously.	The battery is fully charged.
	The red LED flashes rapidly.	Charging fault

8.3 Tips

8.3.1 Cleaning

DANGER



Always unplug the charger from the mains before cleaning and especially before wiping it, otherwise you could get an electric shock if you touch the contacts.

IMPORTANT



Do not immerse the charger in water. Damage may still result even though the components are sealed.

Do not use any cleaners which contain alcohol or solvent, or which scour. No coarse sponges or brushes may be used either. They leave scratches and cause the surface to become matt. Clean the charger with a soft damp cloth.

1. Remove the charging cable from the battery charging socket.
2. Unplug the charger from the mains socket.
3. Clean the casing with a slightly damp, soft cloth.
4. If the contacts are dirty, clean them with a soft dry cloth.

8.3.2 Storage

1. Store the battery charger in a dry, not excessively warm room. The charger should not be exposed to direct sunshine. The recommended storage temperature range is 18 to 23 °C.

9. Fault

9.1 Codes

9.1.1 Warning codes



Display of a warning code

Warning codes appear in the top centre of the display. They disappear when the problem has been resolved. Follow the solution listed in the table in order to resolve the problem.

Warning code	Description	Cause	Remedy
W010	Pedal assistance may be lower than normal.	Motor is too hot.	Ride without assistance until the motor cools off. If the warning code reappears, contact your dealer.
W011	No riding speed is displayed.	The switch-off speed is maybe lower than normal.	Check whether the speed sensor is installed correctly. If the warning code reappears, contact your dealer.
W013	Pedal assistance may be lower than normal.	The torque sensor is possibly not fully initialised.	Replace the support switch in the gear shift or only switch on one support switch and then switch the system on again. If the warning code reappears, contact your dealer.
W032	The pedal assistance provided in [GO] mode is maybe lower than normal.	An electrical gear shift is maybe installed instead of a mechanical gear shift.	Reinstall the derailleur for which the system was designed. If the warning message reappears, contact your dealer.

9.1.2 Error codes



Display of an error code



If resetting the battery power does not resolve the problem, or the same problem occurs frequently, contact your dealer.

Error code	Description	Cause	Remedy
E010	No pedal assistance when riding.	System fault	Press the  button to restart the system. If the error code reappears, contact your dealer.
E011	No pedal assistance when riding.	System fault	Press the  button to restart the system. If the error code reappears, contact your dealer.
E013	No pedal assistance when riding.	An anomaly has been detected in the drive unit firmware.	Please contact your cycle dealer.
E014	No pedal assistance when riding.	The speed sensor may be incorrectly installed.	Please contact your cycle dealer.
E020	No pedal assistance when riding.	A communication error between the battery and drive unit has been detected.	Check that the cable linking the battery and drive unit is correctly connected. If the error code reappears, contact your dealer.
E021	No pedal assistance when riding.	The battery connected to the drive unit complies with system standards, but is not supported.	Press the  button to restart the system. If the error code reappears, contact your dealer.
E022	Switch off of all system functions.	The battery connected to the drive unit does not comply with system standards.	Press the  button to restart the system. If the error code reappears, contact your dealer.
E043	No pedal assistance when riding.	The display firmware may be corrupted.	Please contact your cycle dealer.

9.2 Drive unit, display and support switch

Description	Cause	Remedy
No support is provided.	a) The battery is not sufficiently charged.	a) Check the battery charge. If the battery is almost empty, recharge it.
	b) Do you take long slopes or ride for extended periods with heavy loads in summer weather? The battery may be too hot.	b) Switch off the system, wait a while, and then try again.
	c) The motor (DU-E8000), display (SC-E8000) or support switch (SC-E8000-L) may be incorrectly connected, or there may be a problem with one or more of them.	c) Contact your dealer.
	d) Speed too high.	d) Check the display. There is no assistance at speeds in excess of 25 km/h.
	e) Are you pedalling?	e) The bicycle is not a motorcycle. You must also use the pedals.
	f) Is the assistance mode switched OFF ?	f) Set the assistance mode to any mode other than OFF. If you continue to feel that no assistance is provided, contact your dealer.
	g) Is the system switched on?	g) Press the ON/OFF button to switch on the system again. If you continue to feel that no assistance is provided, contact your dealer.
The pedals are difficult to use.	a) Tyre pressure too low.	a) Pump up the tyres.
	b) Assistance mode set to OFF .	b) Set the assistance mode to BOOST. If you continue to feel that no assistance is provided, contact your dealer.
	c) The battery is not sufficiently charged.	c) Check the degree of assistance again after charging the battery. If you continue to feel that no assistance is provided, contact your dealer.
	d) Did you switch the system on with your foot on the pedal?	d) Switch the system on again, without applying any pressure to the pedal. If you continue to feel that no assistance is provided, contact your dealer.

Description	Cause	Remedy
No display	a) No power	a) Press the ⏻ button.
	b) The battery is not sufficiently charged.	b) Charge the battery and try again.
	c) The battery is charging.	c) The system cannot be switched on when the battery is charging. Wait until the battery is completely charged, or interrupt the charging process.
	d) The display is not properly mounted on the bracket.	d) Install the bicycle computer correctly.
	e) The power cable connector is not properly connected.	e) Check whether the power cable connector which connects the motor unit to the drive unit is disconnected. If you are unsure, contact your dealer.
	f) A component which the system does not recognise has been connected.	f) Contact your dealer.
Three acoustic signals are heard.	This indicates an error or a warning.	Follow the instructions relating to the relevant code.
There is signal interference.		This is not a fault. Turn off the signal.
Two audible signals are heard when the assistance button is pressed. In addition, it is not possible to press the button.	The operation of the pressed button has been deactivated.	This is not an error.

9.3 Battery

Description	Cause	Remedy
The battery does not charge.	a) The battery charger plug is not firmly inserted into the socket.	a) Unplug the battery charger power plug from the socket. Reinsert the plug. Repeat the charging process. If it is still not possible to charge the battery, contact your dealer.
	a) The battery charger charging connector is not firmly inserted into the battery.	b) Unplug the battery charger charging connector from the battery charging socket, and reinsert. Repeat the charging process. If it is still not possible to charge the battery, contact your dealer.
	c) Damaged battery.	 c) Damaged batteries must not be charged or used for any other purpose. Contact your cycle dealer. The battery may have to be replaced.
	d) Battery charger is faulty.	d) Have your charger checked out by your cycle dealer; it may have to be replaced.

Description	Cause	Remedy
The battery is hot.	The battery temperature may exceed the operating temperature range.	Interrupt the charging process, wait a while, and try charging again. If the battery is too hot to touch, there may be a problem with the battery. Please contact your cycle dealer.
An unusual smell is noticeable.	The battery may be faulty.	Stop using the battery immediately, and contact your dealer.
Smoke is coming from the battery.	The battery may be faulty.	Stop using the battery immediately, and contact your dealer.
The battery seems to discharge more rapidly than it used to.	The battery may have reached the end of its usable life.	Replace it with a new battery.
The travel range appears too short.	<p>The travel range depends on:</p> <ul style="list-style-type: none"> » Ride profile » Assistance mode » Tyre pressure » Riding style » Physical condition » Overall weight » Outside temperatures » Battery capacity. A much shorter service life after the charging process indicates that the battery has lost considerable capacity. The battery may have to be replaced. Discuss how to proceed with your cycle dealer. » The route selected 	There are many reasons why the travel range may appear too short.

9.4 Charger

Description	Cause	Remedy
The battery charger is hot.	The battery charger temperature may exceed the operating temperature range.	Interrupt the charging process, wait a while, and try charging again. If the problem re-occurs, contact your dealer.
The charging process will not start.	The battery may have reached the end of its usable life.	Replace it with a new battery.
The battery charger is warm.	If the battery charger is used to charge batteries continuously, it can become warm.	Wait awhile before using the battery charger again.

9.5 Gear changes

Description	Cause	Remedy
No gear is displayed.	The gear is only displayed when the electronic gear shift is in use.	Check whether the power supply cable is disconnected. If you are unsure, contact your dealer.
When using an electronic gear shift, pedal assistance seems to be weaker when changing gears.	The pedal assistance is set to an optimum level by the computer.	This is not an error.
A noise can be heard after changing gear.		Please contact your cycle dealer.
A noise can be heard from the rear wheel during normal riding.	Gear changing is not set correctly.	a) Mechanical gear shift: Adjust the tensioning of the gear shift cable.
		b) Gear shifting: Please contact your cycle dealer.
When you bring the bicycle to a stop, the gear does not move to the Start mode position.	Excessive pressure is being applied on the pedals.	Only apply gentle pressure to the pedals when changing gear.
The front or rear lights do not light, even when the button is pressed.	E-TUBE PROJECT may be set incorrectly.	Please contact your cycle dealer.

10. Torque settings



DANGER

Only use appropriate tools to tighten screws and bolts. Observe the specified torque setting. The component manufacturer's torque settings take precedence (where available). Failure to comply can result in screws/bolts becoming loose, tearing away or fracturing. If that happens while you are riding the bike, components may come off and you could have a severe crash. If screws are overtightened, components can also be damaged. Tighten all screws and bolts that are relevant for safety with a torque wrench. This indicates the corresponding torque in newton metres (Nm).

If no values are shown on the component or component manuals, use the torque settings from the following table.

Screw fixing	Thread	Tightening torque (Nm)
Pedal crank screw	M6	10
Pedal crank arm, aluminium	M6	12 – 14
Pedal	9/16	40
Ahead stem angle adjustment	M6	8 – 10
Ahead stem handlebar clamp	M5 / M6 / M7	M5: 5 / M6: 10 / M7: 14
Ahead stem steerer tube	M5 / M6 / M7	M5: 5 / M6: 10 / M7: 14
Saddle clamp bottom	M5 / M6 / M8	M5: 5 / M6: 10 / M8: 20
Disc brake calliper, Shimano, IS and PM	M6	6 – 8
Disc brake calliper, AVID, IS and PM	M6	8 – 10
Disc brake calliper, Magura, IS and PM	M6	6
Gear lever clamp	M5	5
Brake lever clamp	M5	Ref. manufacturer's spec.
Cassette fixing ring	N/A	30 – 40
Screw-on handlebar plugs	M4 / M5	M4: 3 / M5: 5
Motor bolts	M8	25



www.focus-bikes.com

DERBY CYCLE WERKE GMBH

Siemensstraße 1-3
49661 Cloppenburg, Germany

www.derby-cycle.com

© Copyright, reprinting, duplication and distribution, in whole or in part only with consent from Derby Cycle Werke GmbH.
Subject to misprints, errors and technical alterations.

1973K0017044