Warranty Certificate

ECOSMO

Congratulations! You have made an excellent choice of this quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, experience defects due to manufacturing faults, we will provide you with a warranty against defects as follows:

Warranty

The product is guaranteed to be free from defects in workmanship and parts for a period of 12 months (dependent on product) from the date of purchase. Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Competition and Consumer laws in the UK.

Our goods come with guarantees that cannot be excluded under the UK Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Proof of Purchase

This warranty is valid for the original purchase and is not transferable. Please keep your purchase docket, tax invoice or receipt as the best proof of purchase, and as proof of date on which the purchase was made.

Extent of Warranty

This warranty is limited to defects in workmanship or parts. All defective products or parts will be repaired or replaced. This warranty does not cover batteries or any other consumable items.

Normal Wear and Tear

This warranty does not cover normal wear and tear to the products or parts.

Exclusions

This warranty does not cover:

- Any defects caused by an accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised by the distributor.
- Any product that has not been installed, operated or maintained in accordance with the manufacturer's operating instructions provided with the product.
- Any product that has been used for purposes other than domestic use.
- Any damage caused by improper power input or improper cable connection.

To Make a Claim

This warranty against defects is provided by Ecosmo Ltd, If a defect in the goods appears within 12 months (the identified period on the packaging), you are entitled to claim a warranty, please contact or send all warranty claims to:

Ecosmo Ltd
Unit 14,Gate A, Yarwood Works,Ledsam Street,Birmingham,B16 8DW

When making a return, please ensure the product is properly packaged so as to ensure that no damage occurs to the product during transit. Please provide the original or a copy of the proof of purchase. Also please make sure you have included an explanation of the problem.
Please note upon receiving your warranty claim, the supplier will send, via the post or email, a repair and refurbished goods or parts notice. Please provide your email address and advise the supplier, if you wish to obtain a repair and refurbished goods or parts notice via email.

AFTER SALES SUPPORT

☎ +441214549446 www.ecosmobike.com

WELCOME

Congratulations on choosing an Ecosmo Bike.

In the event you require assistance with your purchase please contact one of our experienced customer service team on 01214549446, before considering a return of product

Please read instructions carefully before use.

Unless directions are followed physical injury or property damage may result.

Save the instructions for future reference.

Table of Contents

There are warnings throughout this manual. Follow all warning instructions. Don't risk injury, mechanical failure or damage.

IMPORTANT! READ THE MANUAL THOROUGHLY BEFORE USE AND STORE FOR LATER CONSULTANCY

NOTE
Here you will find information about handling a product or your attention is drawn to a particularly important part of this operating manual. Also, danger of possible material or environmental damage!

DANGER
Here, life and health may be exposed to danger. In all cases, check the requirements and comply with the relevant safety measures.

- Legally your bicycle is a vehicle.
- It can be ridden on roads mixing with other traffic.
- You need to know about certain legal and common sense requirements for the enjoyable, safe and trouble free use of your bicycle.

Original Operating Manual, Regulations Standard:

- EN15194:2017

Dear Customer,

It is assumed that the users of this bicycle have sufficient general knowledge of how to handle bicycles.

People by whom this bicycle is used, repaired or maintained, must have fully read and understood the manual in terms of both contents as well as meaning. If there is anything that you may not have fully understood or if you have additional questions, consult the Ecosmo Customer Service Hotline.

This manual contains information about construction and technology and maintenance and servicing. It has relevance to safety and must be adhered to. Otherwise, serious accidents and material damage can occur.

Familiarise yourself with current national regulations if you want to use your bicycle on the public road. But first, for your safety as rider, take note of the following instructions:

- Always wear a suitable and well-fitting cycling helmet for every ride.
- Be sure to wear bright or reflective clothing to enable other road users to see you more easily.
- Wear close-fitting clothing on your legs or use trouser clips.
- Wear shoes with hard, preferably non-slip soles.

Even if you already have experience in handling bicycles, you should first read the "Before the First Ride" chapter and carry out all checks that are mentioned in the chapter "Before Every Ride". Be conscious of the fact that as a cyclist on the public road, you are exposed to unexpected dangers. Protect yourself and others against injury and damage by acting with responsibility and conscientiousness.
We strongly recommend that you have any repairs and adjustments carried out by a specialist dealer. We do not accept any liability with regard to completeness or correctness of the information provided by the manufacturers.

Safety Instructions

Attentively read all instructions and warnings in the operating manual, before using the bicycle. Before the first ride, be sure to read the chapters "Before the First Ride" and "Before Every Ride"! If you allow other people to use your bicycle, always hand over this operating manual and ask them to read it.

Important screw joint! Here, you must tighten with an exact torque. You can find the information about the correct torque either displayed on the construction element or consult the table with torque values. The correct torque can only be achieved with the aid of a torque wrench. If you don't have one, have the work done by a specialist dealer. Screws or parts that are not tightened correctly can tear, break or work loose. This can cause serious falls and injuries.

Modern bicycles are highly technical. Carrying out work on them requires special knowledge, experience and special tools. Do not carry out any work on the bicycle yourself. Take your bicycle to a specialist dealer for repairs, servicing and overhauls.

Before Your First Ride

In wet conditions or on slippery surfaces, the braking effect can be dangerous, and different from what you are used to. Adapt your riding behaviour appropriately and prepare yourself for potential longer braking distances.

Check the correct and secure seating of the wheels in frame and fork. Make sure that all quick release and all fastening screws and nuts are firmly seated. These tests can be carried out as follows:

- Lift the bicycle about 10 cm from the ground then let it drop on the wheels. If you can hear any rattling or other unusual sound, ask a specialist dealer to detect the cause and to solve the problem. Do not use your bicycle until this is done.
- Successively operate the front and rear wheel brakes whilst simultaneously pushing the bicycle forward. If the rear wheel brake is pulled, the rear wheel should block. If the front wheel brake is pulled, the rear wheel should lift off the ground. Before riding off, practise braking in a quiet area without traffic. The braking effect of modern brake systems may be completely different from what you are used to. Check that the steering does not rattle when braking and does not have any play.

- Make sure that the air pressure in the tyres is correct. The specifications of the correct tyre pressure are engraved on the side walls of the tyres. The values for minimum and maximum pressure must be adhered to.
- A simple method for checking the tyre pressure, also useful when out on a ride, is as follows: Place your thumbs on the air-filled tyre and press on the tyre. As a rule, the tyre pressure is correct if the tyre does not become deformed, even when pressing hard. Check the tyres and rims for damage. Look for tears, deformations, penetrated foreign particles, e.g., glass splinters or sharp-edged grit, etc.
- Do not ever ride your bicycle if you notice cuts, tears or holes. Take it to a specialist dealer for checks.

Before Every Ride

Check,

- The battery has enough charge for your estimated distance
- Frame and fork for damage and deformations
- Functionality of the power cut off brakes
- Functionality and secure seating of the bell and lighting
- The tyres for sufficient profile depth
- Rims and tyres for damage, true run and penetrated foreign particles, especially after riding on rough terrain
- Functionality and secure seating of the spring elements
- Screws, nuts and quick release skewers for secure seating
- Handlebar and stem for correct and secure seating and for appropriate adjustment
- Seat and seatpost for correct and secure seating and for appropriate adjustment. It must not be possible to turn or tilt the seat.

Danger: Only ride off when you are certain that your bicycle is in perfect condition. Otherwise, take your bicycle to to be checked by a specialist dealer.

If you use your bicycle intensively or on a daily basis, take it regularly to a professional workshop in order to have all important construction elements checked.

DANGER

Bicycles are considered to be means of transportation for a single person. For transportation of baggage, a device for that purpose must be fitted on the bicycle. You must respect the maximum load capacity of the baggage carrier. Children may only be carried in a child seat or in purpose-built trailers. Make sure that you do not exceed the maximum permissible total weight of **100kg for rider and baggage**.

Folding Electric Bike

Only ride in public road traffic and on paved roads.

Manufacturers and dealers are not liable for damage resulting from use outside of intended use. This applies particularly to damage resulting from non-adherence to the safety instructions, e.g., in terms of:

- use on terrain,
- overloading, or
- incorrect remedying of defects.

Bicycles are not designed for cycling down steps or for leaping.

Before You Start

Unpacking the Bike:

- Open the box and REMOVE ALL OF THE STAPLES in the box flaps so you do not scratch or cut yourself, rip clothes or even scratch the bike.
- Remove the bike.
- Remove all of the cardboard that is wrapped around the tubes of the frame and fork.
- Recycle, or dispose of, packaging safely and in accordance with local regulations

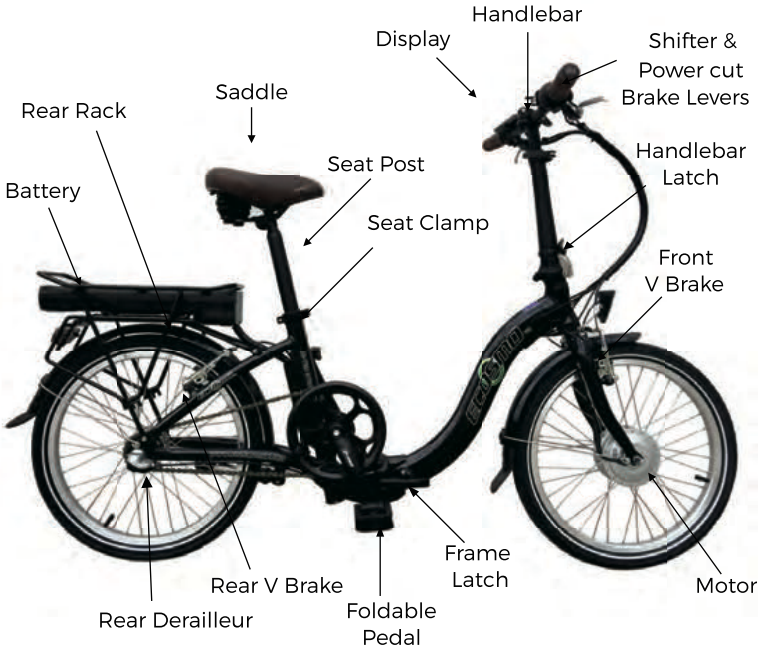
Inspecting the Bicycle:

Inspect the bicycle and all of the included parts to make sure there is no damage or parts missing.

If you have any questions regarding any issues with your bicycle, please contact our Support team on: 01214549446 or sales@ecosmobike.com

Handlebar hand grips should be replaced if damaged, as bare tube ends have been known to cause injury.

Elements of the Bicycle



Unfolding the Bike

STEP 1
To unfold the bike, start by standing next to the side with the chain wheel, opposite from the handlebars and front wheel.

STEP 2
Please note, the folding e-bike features 2 powerful magnets next to the wheels to ensure the bike stays folded.

STEP 3
Hold the rear rack with your left hand and front frame with the right hand, standing well clear from the frame latch. Spin the front half of the frame and align it with the rear wheel.

STEP 4
Holding the bike upright with your right hand, use your left hand's thumb to close the frame latch. You will hear a solid click telling you the frame latch is secure.

STEP 5
Swing your handlebars upright with your left hand and use the right hand the close the handlebar latch securely.

STEP 6
Place your left hand on the left handlebar grip and, with your right hand, open the top Quick Release Lever. Rotate the handlebars backwards, angling the brake levers at 45 degrees. Close the quick release lever to secure the handlebars.

STEP 7
Open the middle quick release with your left hand and pull the handlebars up to the desired height. For safety reasons, be careful not to go over the minimum insertion mark. Close the quick release lever to hold the handlebars in place.

STEP 8
Open the Quick Release lever on the seat-clamp and slide the saddle to the desired height. For safety reasons, be careful not to go over the minimum insertion mark. Close the quick release lever to hold the saddle in place.

STEP 9
Unfold the pedals by holding the outside part and pull it away from the bicycle until it becomes horizontal.

STEP 10
Squeeze the brake levers to check braking function and check the tyre pressure.

Folding the Bike

STEP 1
To fold the bike, start by standing next to the side with the chain wheel, handlebars on your right.

STEP 2
Start by folding the pedals. Hold the pedal with your hand and with your index finger, pull the locking trigger on the pedal to allow it to fold. Do this on both pedals.

STEP 3
Point the right pedal straight down, towards the ground, with the folded pedal pointing up. This will make it easier to fold the bike.

STEP 4
Hold the top of your handlebars and open the middle Quick Release Lever, allowing the handlebars to slide down. Close the Quick Release to lock it in place.

STEP 5
Place your left hand on the left handlebar grip and, with your right hand, open the top Quick Release Lever. Rotate the handlebars forward, allowing the brake levers to point to the ground. Close the quick release lever to hold it in position. This will reduce how much the brake levers protrude once the bike is fully folded.

STEP 6
Hold your handlebar with your right hand and use your left hand on the bottom handlebar latch, using your index finger to slide the safety lock upwards and your thumb to pull the latch away from the frame. Gently spin the handlebars down towards the front wheel.

STEP 7
Open the Quick Release lever on the seat-clamp and slide the saddle all the way down. Close the quick release lever to hold the saddle in place.

STEP 8
With your right hand, open the frame latch by sliding the safety lock towards the front wheel with your thumb and using your index finger to pull the latch away from the frame.

STEP 9
Hold the rear rack with your left hand and front frame with your right. Fold the frame by swinging the front of the bike away from you until both wheels are parallel.

STEP 10
The powerful magnets will ensure the bike stays folded.

STEP 10
You can now hold the bike by the rack and saddle and carry it with you.

Important Notice

DANGER - Handling the battery

Only use the specified battery for the bike – the battery contains Samsung® cells as well as the sophisticated XOFO battery management system that controls the many of the e-bike functions. Using non-standard batteries, even if they look the same, can seriously damage the e-bike system, can result in battery fire or explosions, and will void warranty.

Be sure to observe the following in order to avoid burns or other injury from fluid leakages, overheating, fire or explosions.

- Do not deform, modify, disassemble or apply solder directly to the battery.
- Do not leave the battery near sources of heat. Do not heat the battery or throw it into a fire.
- Do not subject the battery to strong shocks or drop it.
- Avoid contact with metal objects (paper clips, coins, keys, nails, screws, or other small metal objects, as this may short-circuit the battery. Shorts caused in this way will invalidate any warranty claims.
- Do not place the battery into fresh water or sea water, and do not allow the battery terminals to get wet.
- If any liquid leaking from the battery gets into your eyes or skin, immediately wash the affected area thoroughly with clean water, and seek medical advice immediately.
- Do not use the battery if it has any noticeable scratches or other external damage.
- Do not use the battery in temperatures outside these ranges. During discharge: –10 ˚C to 50 ˚C. During charging: 0 ˚C to 40 ˚C.
- During storage keep the battery at a charge level of at least 40%
- Follow local regulations when disposing of used batteries. If you are not sure, consult the place of purchase or a bicycle dealer.

CAUTION - Charging the battery

- Only use the specified charger and observe the specified charging conditions when charging the specified battery.
- When charging, make sure there is no water on the charging port or the charger plug.
- Do not allow children to play near the product whilst charging
- Close the charging port cap when not charging.
- Be careful of the following whilst charging the battery when it is mounted to the bicycle:
  - Ensure that the battery is locked into the battery mount before charging.
  - Do not remove the battery from the battery mount while charging.
  - Stabilise the bicycle to ensure that it does not collapse during charging.
  - Do not move or ride the bicycle, whilst the battery is being charged.

CAUTION - Whilst riding

- Do not give too much of your attention to the cycle computer display while riding, otherwise accidents may result.
- If riding a power-assisted bicycle, make sure that you are fully familiar with the starting-off characteristics of the bicycle before riding it on roads or bike paths. The bicycle can start suddenly, and accidents may result.
- Check that the bicycle lights illuminate before riding at night.
- This e-bike system is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Use the product according to local laws and regulations.
- Familiarise yourself with brakes and the power cut off feature. Always ride with hands ready to operate the brake levers.

E20F01 System Features

The powerful 250W System assists you whilst you pedal - up to 25km/hr and with a range of up to 50km, all on a single charge.

The XOFO E20F01 series is an EPAC (Electric Pedal Assistance Bicycle) system where the motor in the front hub, provides assistance as the rider pedals. There is no throttle, the rider must pedal for the power assistance to begin.
It features the latest in e-bike technology including a Samsung® powered 281Wh smart battery, and a sine-wave controller which adds durability and also ensures a smooth, quiet and efficient ride.

The premium LCD display shows you all the important information required, including the battery capacity, speed and trip meter. From the display you can select one of the 5 levels of pedal assistance and there is also a switch for the front and rear lights. Should you need it, there is a handy walk assist function - useful whilst walking the bike up hills.

Range

The e-bike can provide up to 50km of assisted riding. This will depend on many factors including the level of assistance selected, but also:

The weight of the rider and luggage
Tyre pressure
Wind resistance
Temperature
Age of the battery
Topography
Maintenance of the bike
Tyre of trail
Amount of traffic
Riding speed.

For maximum efficiency, use the lowest level of assistance and ensure you select the appropriate gear for your speed.

Specifications

Charging voltage - 100V to 240VAC
Charging time - approx. 5 hours
Battery type - Lithium ion battery
Capacity - 281Wh
Nominal voltage - 36VDC
Max Speed – 25km/hr
Motor type - Rear-wheel drive
Motor type - Brushless DC Motor
Nominal motor power - 250W
Maximum motor power - 400W
Torque - 40Nm

Battery

For safety this high energy density lithium ion battery contains a sophisticated battery management system (BMS). The BMS ensures safe charging and discharge, continuously monitoring each of the cells in the battery individually. If the current drawn gets too high or the temperature of the battery is elevated, the BMS will shut the battery down for safety.

Specifications

Capacity - 281Wh
Automatic Discharge Cut-off - 30V
Charging voltage - 42V
Maximum Discharge Current - 15A
Weight - 1.95kg

Viewing the remaining capacity

To view the remaining capacity of the battery, you can use either LCD display or the LED panel on the battery – press the button to activate the LED's.

Red - 0 to 25%
1 Green - 25 to 50%
2 Green - 50 to 75%
3 Green - 75 to 100%

Turning the battery On

The battery has its own switch, located on the rear left hand corner of the battery. It must be switched on for the system to operate.

Charging the battery

The battery can be charged whilst attached to the bike or removed from the bike and charged separately.
To charge the battery,

- Make sure that the system and battery are turned off.
- Do not make or break connections with the battery, whilst the 240V power is connected to the charger. Connect the charger to the battery first, then the charger to the wall socket.

- The light on the charger will illuminate red whilst charging. When the charging is finished, it will turn green.
- Close the port after charging.
- If the battery hasn't fully charged after 6 hours. Then stop charging and contact our Customer Service Hotline.

Attaching or Removing the battery

- Make sure the battery is turned off, and push the battery full into the case
- Turn the key clockwise to lock the battery, to unlock turn anti clockwise.

CAUTION

- Always make sure that the battery is locked in place before riding. Do not ride the bike with the key in the barrel.

- In the event that keys are lost, take note of the number of the barrel of the lock and contact our Customer Service Hotline.

Display

Specifications

- Display - LCD
- Levels of Assistance - 5
- Voltage - 5V
- Configurable - Adjust the parameters for the system
- Supports - 36V system
- Certification - CE / ROHS

Display explanation

The speed, trip and odometer readings are as displayed. The other display information is below:

Pedal Assistance Level

Walk Assist Activated

Lights Activated

Battery Status

Operating the system via display

Turning the System On/Off
Hold the M button will turn the e-bike system on. Hold the M button to turn the display off. When powered off, the unit uses very minimal power.

Changing the Level of Pedal Assistance
The default setting for the display is 1. You can vary the level of assistance by using the + and - buttons from 0 (no pedal assistance) to 5 (maximum pedal assistance).The level of assistance is indicated at the top of the display.

Walk Assist Mode
To engage walk assist mode, hold down the – button. The bike will begin moving at 6km/hr – useful for when walking the bike up hills. Releasing the button will stop the walk assistance.

Turn on lights
Hold the + button down until the light led is illuminated. The display is dimmed whilst the lights are activated so as not to blind the rider whilst in low light conditions

Changing Modes
To change between modes, press the M button. Pressing the M button toggles between average speed and current speed and also between trip meter and Odometer. You can see which you have selected on the left hand side of the display.

Battery Capacity
There is a battery capacity indicator at the bottom of the display measured in 5 increments

Error Code
When there is a fault with the system, the E light will be displayed, along with the corresponding code.

Battery charger

- Only use the charger provided with the kit
- The LED light on the charger indicates the function of charger.
- The light on the charger will illuminate red whilst charging. When the charging is finished, it will turn green.

Specifications

Efficiency - Over 80%
Temperature – low operating temperature
Input – 220-240 VAC 50-60Hz 90W
DC Output – 36V 2A

Motor

- The motor is a brushless sealed (geared) drive unit that does not require maintenance.

Specifications

Efficiency - Over 80%
Noise - Under 50Db
Voltage - 36V
Rated Power - 250W
Torque - 40Nm
Weight - 2.78kg
Hub – Freewheel

Pedal Assistance Levels

There are 5 levels of pedal assistance. Assistance will only begin once you start pedalling. Make sure you are familiar with the power delivery, and always start with the default level, level 1.

All levels of power delivery are limited to 25km/hr, however they vary in how much pedal assistance is given.

0 - No pedal assistance
1 – 30% of maximum power
2 – 45% of maximum power
3 - 60% of maximum power
4 – 80% of maximum power
5 – 100% of maximum power

CAUTION

- Make sure that you select the appropriate gear for the terrain

Walk Assist

The walk assist function helps you walk the bike out of car parks and up steep hills without needing to push the bike. Walk assist is limited to walking pace, 6km/hr

Power Cut Brake Levers

Operating the brakes on the e-bike will automatically cut off any power to motor. Familiarise yourself with this feature before riding. Always ride with your hands ready to operate the brakes in case of any sudden power assistance.

Troubleshooting

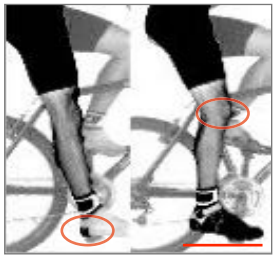
If the suggested remedy does not solve the problem, please contact the Ecosmo Customer Service Hotline.

SYMPTOM	POSSIBLE CAUSE	REMEDY
Assistance not being provided	Is the battery / system turned on	Use the switch on the battery to turn it on. Then hold the M button on the display to turn the entire system on
	Is the battery charged	Charge the battery
	Battery maybe over heating	If you are riding in hot weather, up inclines or with a heavy load. Wait until the battery cools down
	Over speeding	The assistance will stop after reaching 25km/hr
	Not pedalling	The bicycle is not a motor bike, and pedalling is required
	The assist level set to 0	Set the assistance from 1-5
	Power cut brake levers activated	Release the brakes

SYMPTOM	POSSIBLE CAUSE	REMEDY
Assisted range is too short	Low battery capacity	Charge the battery
	Low tyre pressures	Increase tyre pressures to correct settings
	Poor gear change	Change gears according to the terrain
	Lower the assistance level	Lower assistance levels will increase range
	Lights using power	Don't use lights during the day
	Over time battery performance will degrade	Replace the battery
Pedalling is difficult	Low tyre pressure	Increase tyre pressure to correct pressures
	Low battery	Charge the battery
Battery cannot be charged	Check the power plug and charger connections	Disconnect and reconnect charger and battery
	Dirty Connections	With the charger disconnected from the bike and the power outlet, check the connections and clean if required
Battery and / or charger are hot	The temperature maybe exceeding operating temperature range	Disconnect, and wait for both to cool and recharge

The LED on the charger does not illuminate	Poor connection	Check the connection of the battery, charger and power outlet
Fluid, odor or smoke is coming out of the battery		Stop using immediately and contact the Customer Service Hotline
The display does not light up	The battery is not sufficiently charged	Recharge the battery
	Is the power on	Turn on the power at the battery and hold the M button for 2 seconds on the display
	Poor connections	Check the connections for the display, and make sure the battery is securely inserted into the case
	Cold weather	In very cold weather the computer will not turn on, wait for it to warm up and try again

Size and Seating Position



The correct seating position is a decisive factor for your safety, health, comfort and ability to perform when riding. Also, make sure the bicycle is not too big or too small for the rider. If the bicycle does not fit properly, you may lose control and fall.
To obtain the correct saddle height, outstretch one leg, so that the heel is just touching the pedal at its lowest position.
When the ball of the foot is then placed on the pedal, there will be a slight bend at the knee.

Adjusting Brake Levers

The brake levers must be adjusted in such a way that you can grip them securely at any time without effort. Ensure that you will know without having to think about it which lever operates the brake on the front wheel and which one operates the brake on the rear wheel.

Danger

The brake force can increase abruptly if the lever is pulled strongly or is at the end of the travel distance of the lever. The braking effect may not be what you are used to.

Note: If the brake levers have been correctly adjusted, your hands will function as straight extensions of your arms and you can then operate the levers safely and without getting tired.

The levers can be brought closer to the handlebar by means of a regulating screw, so that riders with small hands can reach the brake grips safely. The pulling tension must be adjusted in such a way that the brake handle cannot touch the handlebar grip, even when it is pulled forcefully.


Danger

Take your bicycle to a specialist dealer for regular check-ups, at least after 1000 km ridden or after a year, whichever is the sooner. They will be able to recognise damaged and worn construction elements quickly and advise you on their replacement. Do not carry out repair work yourself on construction elements that affect safety, such as electrical system, frame, fork, handlebar, stem, headset, brakes and lighting.


Danger

Screws and Torque Wrench. Take note that during all work on the bicycle, all screw joints must be tightened with the correct torque. The torque that is needed for fastening is displayed on many construction elements. The torque is given in newton metres (Nm) and can only be applied by means of a torque wrench. Therefore, always use a torque wrench. Screws or construction elements that are not tightened correctly can tear, break or work loose.
If you do not have a torque wrench, then you should leave the work to a specialist dealer.

Screw Joints - Torque List


Danger

Applying the correct torque is essential for all screw joints on the bicycle, to ensure that they remain securely seated. A torque that is too high can cause damage to the screw, the nut or the construction element. Therefore, always use a torque wrench.

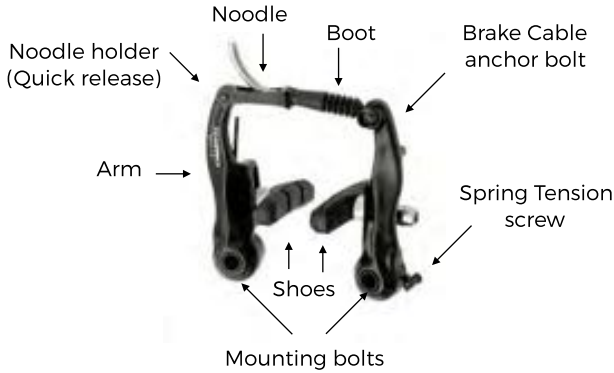
Torque List

Screw Connection	Nm
Crank arm, aluminium	40
Pedals	35
Wheel nut, front	25
Wheel nut, rear	40
Stem expander bolt	7
A-head clamp screws	9
Clamping screws M8	15
Clamping screws M6	11
Clamping screws M5	7
Clamping screws M4	4
Brake blocks	6
Brake cable anchor bolt	5~6
Seatpost bracket	20

Danger

Brakes are highly relevant to safety. This means that regular servicing is essential, and requires specialist knowledge and special tools. Ensure all work on the brake installation is carried out by a specialist. Work that has not been carried out correctly and professionally will impair the operational safety of your bicycle.

The following are general V-Brake adjustment instructions that can be apply to most brake brands. Keep in mind this service should be carried by a professional bike mechanic.



Adjusting V-Brakes

Loosen the clamp that holds the brake cable with an Allen key. Hold each arm in towards the rim of the wheel and pull the loose brake cable through the clamp. Once you have pulled the cable tight, use an Allen key to tighten the clamp. This will hold the cable in place. Make sure that the bolt is tightly holding the brake cable before you ride.

There should be **1mm gap** between brake shoes and rim.

Replacing & Adjusting Brake Shoes
Remove the nut and washer from the brake shoe. Install into the brake arm so the shoe runs parallel to the machined brake surface area (Silver).
Note: Use same method for Caliper Brakes.

Gears

Your gears have been adjusted in factory by a professional mechanic. As gear cables stretch, you might need to get the gears checked by a professional mechanic at your local bike shop.

Tips for keeping the gears in good condition:

- Do not change gears under load
- Keep your chain clean of debris and lubed with bicycle chain lube
- Gears should be checked in the first 3 months of owning a new bike and 9 months periods after that

Note

You will find information about your bicycle's gears on the Shimano® website.

Storage & Transportation

The best way to prevent rust from accumulating on your bike is to store it in a dry place, away from direct sunlight and extreme heat. Ensure you keep the bike upright and nothing hits the side of the bike with the gears. Before storing the bike for a long period of time, wipe and apply fresh lube to the chain, wipe the frame and wheels with a dry cloth and pump up the tyres to the recommended pressure. After a long period in storage, start by checking tyre pressure, brake function, lube the chain and check for any rust build up on the frame.
If transporting your bike in a car, ensure that the battery is secured in the battery case on the bike. Do not transport separately.

Note: Keep your battery charged whilst in storage.

Bicycle Chain

Clean and lubricate the bicycle chain regularly in order to maintain its functionality. Dirt can be removed during normal washing of the bicycle. Otherwise, you can also clean the chain by pulling it through an oily rag. Use a suitable lubricant to apply oil to the cleaned joints of the chain. Leave for a while, then remove the excess lubricant.

Note

The chain must be under a certain tension to enable secure functioning of the chain and the gears. In the case of chain gears, tension will be automatically applied. In the case of hub gears, the chain must be tensioned if it shows too much sag. Otherwise the chain may come off and cause a fall.

Note

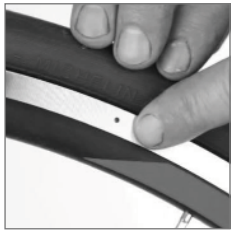
Dirt and continuous load on the chain cause the chain to wear out. The chain must be replaced as soon as it can be lifted clearly (approx. 5 mm) off the front chain ring. Modern chains for chain gears do not have chain joints, so special tools are needed for replacing the chain. Have the chain replaced by a specialist dealer.

Note

In normal use, brake rubbers and brake linings are subject to wear and tear. Check the condition of the brake installation and brake linings at regular intervals. Replace worn brake linings and brake rubbers in good time. Keep rims and brake discs clean and free of grease.

Note

On the rims there are engraved lines on the brake surfaces and rims, where you can see how much tread is left. If the markings cannot be seen at a point, replace the rim.



Other markings that fulfil the same function only become visible after a particular period of use, at which time the rim must be replaced. Have the rim checked by a specialist dealer, at the least when you have used up the second pair of brake rubbers.

Danger

Rims are components under heavy load and are relevant to safety. They wear out during normal use and especially when applying rim brakes. Do not continue to ride a bicycle with a rim that has signs of damage or on which the wear markings indicate that they are worn out. Take your bicycle to the specialist dealer so that he can check the rim and replace it if necessary. A worn rim loses stability and can lead to falls and serious accidents.

Danger

Regularly check the tyres on your bicycle as well. The values for minimum permissible tyre pressure and maximum permissible air pressure are displayed on the side of the tyre. Adhere to those values. Otherwise, the tyre can jump off the rim or burst!

Note

Tyres are one of the components that are subject to wear and tear. Regularly check the profile depth, air pressure and the condition of the side of the tyre. The various types of tyres are meant for different uses. Consult your specialist dealer when selecting tyres in order to find the tyre that is best suited to your bicycle.

Danger

When using non-original or counterfeit spare parts, the correct operation of your bicycle is no longer guaranteed. Falls with serious consequences are possible when using tyres with bad adhesion or poor operational reliability, brake linings with insufficient friction and light construction elements that are used incorrectly or that have been poorly constructed. The same applies to incorrect assembly.

Lubrication

Note

Ask your specialist dealer about suitable lubricants.

Lubrication Schedule

The chain: after removing dirt, after having ridden in the rain, every 250 km with chain oil.
Brake and gear cables: when not functioning well, once a year with silicon-free grease.
Wheel bearings: pedal bearings, inside bearing, once a year with bearing grease.
Gear joints: when not functioning well, once a year with spray oil
Brake joints: when not functioning well, once a year with spray oil

Schrader or Auto Valve
To open a Schrader valve, simply unscrew the cap at the top. Place the pump on the valve, pump to the required pressure and remove the pump.

PRESSURE - The required pressure is printed on the side wall of the bicycles tyres. Most tyre will give the values in "PSI" or "BAR". Please check the **PSI/ BAR/ KPA Conversion Table if needed.**
Adhere to the values printed on the side wall of the tyres. Otherwise, the tyre can jump off the rim or burst!

PSI/ BAR/ KPA Conversion Table

PSI	BAR	KPA	PSI	BAR	KPA
35	2.4	241	100	6.9	689
40	2.8	276	105	7.2	724
45	3.1	310	110	7.6	758
50	3.5	345	115	7.9	793
55	3.8	379	120	8.3	827
60	4.1	414	125	8.6	862
65	4.5	448	130	9.0	896
70	4.8	483	135	9.3	931
75	5.2	517	140	9.7	965
80	5.5	552	145	10.0	1000
85	5.9	586	150	10.3	1034
90	6.2	621	155	10.7	1069
95	6.6	655	160	11.0	1103

Cleaning

- Do not use thinner or other solvents to clean any of the electrical components. As such substances may damage the surfaces.
- Use a damp cloth, with the water well wrung out, to clean the bike and components.
- Lubricate after cleaning

Maintenance Schedule

Note

Always store your bicycle with a fully charged battery.

Note

Regular servicing is essential. This requires specialist knowledge and special tools. Have all work on your bicycle carried out by a specialist dealer!

The electrical components do not require maintenance however the mechanical components are similar to a regular bicycle and the following actions are necessary for maintaining sustainable functionality and upholding the right to make claims under warranty:

- Clean you bicycle after every ride and visually check it for damage.
- Always have inspections carried out by a specialist dealer.
- Check your bicycle at intervals of about 300 to 500 km and at least after three to six months. Amongst other things, check that screws, bolts and quick release skewers are firmly seated.
- Use a torque wrench for all screw joints
- Maintain and lubricate all moving parts (except the brake surfaces) in accordance with the specifications of the manufacturer.
- Have deficient and worn construction elements replaced.

After **200km of riding**, and once a year thereafter, actions need to be carried out:

Check Tyres and wheels

Torques of:
- Crank arms
- Seatpost
- Pedals
- Seat
- All fastening screws
- Handlebar and stem

Have components adjusted:
- Headset
- Brakes
- Gears
- Spring elements

Every **300** to **500 kilometres** approx. Actions to be carried out:

Check:
- Bicycle chain
- Pinions
- Cogset
- Rim
- Brake linings for wear, have them replaced if necessary (specialist dealer)

Lubricate:
- Chain with suitable lubricant

Check / have checked:
- the firm seating of all screws

Clean:
- Bicycle chain
- Pinions
- Cogset

Every **1000 kilometres** approx. Actions to be carried out:
Check hub brake, if necessary, grease brake sheath with brake sheath grease or replace (specialist dealer)

Every **3000 kilometres** approx. Actions to be carried out:
Have your specialist dealer check, clean, possibly replace:
- Hub
- Pedals
- Headset
- Gears
- Brakes

Guarantee inspection checklist within 30 to 60 days of purchase

Checked	New	Adjusted	Repaired
Gears/ Chain	☐	☐	☐
Bowden cables gears	☐	☐	☐
Brake system/ linings	☐	☐	☐
Bowden cables brakes	☐	☐	☐
Bearing system	☐	☐	☐
Pedal bearings	☐	☐	☐
Stem/ fastening	☐	☐	☐
Handlebar/ fastening	☐	☐	☐
Seat/ fastening	☐	☐	☐
Seatpost	☐	☐	☐
Wheels/ wear and tear	☐	☐	☐
Spoke tension	☐	☐	☐
Tyres	☐	☐	☐

Work carried out: _____

Materials Used: _____

Specialist dealer, date, stamp _____

Inspection after 12 months of purchase or 200 ridden kilometres.

Checked	New	Adjusted	Repaired
Gears/ Chain	☐	☐	☐
Bowden cables gears	☐	☐	☐
Brake system/ linings	☐	☐	☐
Bowden cables brakes	☐	☐	☐
Bearing system	☐	☐	☐
Pedal bearings	☐	☐	☐
Stem/ fastening	☐	☐	☐
Handlebar/ fastening	☐	☐	☐
Seat/ fastening	☐	☐	☐
Seatpost	☐	☐	☐
Wheels/ wear and tear	☐	☐	☐
Spoke tension	☐	☐	☐
Tyres	☐	☐	☐

Work carried out: _____

Materials Used: _____

Specialist dealer, date, stamp _____

Inspection after 24 months of purchase or 1000 ridden kilometres.

Checked	New	Adjusted	Repaired
Gears/ Chain	☐	☐	☐
Bowden cables gears	☐	☐	☐
Brake system/ linings	☐	☐	☐
Bowden cables brakes	☐	☐	☐
Bearing system	☐	☐	☐
Pedal bearings	☐	☐	☐
Stem/ fastening	☐	☐	☐
Handlebar/ fastening	☐	☐	☐
Seat/ fastening	☐	☐	☐
Seatpost	☐	☐	☐
Wheels/ wear and tear	☐	☐	☐
Spoke tension	☐	☐	☐
Tyres	☐	☐	☐

Work carried out: _____

Materials Used: _____

Specialist dealer, date, stamp _____

Inspection after 36 months of purchase or 2000 ridden kilometres.

Checked	New	Adjusted	Repaired
Gears/ Chain	☐	☐	☐
Bowden cables gears	☐	☐	☐
Brake system/ linings	☐	☐	☐
Bowden cables brakes	☐	☐	☐
Bearing system	☐	☐	☐
Pedal bearings	☐	☐	☐
Stem/ fastening	☐	☐	☐
Handlebar/ fastening	☐	☐	☐
Seat/ fastening	☐	☐	☐
Seatpost	☐	☐	☐
Wheels/ wear and tear	☐	☐	☐
Spoke tension	☐	☐	☐
Tyres	☐	☐	☐

Work carried out: _____

Materials Used: _____

Specialist dealer, date, stamp _____