

USER MANUAL

COVERING OPERATION, SETTINGS, MAINTENANCE AND SERVICING

DIN EN ISO 4210 / DIN EN 82079-1

ONE-SIZE CITY AND TOURING BIKES

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Qio

1 Warranty (Guarantee specifications)

With the purchase of this bicycle, you have purchased a high quality product. We are therefore able to offer you the following guarantee which is effective from the purchase date:

On aluminium frames and unsprung aluminium forks: 5-year guarantee for frame and fork breakage

On steel frames and unsprung steel forks: 5-year guarantee for frame and fork breakage

On carbon frames and carbon forks without suspension: 3-year guarantee for frame and fork breakage

During the guarantee period, product defects are resolved by replacement or repair at no charge. Guarantee repair services may be carried out only by a bicycle dealer specified by us.

The guarantee is only valid for the first owner and cannot be transferred to a subsequent owner.

Proof of purchase (invoice/dated sales document identifying the bicycle) is required for this.

The guarantee is invalidated if the bike is used for races and competitions.

This guarantee covers complete bikes, which have been fully assembled and adjusted by a dealer we have authorised.

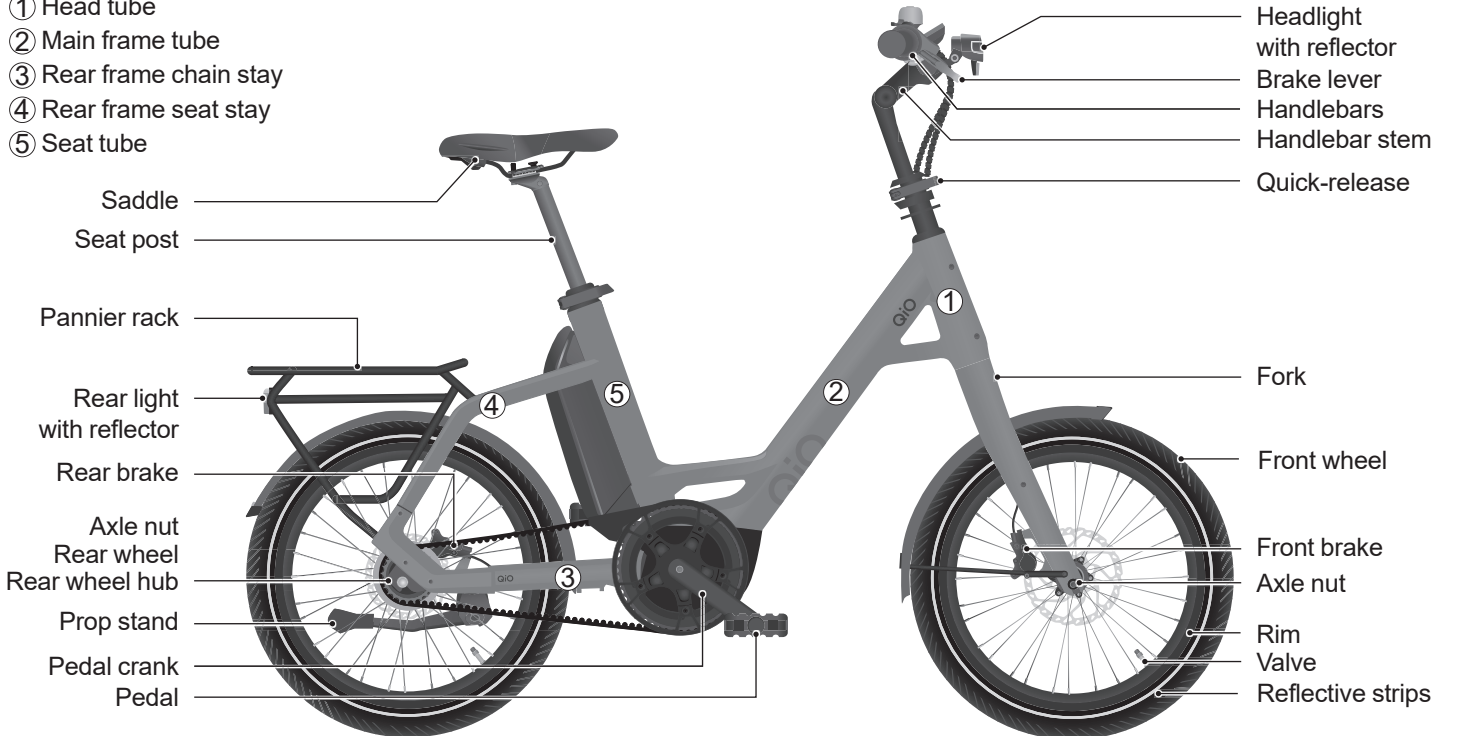
This guarantee is voided if the bicycle is not used as specified, is inadequately maintained, incorrectly repaired, converted or modified.

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2 Bicycle part terms

Frame:

- ① Head tube
- ② Main frame tube
- ③ Rear frame chain stay
- ④ Rear frame seat stay
- ⑤ Seat tube



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

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3 Safety

3.1 General notes and information

3.1.1 Reading the user manual



Read all warnings and notes in this user manual with care before you operate the bicycle for the first time.

If you have purchased an e-bike, please also read the **original instruction manual** carefully before using the e-bike.

Keep the manual to hand so that it is available at all times. Include the user manual when passing the bicycle on to third parties.

3.1.2 Validity

This user manual is valid for the 2021 and newer bicycle models.

The lighting equipment supplied with your bicycle or e-bike meets the applicable requirements in your country.

- Use the Figure *Lighting equipment* to check whether your bicycle or your e-bike model is approved for road usage (see Chapter “Road traffic” on page 12).
- **Note:** In many countries, the light fittings required by law for road traffic use must also be fitted during the day and must be ready for use at all times.

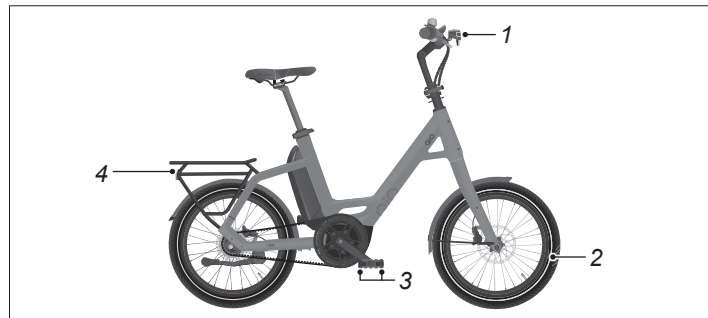


Fig. Lighting equipment (example)

- | | |
|------------------------------------|------------------------------------|
| 1 Headlight with reflector (white) | 3 Reflectors on the pedal (yellow) |
| 2 Reflective strips (white) | 4 Rear light with reflector (red) |

3.1.3 Categorisation of warning notes

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

There are warning notes in the following categories:



WARNING

This key word designates a hazard with a moderate degree of risk which may lead to death or severe injury if unheeded.



CAUTION

This key word designates hazard with a low degree of risk, which may result in minor or moderate injury if unheeded.



NOTICE

This key word warns of possible damage to property.

3.2 Proper use



WARNING

Danger for children or for individuals with insufficient knowledge or abilities!

Risk of accident and injury!

- You should only use the bicycle if you are fully acquainted with the operation of the bicycle and all of its functions.
 - Do not allow persons with reduced physical, sensory or mental abilities or a lack of experience or knowledge to use the bicycle.
 - Do not allow children to play with the bicycle.
 - Do not allow children to clean, maintain or service the bicycle.
-



WARNING

Children have insufficient knowledge and skills.

Risk of suffocation!

- Do not allow children to play with the packaging wrapper. Children may get caught in it when playing and suffocate.
-



WARNING

Braking distances can be increased or the bicycle could slip on bends, e.g. when riding in wet conditions or where the riding surface is very dirty.

Risk of accident and injury!

- Adapt the manner in which you ride to the weather conditions and road surface conditions.
-



WARNING

Component breakages caused by improper usage.

Risk of accident and injury!

- The bicycle should only be used for the intended purpose as described.
-



CAUTION

Risk of trapping body parts due to the bicycle's moving parts.

Risk of injury!

- Wear tight-fitting clothing on the legs.
 - Ensure no loose straps are hanging down, e.g. shoe-laces or jacket belts.
-



CAUTION

Slipping due to improper footwear.

Risk of injury!

- Wear shoes with non-slip soles.
-



CAUTION

Insufficient control of the bicycle.

Risk of injury!

- Hold on to both handlebar grips firmly with both hands while riding.
 - Always remain ready to brake.
 - Never ride one-handed or with no-hands.
-



NOTICE

Increased wear and breakage of components caused by improper use of your bicycle.

Risk of damage!

- Do not use your bicycle to jump over ramps or mounds of earth.
 - Do not ride over steps or other types of ledges, e.g. kerbs or rocks.
 - Do not ride through deep water.
-

Safety

Neither the manufacturer nor the specialist dealer will accept liability for damage which occurs due to improper use, which does not comply with the intended purpose. Only use the bicycle in the manner described in this user manual. Any other use is deemed improper and may cause accidents, serious injuries or damage to the bicycle itself.

The warranty is rendered void in the event of improper use of the bicycle.

The bicycle is intended for use by one person, for whom the bicycle has been adjusted to provide the correct sitting position according to their body size.

The bicycle is intended for use on roads and paved paths with a smooth surface.

The bicycle is not intended to be subjected to above-average loads during use, e.g. using this bicycle in racing or competitive events is considered improper use.

The pannier rack must not be removed, replaced or modified as it is a load-bearing component.

The bicycle is designed for use with a child seat, trailer or trailer system if this is indicated in the bicycle passport (see Chapter *“Bicycle passport” on page 95*).

3.3 Road traffic



WARNING

Improper use or use for purposes other than those originally intended.

Risk of accident and injury!

- Only use the bicycle in public road traffic if it is equipped in accordance with the road traffic regulations in the respective country.
- Be aware of and follow the applicable national and regional regulations regarding road traffic.



WARNING

No head protection.

Risk of injury!

- Wear a suitable bicycle helmet when riding your bicycle.



WARNING

Poor visibility to other road users.

Risk of accident and injury!

- Wear light-coloured clothing with reflective elements when riding your bicycle.



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Do not allow yourself to become distracted by other activities when riding your bicycle, e.g. by switching the lights on.
- Do not use mobile devices when riding your bicycle, e.g. smartphones or MP3 players.
- Do not ride your bicycle if you have consumed alcohol, narcotics or medication which may impair your ability to ride.

Note: Dirt roads and forest tracks are also part of the road traffic network, as are private areas of land if these are accessible to the public.

- Seek information regarding the relevant applicable road traffic regulations for the country or the region, e.g. from the Ministry of Transport.
- Ensure that you regularly obtain information regarding changes to the content of the regulations currently in force.
- Ride in such a way that nobody suffers injury, is endangered, incapacitated or disturbed.
- Use the cycle routes intended for bicycles according to regulations.

3.3.1 Bicycle helmet

- For your safety: Wear a bicycle helmet even if you are not required to do so by law.
- Laws and regulations may change at any time. Check regularly for updates about regulations for your respective country or region.
- Wear a suitable bicycle helmet which has been tested in accordance with DIN EN 1078 standards and bears the CE seal of conformity.

3.3.2 Additional regulations

For use in road traffic, bicycles must be equipped with two brakes, which operate independently of one another, and a bell.

3.4 Modifications



WARNING

Changes to the bicycle or incorrectly selected spare parts can cause the bicycle to malfunction.

Risk of accident and injury!

- Only use original spare parts.

3.5 Residual risks

Despite the observance of all safety and warning notes, use of the bicycle is still associated with several unforeseeable residual risks, some examples are listed below:

- Misconduct of other road users
- Unforeseeable material defects or material fatigue can lead to breakages or failure of components
- Try to anticipate the actions of others and ride defensively.
- Before each ride, you should check your bicycle for cracks, changes in colour or other signs of damage.
- Before each ride, check that all safety-related components work properly, e.g. the brakes.
- After a fall or accident, ask your specialist dealer to thoroughly check your bicycle for damage.

3.6 Carrying children



WARNING

Changed riding characteristics due to additional weight.

Risk of accident and injury!

- Never exceed the maximum tow load.
 - Familiarise yourself with the how it feels to ride your bicycle after attaching a child seat or trailer.
 - Adapt the way you ride to suit the changed handling of the bicycle.
-



WARNING

Component breakages caused by incorrect assembly of the trailer coupling.

Risk of accident and injury!

- Ask your specialist dealer to mount child seats, trailers and trailer couplings for you.
-

The following points must be observed when riding with a trailer:

- Only attach a trailer if your bicycle is suitable for use with a trailer (see Chapter “*Bicycle passport*” on page 95).
- Observe the maximum tow loads:
 - The maximum tow load for non-braked trailers is 40 kg.
 - The maximum tow load for braked trailers is 80 kg.
- Please note that the maximum total weight of the bicycle must not be exceeded when carrying children in the child seat or trailer (see Chapter “*Permissible total weight*” on page 21).
- Seek information from your specialist dealer about suitable child seats, trailers and trailer systems for your bicycle.
- If you require a child trailer tested in accordance with DIN EN 15918, only a child trailer tested in accordance with DIN EN 15918 offers the necessary safety.
- Regularly check the safety devices e.g. the tow bar or the light fittings.

Safety

- You should only allow a child to ride in the child seat or child trailer if the child is younger than 8 years old and weighs less than 22 kg.
- You should only ride with a child in the child seat or child trailer if you are over 16 years old.
- You should only allow a child to ride in the child seat or child trailer if the child is wearing a suitable bicycle helmet, which has been tested according to the relevant norms and bears the CE seal of conformity.
- Always follow the regulations governing the use of child seats, trailers and trailer systems that apply in your country or region.
- Apply the brakes sooner, expect a longer braking distance and less responsive steering.
- With your child, practice proper conduct while cycling.
- Try to anticipate the actions of others and ride defensively.

3.6.1 Travelling with children in a child seat

- Child seats should only be mounted on the frame. Securing attachments (child seat) with **clamps** can break **the pannier rack** and is **prohibited**.
- When a child seat is installed, ensure the seat springs and suspension seat post are fully covered.
- When a child seat is installed ensure that all moving parts are covered, e.g. using a spoke protector.

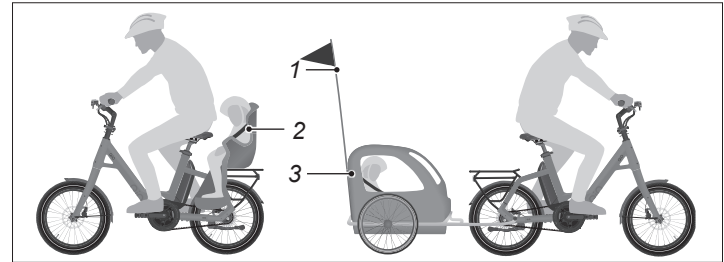


Fig. Carrying children

1 Flag

2 Child seat

3 Child trailer

3.6.2 Travelling with children in a child trailer



WARNING

Increased acceleration and high speeds when riding e-bikes (pedelecs).

Risk of accident and injury!

- Only ride at moderate speeds when riding with a child trailer.
 - Bear in mind the extended stopping distance caused by the propulsive force of the child trailer.
-
- Keep in mind that your bike is significantly longer with the trailer system attached.
 - Transport a maximum of two children in the child trailer.

Safety

- Only use trailers with functional lighting equipment that complies with the regulations applicable in your respective country or region.
- For the child's safety, choose a trailer with a restraint system.
- Ensure that you equip the trailer with a luminous-coloured pennant flag on a flexible flagpole with a minimum height of 1.5 m and install covers for the wheel housings.
- For maximum safety, select a model with a sturdy passenger compartment and safety belts compliant with DIN EN 15918.

4 Basic information

4.1 Symbols and terms

4.1.1 Symbols

- 1st** Steps to be performed in a particular order begin with a number.
- Steps to be performed in no particular order begin with a bullet point.
 - Dashes are used to denote lists.

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

4.1.2 Terms

Dynamo: Contrary to the norm, the term “dynamo” is used instead of “generator”.

Threadless handlebar stem: Contrary to the norm, the term “threadless handlebar stem” is used instead of “quill stem”.

Dropout: Connection between the rear frame seat stays and the rear frame chain stays. The rear wheel’s axle is tightly screwed into the dropout.

Brake arm: Contrary to the norm, the lever installed on the chain stays as a bracket for the coaster brake is described as the brake arm.

Brake lever: Contrary to the norm, the term “brake lever” refers to the lever attached to the handlebars that is used to activate the rim brakes, drum brakes or disc brakes.

Pressure point (hydraulic brake): The position of the brake lever at which the brake begins to have a braking effect.

Pedal drive: Assembly consisting of pedal, pedal crank, bottom bracket and chainring.

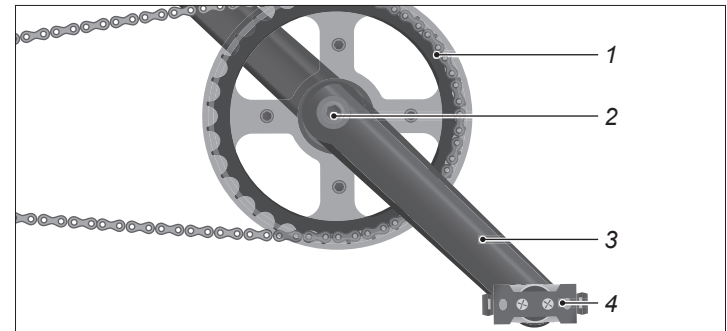


Fig. Pedal drive (example)

- | | |
|------------------|---------------|
| 1 Chainring | 3 Pedal crank |
| 2 Bottom bracket | 4 Pedal |

4.1.3 Written labels

Italic font is used for picture captions and references in the text.

4.1.4 Units

Unit	Meaning	Unit for
1/min	per minute	Revolutions
Bar	Bar	Pressure (obsolete)
g	Gram	Weight (= kg/1000)
kg	Kilogramme	Weight (= g×1000)
kPa	Kilopascal	Pressure
Nm	Newton meter	Torque
psi	pound per square inch	Pressure (USA, obsolete)
"	Inch	Length (USA); 1 inch = 2.54 cm

4.2 Direction of rotation for screws

- Tighten screws, axles and nuts by turning them in a clockwise direction.

Note: If there are any deviations to this rule, a note will be included in the appropriate chapter, indicating the change in direction. Please observe the respective notes.

4.3 Torques



WARNING

Material fatigue caused by incorrect tightening of screw connections.

Risk of accident and injury!

- Do not use the bicycle if you notice any loose screw connections.
- Screw connections must be properly tightened with a torque wrench and the correct torque level.

The correct torques must be observed in order to correctly tighten screw connections. This requires the use of a torque wrench with a corresponding range of adjustment.

- If you do not have any experience with using torque wrenches, you should ask your specialist dealer to check your screw connections.
- Individual bicycle components are labelled with information about the appropriate torques or with markings showing insertion depths. You must make sure to observe these specifications and markings.

This table does not list all components. Torque specifications are to be used as basic values and do not apply to carbon components.

Basic information

- Please ask for more information about other components and their corresponding torques or read the enclosed instruction manual for these components.

Screw connection	Torque in Nm
Pedal crank (steel/aluminium)	30 / 40
Pedal	30
Axle nut front / rear (15 mm)	25 / 35
Saddle (adjustment screw) M6 / M8	14 / 20
Seat post clamp M5 / M6	5 / 10
Brake and switch lever on the handlebars	3
Quill handlebar stem (expander bolt on the shaft stem)	8
Threadless handlebar stem (shaft clamp / handlebar clamp)	4 / 5

4.4 Sitting position



CAUTION

Muscle tension and joint pain due to an incorrectly adjusted sitting position.

Risk of injury!

- Ask your specialist dealer to adjust your sitting position correctly.



CAUTION

Limited accessibility to operating controls on the handlebar due to an incorrect sitting position.

Risk of accident and injury!

- Ask your specialist dealer to adjust your sitting position correctly.

The optimal sitting position depends on the frame size of the bicycle, the physical size of the rider and the settings of the handlebars and the seat. Specialist knowledge is required to adjust the bicycle to an optimal sitting position.

The optimal sitting position can also depend on the use of the bicycle, e.g. if it is predominantly used for sports.

The key features of an optimal sitting position are:

- If a pedal is at the top, the knee angle of the upper leg and the arm angle is 90°. The lower leg must be slightly bent (see Fig. “Key features of an optimal sitting position”, left).
- When one pedal is forwards, the knee must be above the axle of the front pedal (see Fig. “Key features of an optimal sitting position”, right).
- The arms are relaxed and slightly bent outwards (not shown in the figure).
- The back is not perpendicular to the seat post.

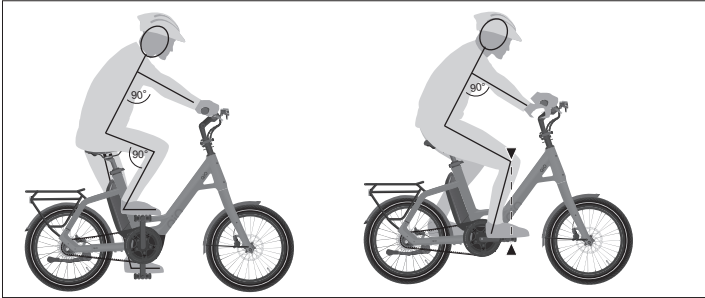


Fig. Key features of an optimal sitting position

If the optimal sitting position cannot be achieved by adjusting the seat and the handlebars, on many bicycle models it is possible to replace the relevant components.

If selling or passing the bicycle on to another person, this can be an option to enable continued use of the bicycle.

- If the sitting position cannot be optimally adjusted, ask your specialist dealer to fit components with different measurements.

4.5 Wear



WARNING

Malfunction caused by excessive wear and tear, material fatigue or loose screw connections.

Risk of accident and injury!

- Check the condition of your bicycle regularly.
- Do not use the bicycle if you notice excessive wear or loose screw connections.
- Do not use the bicycle if you notice any cracks, distortions or changes in colour.
- If you notice any signs of excessive wear and tear, loose screw connections, distortion, cracks or colour changes, you should get your specialist dealer to inspect your bicycle immediately.

As with all mechanical components, bicycle components are subject to wear. High levels of strain and improper use may exacerbate wear. Different materials wear out at different rates.

Only a specialist dealer is able to assess wear on components made of aluminium, carbon or composite materials.

Basic information

Heavy blows, shocks and excessive tension can cause damage to frames, forks and wheels made of carbon and composite materials. The inner structure of the materials undergoes detrimental changes without showing any visible signs.

- Consult your specialist dealer about the wearing parts of your bicycle.
- Regularly check the condition of all wearing parts.
- Maintain the wearing parts on a regular basis.

4.6 Protection against theft

- Protect your bicycle against theft.
- For models with a frame lock: If you are not able to keep watch over your bicycle, lock it up using the frame lock.

Note: For effective protection against theft, use a chain lock or steel cable lock and attach the bicycle to a fixed object, e.g. to a bicycle stand.

The frame lock does not provide sufficient protection against theft.

4.7 Permissible total weight

- If you own an e-bike, read the separate user manual on its drive system to learn the permissible total weight.

Permissible total weight: 140 kg

4.7.1 Determining unladen weight

- Determine the unladen weight of your bicycle by weighing it, with all optional extra equipment attached as appropriate.

Note: For the best results, the weight should be determined using

a hanging scale. If necessary, ask your specialist dealer to determine the unladen weight of your bicycle.

4.7.2 Calculating the total weight

The actual total weight is calculated as follows:

Bicycle + rider (incl. rucksack) + baggage = total weight

Baggage includes saddle bags, baskets, child seats and trailers.

As the weight of the trailer and its cargo have a considerable influence on the braking performance, it must be 100 % added to the total weight.

Note: Particular caution must be taken with child trailers in combination with e-bikes due to the high speed and longer braking distance.

4.8 Transport

NOTICE

Incorrect use of bike racks.

Risk of damage!

- Only use approved bicycle racks with which the bicycle can be transported in an upright position.
 - Find out how to use a bicycle rack, e.g. by consulting your specialist dealer.
 - Secure the bicycle properly to prevent it from slipping and falling off.
-

Depending on the bicycle model, a transport restraint for the disc brakes is included in the bicycle's packaging.

- Ask your specialist dealer to explain how to use the transport restraint.
- Use the transport restraint when transporting the bicycle.
- Transport the bicycle in an upright position.

4.9 Before you start riding

WARNING

Unexpected bicycle handling.

Risk of accident and injury!

- Practice using the brakes and changing gears in a location that is free of traffic.
 - Enter road traffic only if you know how the bicycle normally handles and you know how to operate it.
-

WARNING

After cycling the first kilometres, cables and spokes may elongate and screwed connections may loosen. The components of the bicycle may malfunction, e.g. in the form of brake failure.

Risk of accident and injury!

- Make sure that a bicycle inspection is carried out by a specialist dealer after the first 200 km.
-



WARNING

Material failure caused by use-related wear and loose screw connections.

Risk of accident and injury!

- Check your bicycle before each ride, following the inspection instructions.
- If in any doubt, ask your specialist dealer to show you how to check your bicycle.
- Only use the bicycle if no damage is visible.
- Only use the bicycle, if you cannot see any signs of excessive wear and cannot find any loose screw connections.

Your bicycle has been fully assembled and adjusted by your specialist dealer; it is now ready to ride.

Ensure that you are well acquainted with your bicycle before your first ride.

- Hold on to both handlebar grips firmly with both hands while riding.
- Do not ride one-handed; the handlebars can turn while braking.
- If you have hydraulic brakes, apply both brake levers multiple times to centre the brake pads in the brake calliper.
- Accustom yourself to the way the bicycle rides away from road traffic.
- If you find that the location of the brake lever for the front wheel or rear wheel brake is unfamiliar to you, you can ask your specialist dealer to reposition them for you.

- Ride in an off-road location and at a low speed in order to familiarise yourself with the braking characteristics of your own types of brakes (see Chapter “*Brakes*” on page 27).
- Ride in an off-road location to practice using the gear shift system until you can change gears without it causing a distraction.
- For longer rides you should also check if you are in a comfortable sitting position and that you are able to safely operate all components located on the handlebars with ease while riding.

4.10 Inspection instructions

- Check the bicycle thoroughly for signs of damage and excessive wear before setting off.

Before each ride, check:

- **The brakes**
 - Push the bicycle and operate one brake each – the front or rear wheel that is currently being braked should become locked.
- **The gear shift system**
 - Check that the gear shift system works properly.
- **The tensioning devices**
 - Check the preload tension of all tensioning devices.
 - Check that all tensioning devices are positioned correctly.
- **The frame, fork and seat post**
 - There should be no visible cracks, distortion or colour changes in the frame, fork and seat post.

Basic information

- **The screw and plug connections**
 - Visual check of the screw and plug connections.
- **The pedal drive**
 - Check whether pedal drive is stable and functions correctly.
- **The lights**
 - Check the headlight and taillights to ensure that they work correctly.
- **The bell**
 - If you use a bell, you should hear a clear sound.
- **The handlebars and handlebar stem**
 - Check the handlebars and handlebar stem to ensure that they are firmly in place.
 - Visual inspection of the handlebars and handlebar stem to check for cracks, distortion or colour changes.
- **The tyres**
 - Check the tyres for cracks, foreign bodies and tyre pressure.
- **The rims and spokes**
 - Visual inspection of the rims.
 - Check the spokes to ensure that tension is even all round.

4.11 Maintenance and inspection

If you do not have the necessary expertise or correct tools to perform maintenance, you should ask your specialist dealer to perform maintenance for you.

4.11.1 Maintenance intervals

- Perform maintenance **every month** .
- Perform maintenance **after an accident** .
- If you overload the bicycle or ride more than 1000 km per year, shorten the maintenance intervals and have the bicycle inspected by your specialist dealer every 6 months.
- If you notice damage while maintaining your bicycle, do not use the bicycle and have it checked and repaired, as appropriate, by your specialist dealer.

4.11.2 Inspection intervals

- Observe the following intervals for inspection by a specialist dealer:
 - After 200 km or 2 months.
 - After 1,000 km or 6 months.
 - Then every 1,000 km or annually.
- Have your specialist dealer document all maintenance and repairs performed.

4.12 After an accident



WARNING

After a fall or an accident, hidden damage can occur to the bicycle, e.g. hairline cracks. Carbon or aluminium components can be damaged, even if the damage is not visible.

Risk of accident and injury!

- After a fall or accident, ask your specialist dealer to conduct a thorough check for possible damage.
 - Do not use the bicycle if damage to the bicycle is visible or suspected.
-

A fall or accident can cause damage to carbon components. Damage to carbon components is not always clearly visible. Fibres or paint may start to flake away or become damaged and component's rigidity can weaken.

- Ask your specialist dealer to replace carbon components after a fall or accident.
- After minor falls, check all components of the bicycle, e.g. if the bicycle has fallen over (see Chapter *"Inspection instructions" on page 23*).
- Consult your specialist dealer if you are in any doubt or need repair work doing.

4.13 Cleaning and servicing



CAUTION

Pinching or crushing of body parts between moving parts.

Risk of injury!

- Exercise caution when handling moving parts to ensure that you do not get your fingers trapped.
 - Wear protective gloves if necessary.
-



NOTICE

Use of incorrect cleaning agents.

Risk of damage!

- Do not use any aggressive cleaning agents.
 - Do not use any sharp, angular or metallic cleaning utensils.
 - Never use a hard water jet or high pressure device to clean the bicycle.
-



NOTICE

Dripping oil or grease.

Environmental hazard!

- Take care to ensure that no oil or grease drips down.
- Wipe up spilled oil or grease with a cloth immediately.
- Spilled oil or excess grease should be disposed of in an environmentally responsible fashion, in accordance with applicable national and local regulations.

What should be used for cleaning:

- Clean cloths,
- Mild, lukewarm soapy solution,
- Soft brush or sponge,
- Cleaning and preservative agents.
- As and when required, seek advice from your specialist dealer on suitable cleaning and servicing products.
- Clean the bicycle immediately if it gets dirty e.g. after riding in the rain.
- Clean the bicycle regularly even if it is only slightly dirty.
- Wipe down all surfaces and components with a damp sponge.
- Use a mild soapy solution to dampen the sponge.
- After cleaning, wipe dry all surfaces and components.
- Maintain lacquered surfaces and metallic surfaces on the frame at least once every six months.

- If your bicycle is equipped with rim brakes, do not use maintenance products on the rims, likewise if it is fitted with disc brakes, do not use maintenance products on the brake discs.
- Read and follow the advice in the enclosed manufacturer's informational leaflets about cleaning individual components.
- If you use the bicycle in difficult conditions, shorten the cleaning and servicing intervals.

Difficult conditions include:

- Frequent use on challenging terrain.
- Use in poor weather conditions e.g.:
 - In winter: particular risk of corrosion due to de-icing salt on the roads.
 - In sludge or mud: increased wear due to excessive soiling of moving parts.
 - In salty environments: particular risk of corrosion due to salty air.
 - In livestock environments: particular risk of corrosion due to ammoniac air.

5 Brakes



WARNING

Unsuitable brake pads can lead to a reduced or excessively strong braking performance or could cause the brakes to fail.

Risk of accident and injury!

- Always replace the brake components with original spare parts; this is the only way to ensure the correct functioning of the brakes.
- If you do not have the necessary expertise and the required tools to replace the brake pads, you should consult your specialist dealer.



WARNING

Danger of overturning if the front brake is applied too forcefully.

Risk of accident and injury!

- When riding at high speeds, use the front brake lever very cautiously in order to avoid being thrown over the handlebars.
- Always brake with both brakes simultaneously so as to achieve optimum braking efficiency.



WARNING

Prolonged braking distance due to reduced braking performance in wet conditions.

Risk of accident and injury!

- Adapt your speed and the manner in which you ride to the weather conditions and road surface conditions.



WARNING

Blocking the rear wheel can cause accidents.

Risk of accident and injury!

- Be very careful when using the rear brake in corners so as to avoid blocking the rear wheel.



WARNING

Potential loss of eyesight if brake fluid comes in contact with eyes.

Risk of accident and injury!

- If you do get brake fluid in your eyes, immediately rinse the eyes with plenty of clean water and consult a doctor immediately.



WARNING

Risk of injury in the event of skin contact with brake fluid.

Risk of chemical burns and poisoning!

- In the event of contact with brake fluid, immediately rinse the affected areas with plenty of clean water and consult a doctor immediately.
-



WARNING

Bent or leaking brake cables and open connections can cause hydraulic brakes to fail.

Risk of accident and injury!

- Do not use the bicycle if you notice leakages on the hydraulic cables or connections.
 - Ask your specialist dealer to repair the brakes.
-

The brakes are a technical mechanism to slow the bicycle down. The collective group of the individual parts is referred to as the brake system.

Your bike is fitted with at least two independent brakes on the front and rear wheel.

Depending on the bicycle model, the following types of brakes have been installed:

- Rim brake
- Disc brakes (hydraulic and mechanical)
- Coaster brake
- Refer to *Figure “Brake types”* to identify which brakes are installed on your bicycle (see Chapter “*Bicycle passport*” on page 95).
- To ensure a short braking distance, you should apply both brakes evenly.

5.1 Checking the condition of the brakes

Follow all the instructions listed below for the front and rear brakes.

1. Check that all the screws in the brake system are secure.
2. Check whether the brake lever is torque-proof on the handlebar.
 - If you find loose screw connections, ask your specialist dealer to tighten them, taking the correct torque into consideration.
3. Check that there is still at least 1 cm of clearance between the brake lever and the grip even when the brake lever is fully deployed.
 - If the clearance is less than 1 cm, you should ask your specialist dealer to adjust the brake system.
4. Check the brake pads for wear and tear.
 - If in any doubt, ask your specialist dealer to show you how to assess signs of wear.

Brakes

5. Check that the brake disc sits on the wheel without any play by gently moving it backwards and forwards.
6. Check that the bicycle wheels come to a complete stop when brakes are applied.
 - If you notice that the brakes are not fully effective, you should ask your specialist dealer to adjust the brake system.

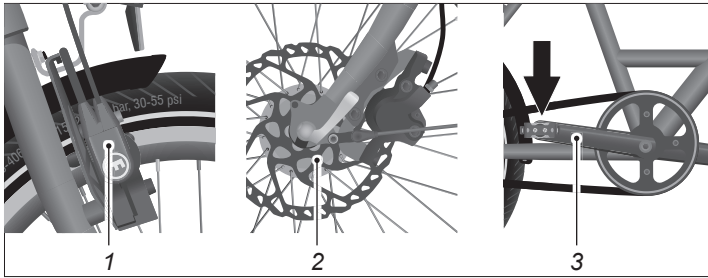


Fig. Brake types (example)

1 Rim brake

2 Disc brakes

3 Coaster brake

5.2 Brake lever configuration

The brake levers are arranged as follows in the basic configuration (see Fig. “*Brake lever configuration*”).

- Familiarise yourself with the configuration of the brake levers before you start riding. Consult your specialist dealer if you wish to change the brake lever configuration.

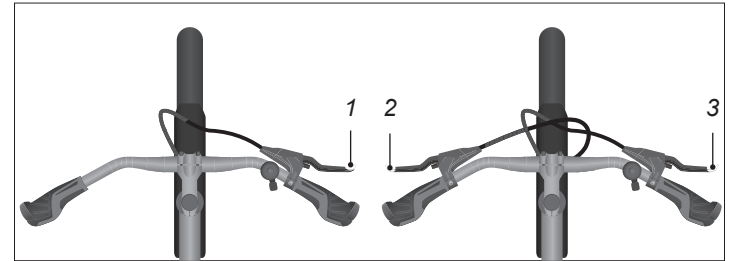


Fig. Brake lever configuration

1 Brake lever for the front brake

2 Brake lever for the front brake

3 Brake lever for the rear brake

5.3 Parking brake

A parking brake is a device that allows you to park your bicycle and prevent it from unintentionally rolling away.

Some brake levers come equipped with an adjustment function; there are various models.

- Check whether your brake lever has a parking function.
 - To engage the brake, pull the brake lever towards the handlebar and push the parking slider towards the brake lever.
 - To release the brake, pull the brake lever towards the handlebar and push the parking slider towards the front wheel.

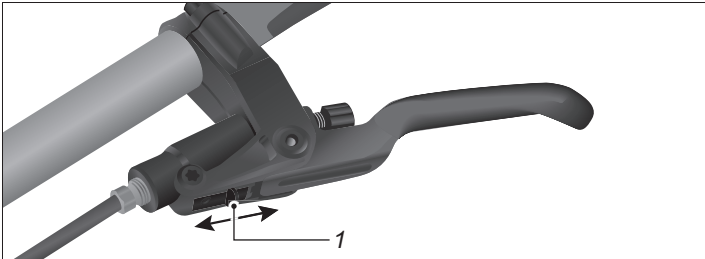


Fig. Parking brake (example)

1 Parking slider

5.4 Rim brake



WARNING

Rim breakage as a result of wear and tear.

Risk of accident and injury!

- Ask your specialist dealer to inspect the rims at least once a year or after riding 1000 km.

When the brake lever on a mechanical rim brake is activated, the brake cable pulls the brake arms together, which presses the brake pads against the rim (see Fig. "Mechanical rim brakes").

When the brake lever is operated on a hydraulic rim brake, the brake pistons within the brake unit are pushed outwards by oil pressure. The brake pads are thus pressed against the rim (see Fig. "Hydraulic rim brake").

5.4.1 Basic information

Using rim brakes causes wear and tear to the brake pads and the rims.

The cable can also become worn in rim brakes operated by cable. In the case of hydraulic rim brakes, the brake fluid can also become damaged through use.

Please follow the instructions listed below for the front and rear brakes.

- Remove dirt from the components of the rim brakes and the rims immediately with a slightly dampened cloth.
- Check that all the screws in the brake system are secure.
- Check whether the brake lever is torque-proof on the handlebar.

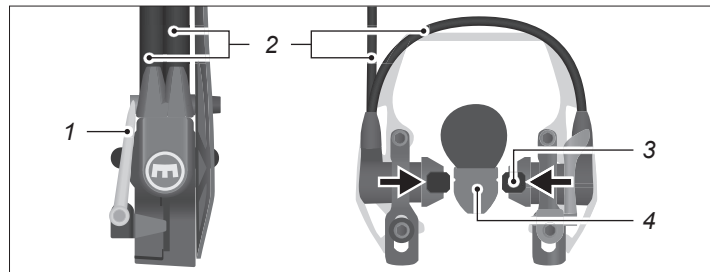


Fig. Hydraulic rim brake

- | | |
|-------------------|-------------|
| 1 Fastening lever | 3 Brake pad |
| 2 Hydraulic lines | 4 Rim |

- If you find loose screw connections, ask your specialist dealer to tighten them, taking the correct torque into consideration.
- Pull on the brake lever several times and check that the brake cable does not catch anywhere, that no scratching sounds can be heard and that no brake fluid leaks from the cables, connections or brake pads.

Brakes

- Check for damage to the brake cable casing or torn wires (visual check).
 - If you notice damage to the brake cables or if you notice that brake fluid is leaking, do not use the bicycle.
- Check that there is still at least 1 cm of clearance between the brake lever and the grip when the brake lever is fully deployed.
 - If the clearance is less than 1 cm, you should ask your specialist dealer to adjust the rim brake.
- Check to ensure that the wheels come to a complete stop when the rim brakes are applied.
 - If you notice that the brakes are not fully effective, you should ask your specialist dealer to adjust the brake system.
- Check for unusual noises when operating the rim brake.
 - If you hear unusual noises, you should ask your specialist dealer to inspect the brake system.

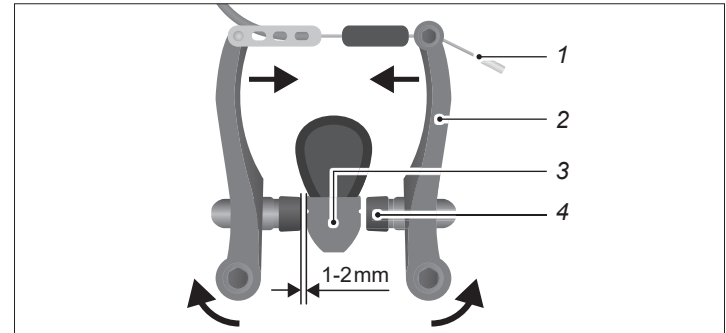


Fig. Mechanical rim brakes

- | | |
|---------------|-------------|
| 1 Brake cable | 3 Rim |
| 2 Brake arm | 4 Brake pad |

Checking the condition of the brake pads

- Check whether the wear limit of the brake pads has been reached.
 - If in doubt, ask your specialist dealer to check the wear limit of the brake pads.

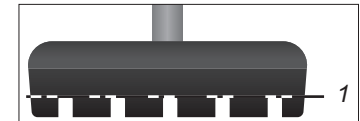


Fig. Brake pad

- 1 Wear limit

The brake pads must be changed before they have been worn down to their wear limit.

Ask your specialist dealer to replace your brake pads and then re-adjust the brake system.

Brakes

Note: Not all brake pads have grooves as a wear limit indicator. Ask your specialist dealer to explain the wear limits to you.

- Check that there is still at least 1 cm of clearance between the brake lever and the grip even when the brake lever is fully deployed.
 - If the clearance is less than 1 cm, you should ask your specialist dealer to adjust the brake system.
- Check whether the brake shoes are wearing equally/wearing down on both sides (visual inspection).
 - If the brake pads are wearing diagonally or unevenly, you should have the brake system inspected by your specialist dealer.
- Check the brake pads for damage and heavy soiling (visual check).
 - Clean the brake pads if they are heavily soiled.
 - If the brake pads are damaged, you should get them replaced by your specialist dealer.
- Check that the brake pads are positioned to rub in the centre of the rim's flank.
 - The brake shoes should be positioned so that they follow the curve of the rim as closely as possible.
- Take hold of the brake shoes and check if they can be turned.
 - If you can turn the brake shoes, have them adjusted by your specialist dealer.

- Check to see if the brake shoes move backwards and forwards in the direction of the rims in an even and symmetrical manner when you pull and release the brake lever (visual inspection).
 - If the brake shoes move in an uneven fashion, have the brake system checked by your specialist dealer.

5.4.2 Operation

When an even braking power is exerted, the rear wheel will lock more readily than the front wheel.

Depending on the bicycle model, your bicycle may be fitted with different types of brakes on the front and rear wheels.

- To operate the brakes, pull the brake lever towards the handlebars using your fingers (see Chapter “Brakes” on page 27).
- Regulate the brake action using the force you apply when pulling the brake lever.

To release the brakes, let go of the brake lever.

To ensure a short braking distance, you should brake evenly, using both brakes at the same time, or with hand brake or coaster brakes where applicable.

5.4.3 Settings



WARNING

Loss of braking power due to incorrectly adjusted brakes.

Risk of accident and injury!

- Adjustments to the brake system should only be carried out by your specialist dealer.
-

Brakes

Specialist expertise are required to correctly adjust the brake system.

If you do not have the necessary expertise and the required tools, you should consult your specialist dealer.

5.4.3.1 Hydraulic rim brake

Gripping distance

Adjusting the gripping distance changes the clearance between the brake lever and the grip.

- Adjust the brake lever in such a way that you can operate it safely during the journey without taking your hand off the handlebars.

To reduce the clearance between the brake lever and the grip, turn the adjusting screw for the gripping distance clockwise (see Fig. "Adjustment screw").

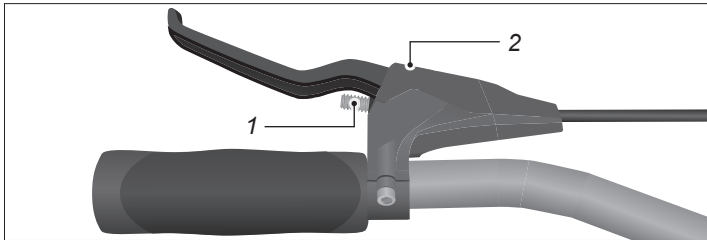


Fig. Adjusting screws

1 Pressure point

2 Gripping distance

Pressure point

- Adjust the pressure point in such a way that the clearance from the brake pads to the rim is 1 to 2 mm (see Fig. "Mechanical rim brakes").
- To reduce the clearance, turn the adjusting screw for the pressure point clockwise.

5.4.3.2 Mechanical rim brakes

Gripping distance

Adjusting the gripping distance changes the clearance between the brake lever and the grip.

- Adjust the brake lever in such a way that you can operate it safely during the journey without taking your hand off the handlebars.

Note: Adjusting the gripping distance also adjusts the tension of the brake cable.

1. Screw in the adjustment screw until you are able to operate the brake lever safely (see Fig. "Adjusting the brake lever").

Brakes

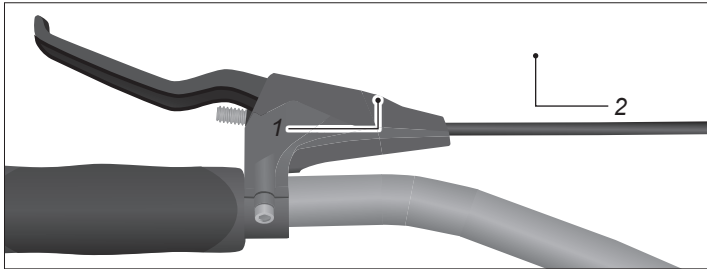


Fig. Adjusting the brake lever

1 Adjustment screw

2 Brake lever

Note: Depending on the bicycle model, the adjusting screw is either a cross-recess or hexagon socket screw.

2. Adjust the tension of the brake cable.

Brake cable

Note: If the clearance of the brake shoe to the left and right of the rim differs by more than 1 mm, a full adjustment of the brake system must be carried out by your specialist dealer before adjusting the brake cable.

1. Unscrew the lock nut one or two revolutions in an anti-clockwise direction (see Fig. "Adjusting the brake cable").

2. Screw the knurled nut clockwise or anti-clockwise until the distance between the brake pads and the rim is 1 to 2 mm on both sides (see Fig. "Mechanical rim brakes").
 - During this process, grip the brake cable in front of the knurled nut and pull lightly on it to make the knurled nut turn with greater ease.
3. Unscrew the knurled nut for a maximum of 5 revolutions.
 - If you are not able to adjust the brake shoes in this way, ask your specialist dealer to inspect the brake system.
4. Check whether you can only pull the brake lever towards the grip handle in such a way that the clearance between the brake lever and the grip handle is at least 1 cm.
5. Turn the counternut in a clockwise direction and tighten it carefully.

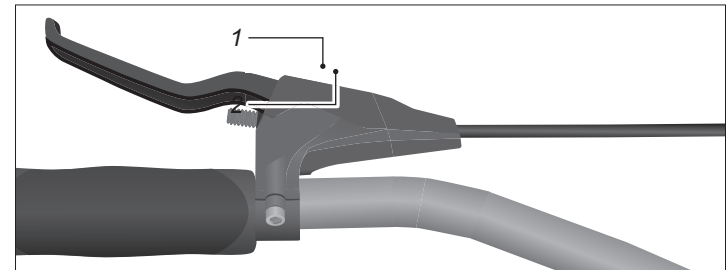


Fig. Adjusting the brake cable

1 Knurled nut

2 Counter nut

5.5 Disc brakes



CAUTION

Burns from contact with hot disc brakes.

Skin burns!

- Wait until the brake discs have cooled down before you touch the brake discs.



NOTICE

Vitrification of the brake pads caused by long-lasting stress.

Risk of damage!

- If it is not dangerous to do so, brake intermittently but with greater force on long descents.



NOTICE

Damage to the brakes caused by dismantling the front or rear wheel.

Risk of damage!

- If you do not have the necessary expertise and the required tools, you should ask your specialist dealer to mount or dismantle the front or rear wheel for you.



NOTICE

Full application of the brakes with new brake pads can cause the brake pads to vitrify.

Risk of damage!

- Break in new discs away from road traffic.

5.5.1 Basic information

When the brake lever is operated, the brake pistons within the brake callipers are pushed outwards. The brake pads are pushed against the brake discs by the brake pistons.

- Check the disc brakes regularly for signs of wear and proper functioning.
- Remove dirt from the brake components and the brake discs immediately with a slightly dampened cloth.
- If you have disc brakes, clean the brake discs regularly with brake cleaning fluid or warm water.

Using disc brakes causes wear and tear to the brake pads and the brake discs.

The cable can also become worn in disc brakes operated by a brake cable.

In the case of hydraulic disc brakes, the brake fluid can also become damaged through use.

Brakes

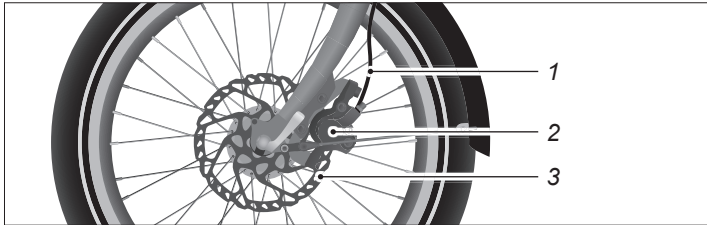


Fig. Hydraulic disc brake

1 Hydraulic lines

3 Brake disc

2 Brake calliper

Ask your specialist dealer for an inspection aid to help check for signs of wear and tear in the brake pads. Depending on your type of brakes, this may be the transport safety device, for example.

- Follow all the instructions listed below for the front and rear brakes.
1. Verify that the brake pads move backwards and forwards in an even and symmetrical manner towards the brake disc when you pull and release the brake lever.
 - If you can move the brake disc or if the brake pads move in an uneven fashion, have the brakes checked by your specialist dealer.
 2. Pull the brake lever and check whether any brake fluid is coming out from the lines, connections or onto the brake pads.
 - If brake fluid is leaking out, do not use the bicycle.
 - Ask your specialist dealer to repair the brakes.

If the disc brakes are new or if the brake pads or the brake discs have been replaced, the disc brakes will need to be broken in.

- To do so, follow the manufacturer's information or ask your specialist dealer for advice.
 - If the disc brakes do not operate efficiently after being broken in or if you hear unusual noises when braking, you should have your disc brakes checked by your specialist dealer.

5.5.2 Operation

When an even braking power is exerted, the rear wheel will lock more readily than the front wheel.

Depending on the bicycle model, your bicycle may be fitted with different types of brakes on the front and rear wheels.

- To operate the brakes, pull the brake lever towards the handlebars using your fingers (see Chapter "Brakes" on page 27).
- Regulate the brake action using the force you apply when pulling the brake lever.

To release the brakes, let go of the brake lever.

To ensure a short braking distance, you should apply both brakes evenly.

5.5.3 Settings



WARNING

Reduced braking power or braking failure due to incorrectly adjusted brakes.

Risk of accident and injury!

- Adjustments to the brakes should only be carried out by your specialist dealer.
 - If necessary, you can ask your specialist dealer to show you how to adjust your brakes.
-

Specialist expertise is required to correctly adjust the brakes.



WARNING

5.5.3.1 Replacing the brake pads

Incorrect or improperly installed brake pads can lead to malfunctions, e.g. brake failure.

Risk of accident and injury!

- Only use original brake pads for hydraulic disc brakes.
 - Seek professional advice when purchasing brake pads.
 - If you are unable to replace the brake pads correctly, you can ask your specialist dealer to replace the brake pads.
 - Make sure that you follow the brake pad manufacturer's operating instructions when replacing the brake pads.
-
1. Use a flat tool to push the brake pistons back into the starting position in the brake calliper. Take care not to damage the brake pistons or the brake discs when doing so.
 2. Use a pair of pointed pliers to bend the inner end of the safety splint until straight and pull the safety splint out of the brake calliper.
 3. Pull the old brake pads backwards out of the brake calliper.
 4. To ensure optimum functioning, clean the brake pistons of any dirt or wear debris from the brake pads using a mild soapy solution and a clean cloth.
 5. Assemble the new, original brake pads and the brake pad springs. Make sure to use the correct sides: All parts are labelled with "Right" or "Left".

Brakes

6. Squeeze the two brake pads together with your thumb and forefinger and insert them the right way around into the brake calliper from behind.
7. Push the safety splint back into the brake calliper. Make sure that you bend that safety splint back into shape from the inside.
8. Check the brake action by pulling on the brake lever.
9. Adjust the brake system if braking action is insufficient.

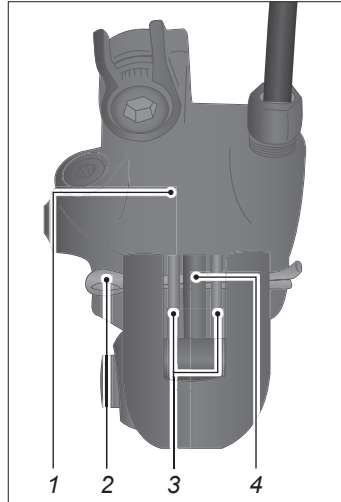


Fig. Brake calliper

- 1 Brake calliper
- 2 Safety splint
- 3 Brake pad
- 4 Safety spring

5.6 Coaster brake



WARNING

The coaster brakes will not work if the chain has come off the chainring.

Risk of accident and injury!

- If the coaster brakes are ineffective, brake carefully using the brake lever for the front wheel and, if available, with the brake lever for the rear wheel.

Bikes with an internal gear hub or without any gear shift system are often fitted with a back-peddalling brake. This is integrated in the rear wheel hub of the bicycle and is operated using the pedals.

If you can turn the pedal drive backwards freely then your bicycle is not equipped with a coaster brake.

5.6.1 Basic information

When the coaster brake is operated, a metallic ring inside the rear wheel hub is pressed against the outer hub shell, causing the wheel to slow down. Due to the bicycle's construction design, wear and tear only occurs after a long period of use.

Regularly check that the coaster brake works.

1. Take hold of the brake arm and check that it sits securely on the rear frame chain stay.
 - If the screw on the brake arm is loose, tighten it in a clockwise direction.
 - Carefully tighten the screw.
2. Check for unusual noises when operating the coaster brake.
 - If you do hear unusual noises, you should ask your specialist dealer to inspect the coaster brake system.

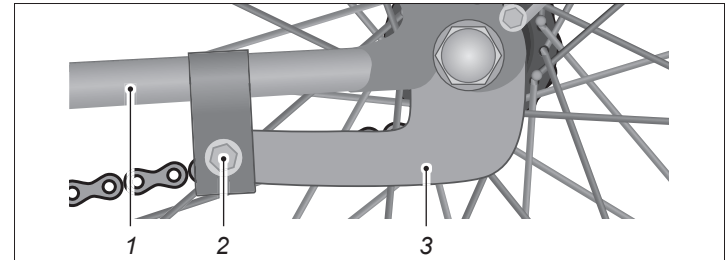


Fig. Brake arm (example)

1 Rear frame chain stay

2 Screw

3 Brake arm

Brakes

5.6.2 Operation

- Pedal backwards to operate the braking system (see Fig. “Coaster brake”).
- Regulate the braking power by adjusting the force you apply when pedalling against the resistance.
- Pedal forwards to release the coaster brake.

To ensure a short braking distance, you should brake evenly with both the hand brake and the coaster brake.

5.6.3 Settings



WARNING

Loss of braking power due to incorrectly adjusted brakes.

Risk of accident and injury!

- Adjustments to the coaster brake system should only be carried out by your specialist dealer.
 - If necessary, you can ask your specialist dealer to show you how to adjust your coaster brakes.
-

Specialist expertise is required to correctly adjust the brakes.

If you do not have the necessary expertise and the required tools, you should consult your specialist dealer.

If you have a freewheel hub and the brakes need to be rotated more than $\frac{1}{6}$ of a revolution in a backwards direction in order to operate the brakes, then you should ask your specialist dealer to adjust the coaster brake.

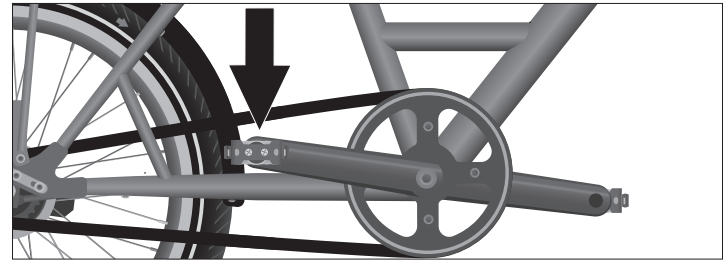


Fig. Coaster brake (example)

6 Lights

6.1 Basic information



WARNING

Poor visibility to other road users.

Risk of accident and injury!

- Switch the light on in poor visibility conditions or darkness.

For riding in road traffic, bicycles must be equipped with headlights, rear lights, reflectors on the pedals, side reflectors for wheels and reflective strips, a white reflector at the front and a red reflector at the back (see Fig. "Lighting equipment"). The light components must meet the requirements of your respective country.

6.1.1 Light fittings

The front and rear lights in all models have been officially approved for road usage and come with long-lasting, energy-saving LEDs. The lamps cannot be replaced.

- If the lights are faulty, you should get them replaced by your specialist dealer.

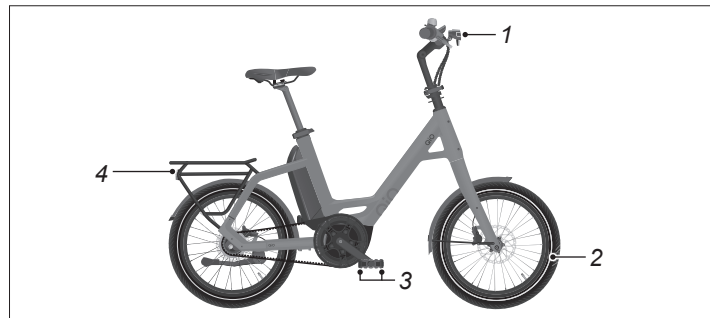


Fig. Lighting equipment (example)

- | | |
|------------------------------------|------------------------------------|
| 1 Headlight with reflector (white) | 3 Reflectors on the pedal (yellow) |
| 2 Reflective strips (white) | 4 Rear light with reflector (red) |

Note: In many countries, the light fittings required by law for road traffic use must also be fitted during the day and must be ready for use at all times.

6.1.2 Rear light

The rear light is switched on together with the headlight in all models.

- Refer to Fig. "Rear lights" to identify which rear light is installed on the bicycle.

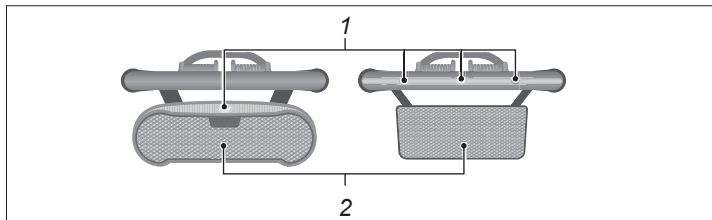


Fig. Rear lights

1 Rear light

2 Rear reflector

6.1.3 Checking the lights

1. Check the cable connections to the headlight, to the rear light and where appropriate to the hub dynamo for damage and corrosion and ensure that they are securely positioned.
 - If the cable connections are damaged or corroded or if they are not securely positioned, consult your specialist dealer.
2. Switch the lights on and check that both the headlight and the rear light light up. For bicycles equipped with a hub dynamo, turn the front wheel to check the lights.
 - If the headlight or the rear light does not light up, consult your specialist dealer.

6.2 Operation

Various headlights are installed on the bicycle, depending on model. See Figure “Headlight models” to identify which headlights are installed on the bicycle.



WARNING

If you ride in low visibility without lights, you may not be visible to other road users.

Risk of accident and injury!

- Turn on lights in low visibility, e.g. when dusk is falling.



WARNING

Not paying enough attention to the road traffic when turning on the lights.

Risk of accident and injury!

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

Lights

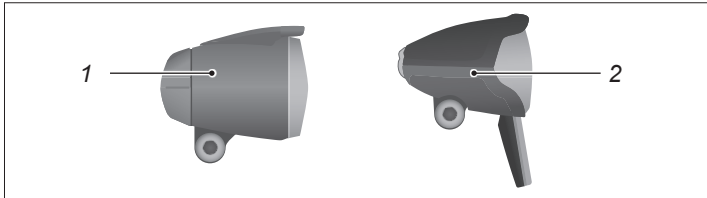


Fig. Headlight models (example)

1 With light sensor

2 Without light sensor

Some headlights are equipped with a stationary light.

If you ride with the light switched on for at least 3 minutes, a capacitor in the headlight will be charged up. If you stop once the capacitor is charged up, the stationary light will remain illuminated until the charge has been used up.

Note: In automatic mode, headlights with light sensor will switch on and off automatically depending on the light conditions.

For headlights with light sensor, turn the rotary switch

- to level “S” for automatic mode,
- to level “T” for continuous light,
- to level “0” to switch off (see Fig. “Switch types”).

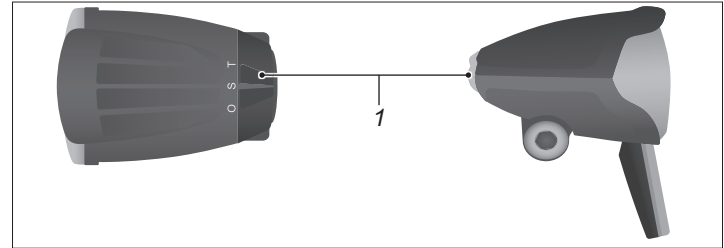


Fig. Switch types (example)

1 On/off switch

- For headlights without light sensor, press the button to switch the lights on/off.

6.3 Settings



CAUTION

Dazzling of oncoming traffic due to incorrect adjustment of headlight height.

Risk of accident!

- Make sure to regularly check that the headlight is properly set to the correct height.

Lights

6.3.1 Vertical mounting

- Check that the bracket is vertically aligned with the head tube when looking at it from the front.

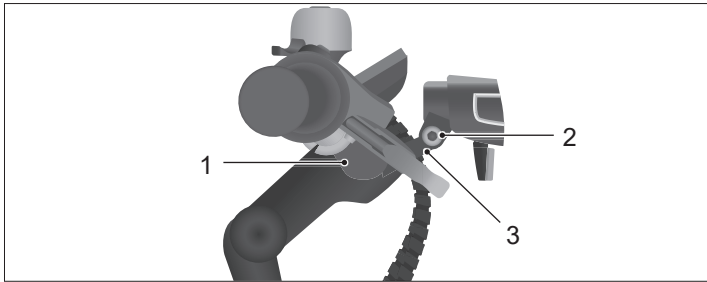


Fig. Adjustment screw

- 1 Stem
- 2 Screw

3 Holder

6.3.2 Horizontal setting

1. Check to ensure that the headlight is correctly vertically aligned.
2. Loosen Screw 2 anti-clockwise until it is loose enough to tip the headlight forwards and backwards with only slight resistance.
3. Switch the headlight on.
4. Adjust the headlight in such a way that the beam of light is only half as high 5 m away as at its point of origin (see Fig. "Headlight range").
5. Carefully tighten Screw 2 clockwise.

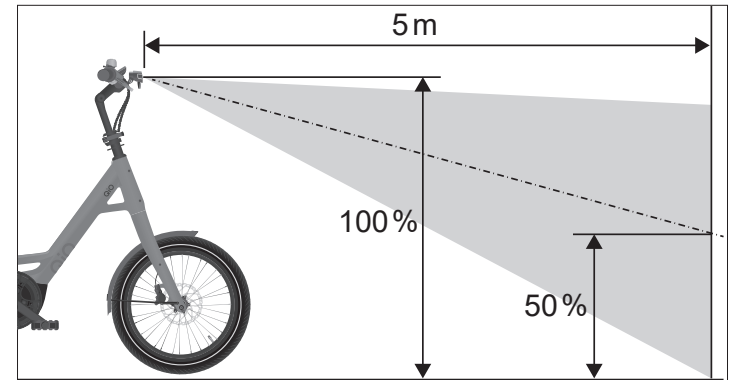


Fig. Headlight range

7 Gear shift system

A bicycle's gear shift system comprises a shiftable gearing mechanism and the corresponding operating elements. This system allows the power generated by the rider to be better adapted to the riding speed and route conditions.

Depending on the bicycle model, your bike will be fitted with an automatic, hub-based, chain or hybrid gear shifting system.

- Find out which gear shift system your bicycle is fitted with (see Chapter "*Bicycle passport*" on page 95).
- Read all chapters relating to your gear shift system.
- If you own an e-bike, you should also read the separate user manual for your e-bike.

With regular care and maintenance and an average amount of use, the gear shift system will only suffer minimal amounts of wear and tear. The gear cables can become stretched through use.

- You should clean all accessible and moving components of the gear shift system with a damp cloth or a soft brush.
- After cleaning, you should lubricate all moving parts with a small amount of lubricant, e.g. universal oil.
 - Afterwards, wipe up any excess lubricant with a clean cloth.

In order to avoid premature wear and tear:

- Pedal slowly and without applying force when changing gears.
- Shift down the gears in a timely fashion before ascents and choose a low gear.

1. Check to ensure that all components of the gear shift system are free of damage.
 - If you notice damage to the components, consult your specialist dealer.
2. Check for damage to the casing of the gear shift cables or torn filaments (visual check).
3. Hang your bicycle from its frame.
4. Turn the pedal crank.
5. Shift through all the gears.
6. Check to see if all gears shift into place correctly and that no unusual sounds can be heard when doing so.
7. Check to see whether the gear shift cable catches anywhere when shifting and whether any scratching sounds are produced.
 - If you hear unusual sounds or if the gears do not shift correctly, ask your specialist dealer to inspect the gear shift system.

7.1 Derailleur gears

7.1.1 Basic information

The derailleur gears consist of 1 to 3 chainrings on the pedal crank and 7 to 11 sprockets on the rear wheel (see Fig. “*Derailleur gears*”). The chain can be shifted to different chainrings and sprockets using separate control units on the left and right side of the handlebars.

- Pedal slowly and without applying force when changing gears.

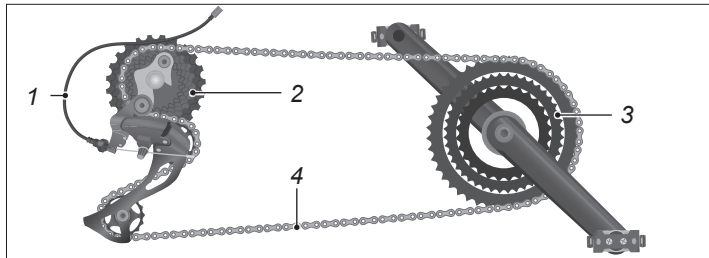


Fig. *Derailleur gears*

- | | |
|-------------------------------|---------------------------------|
| 1 Gear shift cable | 3 Chainrings on the pedal crank |
| 2 Sprockets on the rear wheel | 4 Chain |

The theoretical number of gears is derived from the product of the sum “chainrings × sprockets”.

The smaller the sprocket, the higher the selected gear. In a higher gear you will have a lower pedal frequency.

The larger the sprocket, the lower the selected gear. In a low gear you will have a higher pedal frequency.

Note: The chain rings are not selected as gears, but are selected depending on the road.

The smaller the chainring, the higher the pedalling frequency.

The larger the chainring, the lower the pedalling frequency.

- Use the small chain ring for ascents.
- Use the large chainring for sport riding.
- Use a damp cloth to clean the operating parts for the derailleur gears.
- On bikes with derailleur gears, you should clean all moving components with a damp cloth or a soft brush, insofar as they are easily accessible (see Fig. “*Rear derailleur*”).
- After cleaning, you should lubricate all moving parts of the derailleur gear system with a small amount of lubricant, e.g. universal oil.
 - Afterwards, wipe up any excess lubricant with a clean cloth.
- Check to ensure that all components of the derailleur gears are free from damage and that the rear derailleur is not bent sideways.
- If you notice damage to any of the components or the rear derailleur is bent to the side, you should ask your specialist dealer to inspect the derailleur gears.
- Check that there is sufficient clearance between the rear derailleur or chain and the wheel spokes.
- If there is no clearance or if the chain is grinding against the spokes, you should ask your specialist dealer to inspect the derailleur gears.

Gear shift system

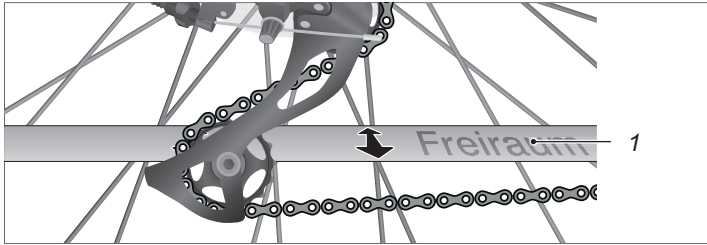


Fig. Distance between the rear derailleur and spokes

1 Clearance

7.1.1.1 Gear combinations

! NOTICE

The use of incorrect gear combinations can damage the gear shift system.

Risk of damage!

- Do not combine the small chainring with the smallest rear sprocket or the large chainring with the largest rear sprocket.

Only certain gear combinations or gears are deemed appropriate for correct usage of the bicycle (see Fig. "Appropriate gear combinations").

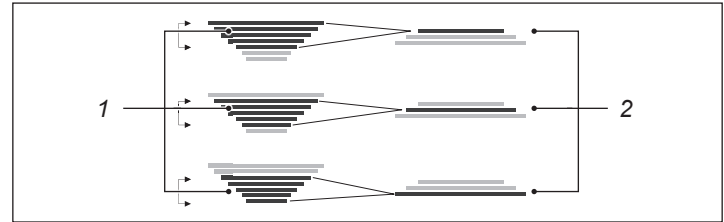


Fig. Appropriate gear combinations

1 Sprockets on the rear wheel 2 Chainrings on the pedal crank

Incorrect gear combinations cause the chain to skew, leading to increased wear to chain rings, sprockets and the chain

- Use the gear combinations in such a way that the chain remains parallel to the direction you are riding in as far as possible.
- If you are at all unsure, ask your specialist dealer to show you how to use the derailleur gears.

7.1.1.2 Checking the chain tension

For bicycles with derailleur gears, the chain is tensioned by the chain guide with the guide rollers in the rear derailleur.

1. Check to see if the chain is starting to sag (visual check).
2. Gently push the chain guide towards the front and then check to see if it falls back into position by itself.
 - If the chain is sagging or if the chain guide does not reposition itself, you should ask your specialist dealer to repair the rear derailleur system.

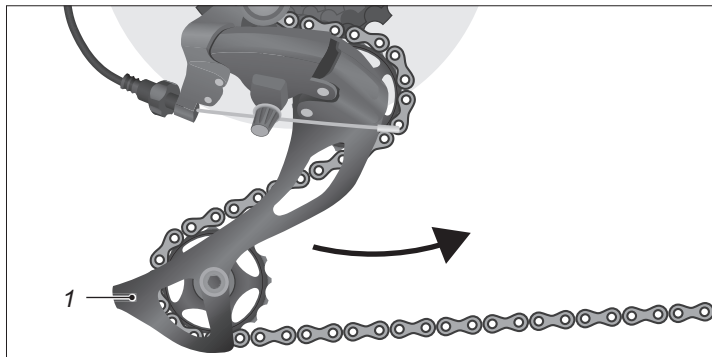


Fig. Rear derailleur

1 Chain guide with guide rollers

7.1.2 Operation



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Familiarise yourself with how to use the derailleur gears.
- Operate the derailleur gears only if this does not distract your attention from the road traffic.



NOTICE

Damage to the derailleur gears caused by improper use.

Risk of damage!

- When shifting gears, do not pedal hard.
 - When shifting gears, do not pedal backwards.
 - Shift down the gears in a timely fashion before ascents.
- If you are unsure about using the derailleur gears, ask your specialist dealer to explain how to correctly use the derailleur gears.
 - Use the gear combinations in such a way that the chain remains parallel to the direction you are riding in as far as possible.
 - Do not pedal too forcefully when changing gear.
- #### 7.1.2.1 Using the gear lever to switch sprockets
- The furthest forward gear lever on the right has two levels.
- To let the gear lever which has been pressed automatically return to its original position, release the gear lever after shifting.
 - In order to shift down one gear on the sprockets, press down on the front gear lever on the right side of the handlebars until it clicks once (see Fig. "Gear lever").

Gear shift system

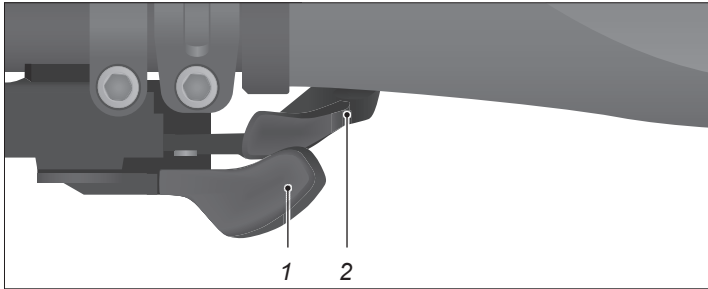


Fig. Gear lever (example)

1 Front gear lever

2 Rear gear lever

- To shift down two gears on the sprockets, press down on the front gear lever on the right side of the handlebars until it clicks twice.
- To change up one gear on the rear sprocket, press down on the rear gear lever on the right-hand side of the handlebars.

7.1.2.2 Using the gear lever to switch the front chainrings

- To let the gear lever which has been pressed automatically return to its original position, release the gear lever after shifting.
- To move onto a larger chainring for flat stretches of road, press down on the front gear lever on the left side of the handlebars (see Fig. “Gear lever”).
- To select a smaller chainring for going uphill, press down or pull the rear gear lever on the left side of the handlebars.

7.1.2.3 Changing gears with a twist-grip shifter

- Turn the twist grip shifter to change gears (see Fig. “Twist grip shifter for derailleur gears”).

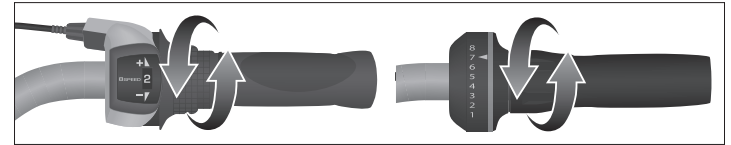


Fig. Twist grip shifter for derailleur gears (example)

7.1.3 Settings



NOTICE

Damage to the derailleur gears caused by incorrect setting.

Risk of damage!

- Consult your specialist dealer if you have questions about adjusting the derailleur gears.

Specialist expertise are required to adjust the derailleur gears.

If you do not have the necessary expertise and the required tools, you should consult your specialist dealer.

If the derailleur gears begin to malfunction, adjust the tension of the gear cable.

Use the cable tensioning screw on the rear derailleur to adjust the tension on the rear derailleur; use the cable tensioning screw on the gear lever to adjust the tension on the front derailleur.

Gear shift system

- If you hear noises when shifting gears whilst riding, correct the gear cable tension using the tensioning screws on the rear derailleur or gear lever (see Fig. “*Tensioning screw*”).
 - To do this, turn the tensioning screw one half revolution.
 - If this helps reduce the noises, continue turning the tensioning screw very gradually in the same direction, until no more noises are heard while riding.
 - If this causes an increase in noises, turn the tensioning screw very gradually in the opposite direction, until no more noises are heard while riding.
 - If you continue to hear noises when shifting gears while riding, you should ask your specialist dealer to adjust your derailleur gears for you.

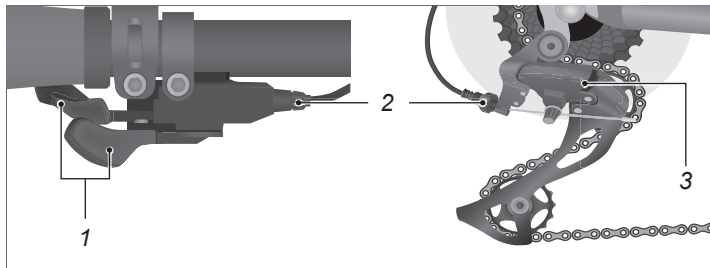


Fig. *Tensioning screw*

1 Gear lever

3 Rear derailleur

2 *Tensioning screw*

7.2 Gear hub

7.2.1 Basic information

The gear hub is integrated in the rear wheel and is operated using a twist-grip shifter or gear lever on the right-hand side of the handlebar.

Note: An exception to this is the two-gear automatic gear hub. Depending on speed, it switches up into second gear and/or down into first gear.

- If your bicycle features the Alfine 11-gear hub or the Rohloff gear hub, ask your specialist retailer to change the oil once every year. For all other gear hubs, ask your specialist dealer to grease these once a year.
- Check to ensure that all components of the gear hub system are free of damage.
 - If you notice damage to the components, consult your specialist dealer.
- If you use the bicycle very often, you should perform maintenance work more frequently.
- If you use your bicycle in very dirty conditions or in an environment rich in salt, you should perform maintenance work more frequently.
- Make sure to use suitable cleaning agents in order to reduce weather-induced ageing.
 - Ask your specialist dealer about suitable maintenance products for your gear hub.

7.2.2 Operation



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Familiarise yourself with the functionality of the gear hub system.
- Operate the gear hub system only if this does not distract your attention from the road traffic.
- Come to a stop if you are not able to use the gear hub system safely, e.g. if it malfunctions.



NOTICE

Damage to the gear hub system caused by improper use.

Risk of damage!

- When shifting gears, do not pedal hard.
 - When shifting gears, do not pedal backwards.
 - Shift down the gears in a timely fashion before ascents.
- If you are unsure about using the gear hub, ask your specialist dealer to explain how to correctly use the gear hub.

Gear shift system

- Find out which gear hub system your bicycle is fitted with.

Note: Depending on the bicycle model, your bicycle is equipped with a gear hub with or without a coaster brake (see Chapter “*Bicycle passport*” on page 95).

7.2.2.1 Changing gears with a twist-grip shifter

To change gears, turn the twist grip shifter (see Fig. “*Twist grip shifter for gear hubs*”).

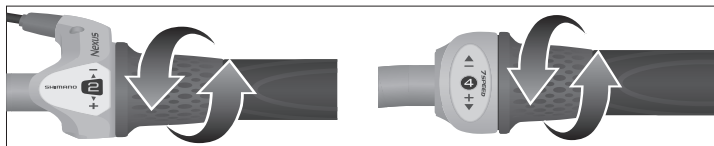


Fig. Twist grip shifter for gear hubs (example)

7.2.2.2 Changing gears with a gear lever

Depending on the type of gear hub installed, the front gear lever will have two settings. The rear gear lever can either be pressed or pulled.

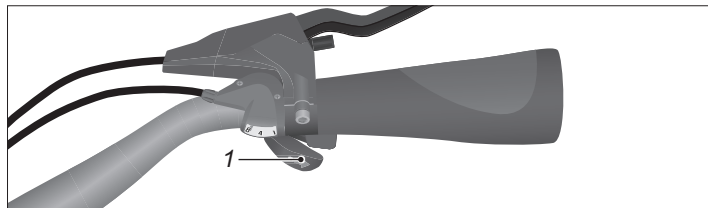


Fig. Gear lever (example)

1 Gear lever

- To let the gear lever which has been pressed automatically return to its original position, release the gear lever after shifting.
- To change down a gear, push the front gear lever with your thumb until it clicks once (see Fig. “*Gear lever*”).

To change up a gear, press or pull on the rear gear lever with your index finger.

7.2.3 Settings

- If the effectiveness of the gear hub reduces, adjust the gear cable tension.

The adjustment of the gear cable tension is done independently of your gear hub.

Gear shift system

7.2.3.1 Gear hubs with 5, 7 and 8 speeds

1. If your bike has a 5-speed gear hub, select the fifth gear and then change to third gear. If your bike has a 7- or 8-speed gear hub, select the seventh or eighth gear and then change to fourth gear (see Fig. "Twist grip shifter for gear hubs").
 - Use as little force as possible when shifting gears to prevent overshifting.

The tension adjustment screw can be found underneath the handlebar.

2. Move the tension adjustment screw on the twist grip handle in such a way that both markings are aligned on the rear wheel hub (see Fig. "Markings on the rear wheel hub").
3. If your bike has a 5-speed gear hub, shift again from third to fifth gear and then back to third gear. If your bike has a 7- or 8-speed gear hub, shift again from fourth to seventh or eighth gear and then back to fourth gear.
4. Check that both markings on the rear wheel hub are aligned.
5. Repeat the setting process if the markings on the rear wheel hub are not aligned.

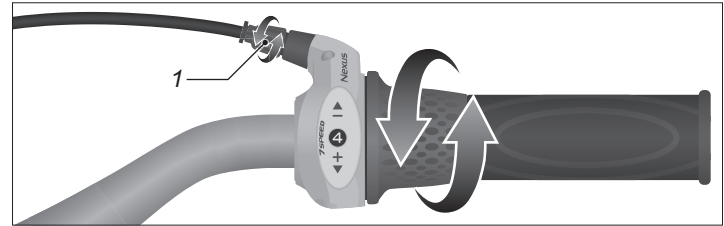


Fig. Twist-grip shifter (example)

1 Adjustment screw on twist-grip shifter

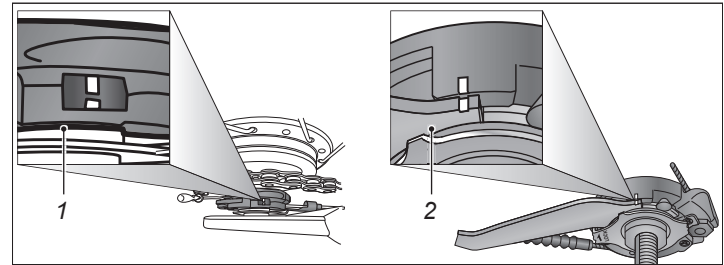


Fig. Markings on the rear wheel hub

1 Marking on the top side

2 Marking on the bottom side

7.2.3.2 Gear hub with 11 gears

1. Select the eleventh gear and then change to sixth gear (see Fig. *"Twist grip shifter for gear hubs"*).
 - Use as little force as possible when shifting gears to prevent overshifting.

The tension adjustment screw can be found underneath the handlebar.

2. Move the tension adjustment screw on the twist grip handle in such a way that both markings are aligned on the rear wheel hub (see Fig. *"Markings on the rear wheel hub"*).
3. Shift again from sixth gear to eleventh gear and back to sixth gear.
4. Check that both markings on the rear wheel hub are aligned.
 - Repeat the setting process if the markings on the rear wheel hub are not aligned.

7.3 Electronic gear hub Rohloff E-14

7.3.1 Basic information

The gear hub is integrated in the rear wheel and is operated using electronic buttons on the handlebars.

- With electronic gear hubs, ask your specialist dealer to change the oil once a year or every 5000 km.
- Check to ensure that all components of the electronic gear hub system are free of damage.
 - If you notice damage to the components, consult your specialist dealer.
- If you use your e-bike often, you should perform maintenance work more frequently.
- If you use your e-bike in very dirty conditions or in an environment rich in salt, you should perform maintenance work more frequently.
- Make sure to use suitable cleaning agents in order to reduce weather-induced ageing.
 - Ask your specialist dealer about suitable maintenance products for your electronic gear hub.
- Disconnect the plug of the gear switching unit before you dismantle the rear wheel (see Fig. "Gear switching unit").

Note: No synchronisation is required after assembling the rear wheel.

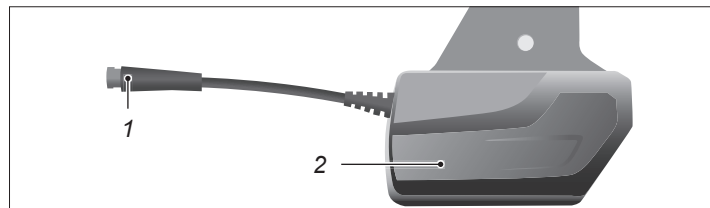


Fig. Gear switching unit

1 Connector plug

2 Gear switching unit

7.3.2 Electronic gear hub operation



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Familiarise yourself with the functionality of the electronic gear hub system.
- Operate the electronic gear hub system only if this does not distract your attention from the road traffic.
- Come to a stop if you are not able to use the electronic gear hub system safely, e.g. if it malfunctions.

! NOTICE





Damage to the electronic gear hub system caused by improper use.

Risk of damage!

- When shifting gears, do not pedal hard.
 - When shifting gears, do not pedal backwards.
 - Shift down the gears in a timely fashion before ascents.
- If you are unsure about using the electronic gear hub, ask your specialist dealer to explain how to correctly use the electronic gear hub.
- The “Rohloff E14” electronic gear hub switches gears automatically at the touch of a button.
- Also read the separate original user manual for your e-bike.

It is operated via a switch unit on the handlebar.

Note: All gears can be switched when stationary. The “Rohloff E14” electronic gear hub automatically switches down into the fourth “starting gear” when stationary.

- To change up a gear, briefly press the button  (see Fig. “Switch unit”).
 - To change up three gears, press the button  a little longer.
- To change down a gear, briefly press the button .
 - To change down three gears, press the button  a little longer.

The current gear is briefly displayed when

- changing gear;
- changing the menu.

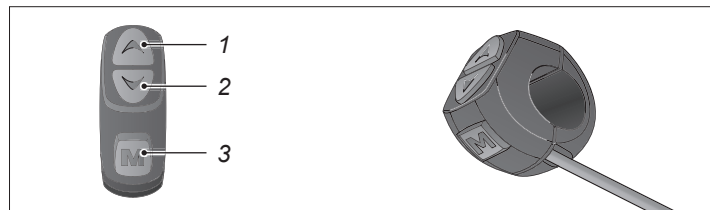


Fig. Switch unit




1 Upshifting

2 Downshifting

3 Menu button

7.3.3 Settings

Press the button  to enter the main menu.

- Select the desired setting point with the buttons  and/or  and follow the menu.
- Confirm your setting by pressing the button .

7.4 Continuously variable gear transmission (Enviolo)



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Familiarise yourself with how to use the gear shift system.
- Come to a stop if you are not able to use the gear shift system safely, e.g. if it malfunctions.



NOTICE

Damage to the gear shift system caused by improper use.

Risk of damage!

- When shifting gears, do not pedal hard.
- When shifting gears, do not pedal backwards.
- Shift down the gears in a timely fashion before ascents.

7.4.1 Basic information

The rear wheel is fitted with a continuously variable gear shift system. By turning the twist-grip shifter, the gear shift is continuously adjusted.

Enviolo gear transmission systems are available with freewheeling gears or with a back-pedalling brake. Check to see which version your bicycle is fitted with (see Chapter “*Bicycle passport*” on page 95).

7.4.2 Operation

- To shift up the gears continuously, turn the twist grip shifter to the back.

The indicator will move towards “flat” (see Fig. “*Enviolo’ twist grip shifter*”).

- To shift down the gears continuously, turn the twist-grip shifter forwards.

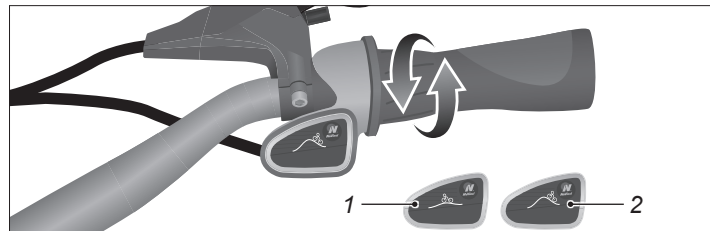


Fig. “*Enviolo*” twist-grip shifter

1 Flat

2 Hill

7.4.3 Settings

! NOTICE

Damage to the gear shift system caused by incorrect settings.

Risk of damage!

- Consult your specialist dealer if you have questions about adjusting the gear shift system.

1. If there is less than 0.5 mm of clearance available, screw the adjustment nut clockwise (see Fig. “Enviolo” adjustments”).
2. If there is more than 1.5 mm of clearance available, unscrew the adjustment nut anti-clockwise.
3. If the adjustments do not alleviate the present malfunctions, you should ask your specialist dealer to inspect the gear shift.

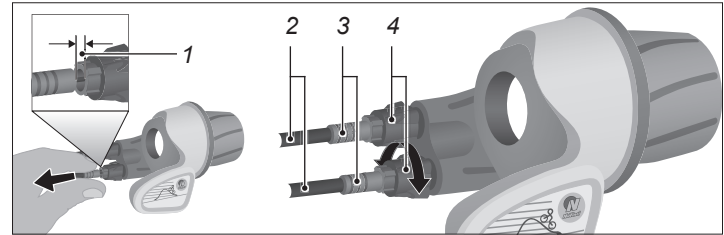


Fig. “Enviolo” adjustments

- | | |
|-----------------------|------------------|
| 1 Clearance | 3 Shaft |
| 2 Shift cable housing | 4 Adjustment nut |

7.5 Di2 shifting system

If your bike has a Di2 electronic shifting system, you can choose between manual and automatic shifting modes.

In manual shifting mode, you can shift up and down using the respective buttons on the control unit. In automatic shifting mode, the shifting system automatically changes gears based on pedal frequency and pedal force.

7.5.1 Using the Di2 shifting system



WARNING

Not paying sufficient attention to the road traffic.

Risk of accident and injury!

- Familiarise yourself with the functionality of the Di2 electronic shifting system.
- Only use the Di2 electronic shifting system when it will not distract your attention from the road traffic.
- Come to a stop if you are not able to use the Di2 electronic shifting system safely, e.g. if it malfunctions.



NOTICE

Damage to the Di2 electronic shifting system caused by improper use.

Risk of damage!

- When shifting gears, do not pedal hard.
- When shifting gears, do not pedal backwards.
- Shift down the gears in a timely fashion before ascents.

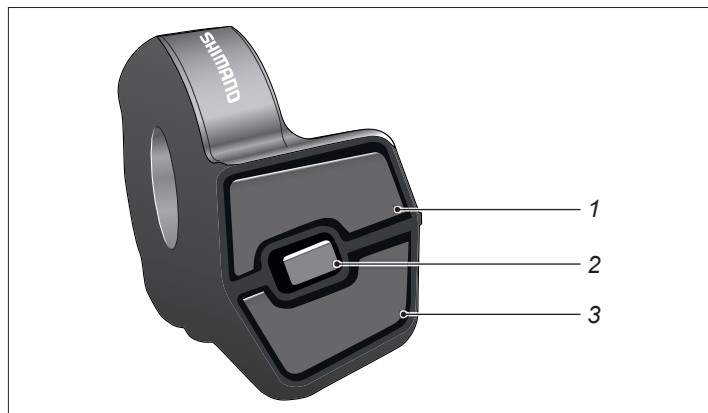


Fig.: Control unit

- 1 Button 1: Shift up a gear
- 2 Button 2: Changing shifting mode
- 3 Button 3: Shift down a gear

Gear shift system

7.5.1.1 Manual shifting

- Press button 1 to shift up a gear.
- Press button 3 to shift down a gear.

7.5.1.2 Changing shifting mode

You can switch between manual and automatic shifting mode using the corresponding button on the control unit (see Fig. "Control unit").

- Press button 2 to change shifting mode.

The display shows which shifting mode is selected (see Fig. "Display unit".)

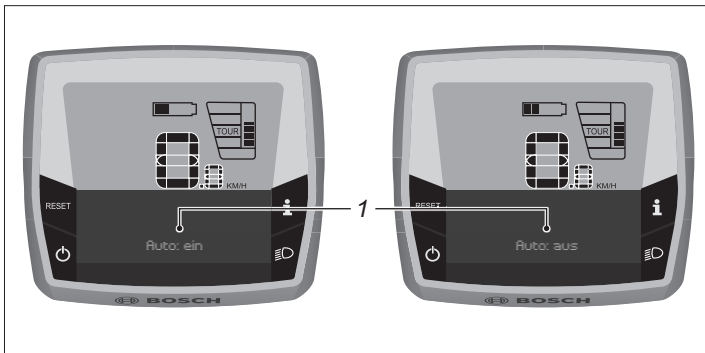


Fig.: Display unit

1 Shifting mode indicator

8 Drivetrain systems

The term 'drive' refers to a mechanism that generates a movement in order to move an object.

In the case of a bicycle, muscle power is transferred to the drive wheel via the pedals.

Depending on the bicycle model, your bike will be fitted with a chain or belt drive system.

- Check whether your bicycle is fitted with a chain or belt drive system (see Fig. "Chain drive system" and Fig. "Belt drive system").

8.1 Pedal drive

8.1.1 Basic information

Assembly consisting of pedal, pedal crank, bottom bracket and chainring.

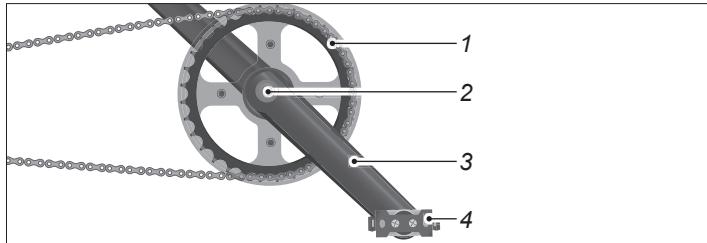


Fig. Pedal drive

1 Chainring

3 Pedal crank

2 Bottom bracket

4 Pedal

8.1.2 Operation

Push the pedals with your feet in order to set the pedal drive – and thus the whole bicycle – in motion.

8.1.3 Checking the condition of the pedal drive

- Take hold of the pedal and try to move it in a vertical direction, up and down (1). While doing so, check to see if the pedal and crank arm or bottom bracket move vertically.
- Take hold of the pedal and try to move it outwards and inwards in a sideways direction (2). While doing so, check to see if the crank arm or bottom bracket move sideways (see Fig. "Checking the condition of the pedal drive").

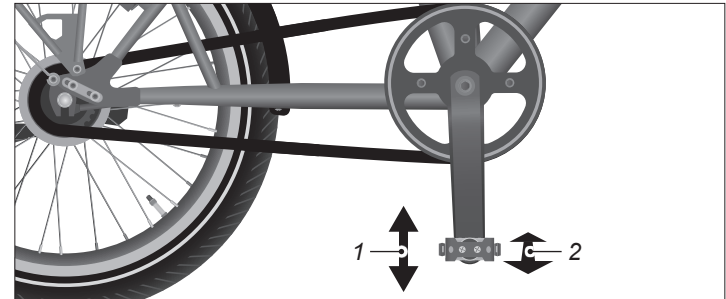


Fig. Checking the condition of the pedal drive

1 Sideways

2 Outwards – inwards

- If the pedal, crank arm or bottom bracket can be moved in a vertical or sideways direction, you should consult your specialist bicycle dealer.

8.2 Chain drive system

8.2.1 Basic information

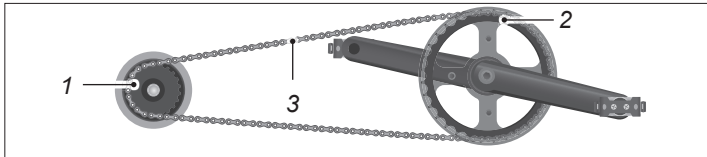


Fig. Chain drive system

- 1 Sprocket
- 2 Chainring

3 Chain

A chain drive system is compatible with gear hubs, coaster brakes and derailleur gears.

- You should clean all accessible, moving components with a damp cloth or a soft brush.
- Remove the chain-guard on bicycles with circumferential chain guard.
 - If necessary, ask your specialist dealer to show you how to remove the chain guard.
- After cleaning the chain, after riding in the rain or after riding 250 km, you should oil the bike chain with universal oil or with another lubricant recommended by the manufacturer.
 - Afterwards, wipe up any excess lubricant with a clean cloth.
- Check that all components are free of damage.
 - If you notice damage to the components, consult your specialist dealer.

8.2.2 Operation

Push the pedals with your feet in order to set the chain drive – and thus the whole bicycle – in motion.

8.2.3 Settings

If you notice that the teeth on the sprocket or chainwheel have become sharp or pointed, you should replace the sprocket or chainwheel.

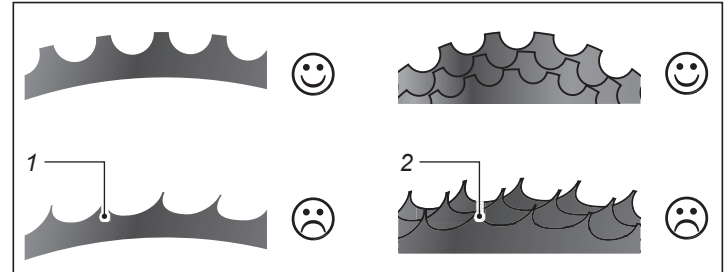


Fig. Sprocket

1 Damage to the chainring

2 Damage to the sprocket

8.3 Belt drive system

8.3.1 Basic information

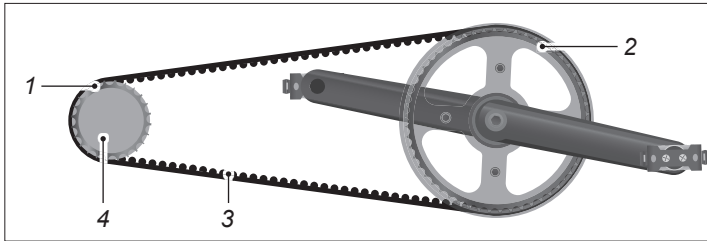


Fig. Belt drive system

- | | |
|------------------|---------------------|
| 1 Rear sprocket | 3 Belt |
| 2 Front sprocket | 4 Rear flange wheel |

A belt drive system is compatible with gear hubs and coaster brakes, but not with derailleur gears.

- Remove dirt from the belt and belt pulleys immediately with a damp cloth.
- Do not use any aggressive cleaning agents.

! NOTICE

Damage to the belt due to incorrect usage.

Risk of damage!

- Always make sure that the belt does not become buckled, twisted, bent backwards, turned outwards, tied up or used as a key.
- When assembling the belt drive system, the belt should not be rolled up with the front disc sprocket or put into position using any type of lever, e.g. a screwdriver.



Fig. Types of damage

Drivetrain systems

8.3.2 Operation

Push the pedals with your feet in order to set the belt drive – and thus the whole bicycle – in motion.

8.3.3 Settings

8.3.3.1 Checking the belt tension

In order for the belt drive system to work smoothly, the belt needs to be tightened until it has the correct belt tension.

The belt drive system may only be measured and adjusted using the original tools from the manufacturer.

- You should get the belt drive system checked and adjusted by your specialist dealer annually.

8.3.3.2 Checking for signs of wear on the belt drive system

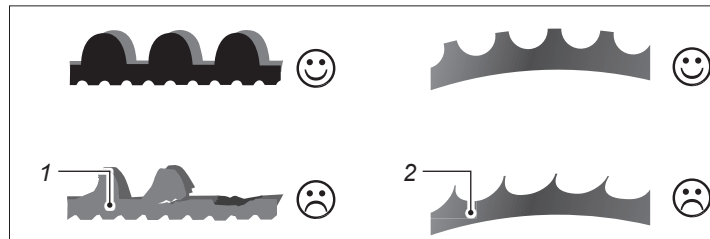


Fig. Wear

1 Damage to the belt

2 Damage to the sprocket

- Check the belt drive system regularly for signs of wear.
 - If you notice damage e.g. sharp teeth, cracks or missing teeth, you should replace the belt.
 - If you notice damage on the sprocket, e.g. sharp teeth, you should replace the sprocket.

8.4 Bike chain

8.4.1 Basic information

The bike chain transfers the torque generated by the pedal force of the rider to the drive wheel.

- If your bike has a full chain guard, remove the chain guard (see Fig. "Bike chain").
 - If necessary, ask your specialist dealer to show you how to remove the chain guard.
- Remove dirt from the bike chain with a clean or lightly oiled cloth, as appropriate.
- Remove dirt from the sprockets and chain rings with a small, soft brush.
- After cleaning, after riding in the rain or after riding 250 km, you should oil the bike chain with a little universal oil or with another lubricant recommended by the manufacturer.
- Consult your specialist dealer in the event of tougher dirt.



Fig. Bike chain

1 Chain guard

2 Bike chain

8.4.2 Settings

8.4.2.1 Checking the chain tension

The chain drive can be adjusted to low-wear tension using a chain tensioner.

The correct pretensioning force prevents premature wear to the chain drive.

- Press the chain up and down and check whether you can move the chain through a distance of between 10 and 15 mm.
 - If the chain can be pushed a distance of less than 10 mm or more than 15 mm upwards or downwards, have the chain re-tensioned by your specialist dealer.

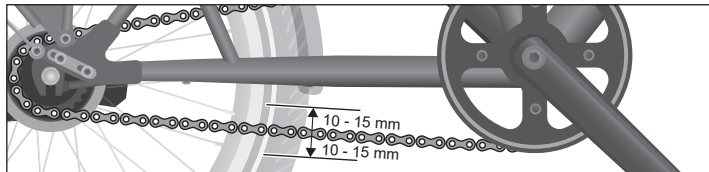


Fig. Chain tension

9 Other components

9.1 Handlebars

9.1.1 Basic information

The handlebars are one of the points of contact between the rider and the bicycle. The handlebars play an important role in controlling direction and operating control mechanisms e.g. brake levers.

1. Hold on to the handlebars grips with both hands and move them up and down in a tilting motion.
2. Secure the front wheel against turning to the side, e.g. in a bicycle stand. Hold on to the handlebars with both hands and check whether it is possible to turn the handlebars against the front wheel.
 - If you notice clearance on the head tube or handlebars when moving the handlebars up and down, or when you tilt them or turn them, have them adjusted by your specialist dealer.
 - Check that the handlebars and the handlebar stem are free from deformations or cracks.
 - If there are cracks or deformations in the handlebars or handlebar stem, consult your specialist dealer immediately.

9.1.2 Operation

Hold on to the handlebars with both hands, take care to ensure that your wrists do not overbend and that you can adopt a comfortable sitting position.



CAUTION

Pinching or crushing of body parts.

Risk of injury!

- Open and close the quick-release slowly and carefully.

9.1.3 Settings

9.1.3.1 Handlebar height



CAUTION

Pinching or crushing of body parts.

Risk of injury!

- Open and close the quick-release slowly and carefully.
1. Hold the handlebars firmly and turn the quick-release lever outwards (see Fig. “*Operating elements of the Speedlifter*”).
 2. To adjust the height, raise or lower the handlebars.
 - Adjust the handlebar height so that you can sit in a comfortable sitting position and can easily operate all components located on the handlebars while riding.

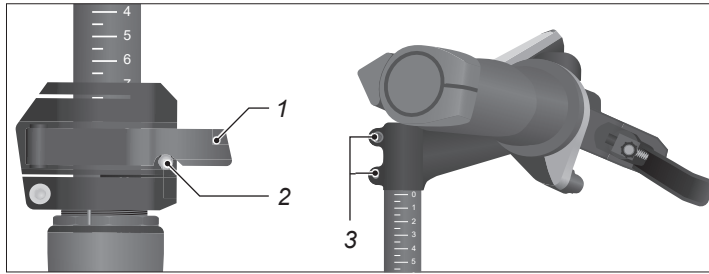


Fig. Operating elements of the Speedlifter Twist

- 1 Quick-release lever
 - 2 Security latch
 - 3 Clamp screws
3. Close the quick-release by turning the quick-release lever inwards until it is flush against the head tube.
 4. Check whether the handlebar is secure; if the handlebar is not secure, adjust the quick-release.
 5. Turn the adjusting screw clockwise one quarter of a turn.
 6. Close the quick-release and check that the handlebar is secure.
 7. Repeat the process until the handlebar is completely secure when the quick-release lever is closed.

9.1.4 Handlebar direction

! NOTICE

Damage to the cables from excessive rotation.

Risk of damage!

- Do not turn the handlebars 360 degrees as this may damage the cables.

1. Unscrew both clamp screws on the handlebar stem anti-clockwise until the handlebar stem is loose enough to be turned (see Fig. "Operating elements of the Speedlifter").
2. Align the handlebars to be perpendicular to the front wheel (see Fig. "Handlebar direction").
3. Turn the screws clockwise and tighten them in accordance with the specified torque.

Note: This setting should only be applied once.

Other components

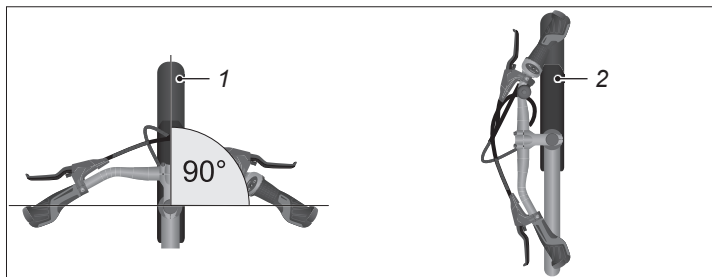


Fig. Handlebar direction

1 Riding position

2 Transport position

9.1.5 Handlebar position

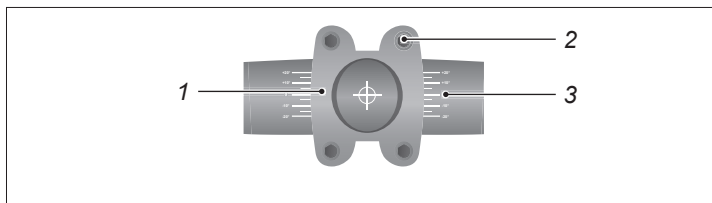


Fig. Handlebar position

1 Handlebar clamp

3 Calibration

2 Clamp screw

Note: Adjusting the handlebar position requires simultaneous adjustment of the hand brake levers and bell position, if necessary.

1. Turn the four clamp ring screws for the handlebar position anti-clockwise until the handlebar is loose enough to be turned in the clamp ring.
2. Rotate the handlebar so the lever of the brakes and the bell can be easily operated while riding.
3. Tighten the screws evenly and alternately until the handlebar no longer turns.
4. Tighten the screws diagonally.
5. If you cannot easily operate the components on the handlebar while riding, adjust the position of the components.

9.1.6 Transport position

! NOTICE

Damage to the fork stem due to incorrect operation.

Risk of damage!

- Never close the quick-release lever before the latch has locked into place.
1. For space-saving transportation or storage of the bicycle, rotate the handlebars 90° from the riding position to the transport position (see Fig. "Handlebar direction").
 1. Hold the handlebars firmly and turn the quick-release lever outwards (see Fig. "Transport position").
 2. Lower the handlebars completely.
 3. Pull the latch upwards.

Other components

- Carefully rotate the handlebar 90° against the front wheel until the latch self-engages. You may need to hold the front wheel firmly to do this.
- Close the quick-release by turning the quick-release lever inwards until it is flush against the head tube.

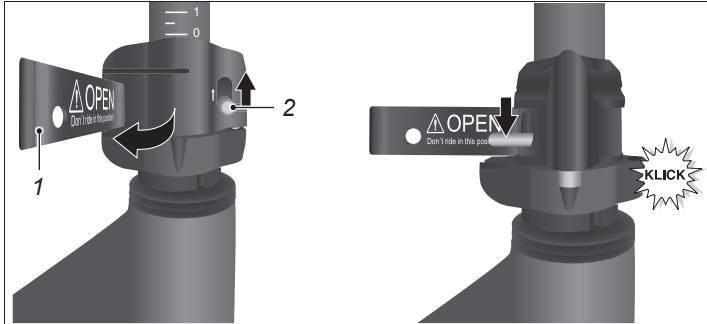


Fig. Transport position

1 Quick-release lever

2 Latch

9.1.7 Riding position

- Hold the handlebars firmly and turn the quick-release lever outwards (see Fig. "Preparing the riding position").
- Pull the latch upwards.

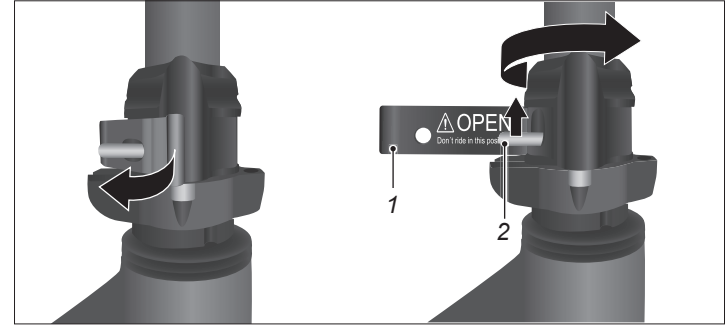


Fig. Preparing the riding position

1 Quick-release lever

2 Latch

- Carefully rotate the handlebar 90° towards the front wheel until the latch self-engages. You may need to hold the front wheel firmly to do this.

Other components

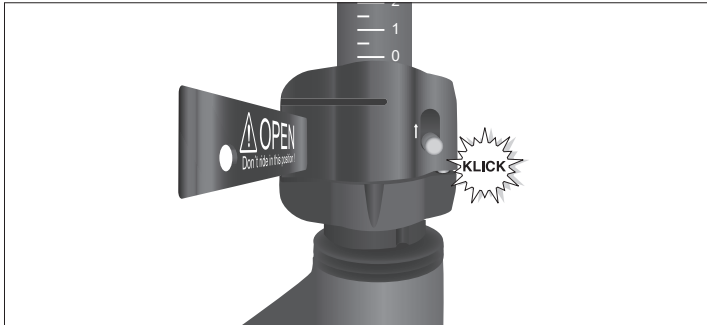


Fig. Riding position

4. Close the quick-release by turning the quick-release lever inwards until it is flush against the head tube (see Fig. "Riding position").
5. Set the handlebar height (see Section "Handlebars" on page 68).

9.2 Folding pedals

9.2.1 Basic information



CAUTION

Pinching or crushing of body parts.

Risk of injury!

- Observe the moving parts when collapsing the folding pedals.

The pedals are attached to the pedal cranks. The bicycle is operated with feet on the pedals.

Folding pedals are ideal for space-saving storage or transportation of the bicycle.

- Remove dirt from the folding pedals with a slightly damp cloth or a brush.
- Regularly lubricate the joints and the locks with a drop of universal oil (see Fig. "Folding pedal"). Make sure that no lubricant gets on the pedal treads.
- Wipe away excess lubricant immediately with a clean cloth.

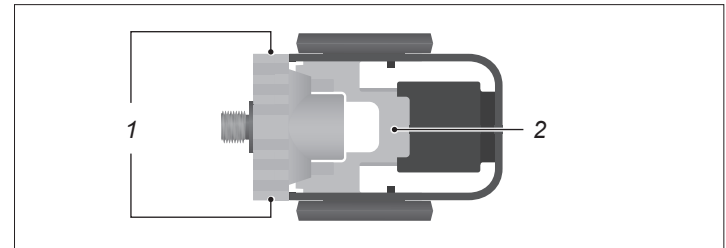


Fig. Folding pedal

1 Joint

2 Lock

9.2.2 Operation

1. To unlock the folding pedal, insert a finger into the opening (see Fig. "Folding direction").
2. Pull the lock outwards.
3. Fold the folding pedal
 - outwards to use the bicycle,
 - inwards for space-saving storage or transportation of the bicycle. Ensure that the folding pedal stop points to the outermost end of the pedal crank.
4. Check whether the lock is back in its starting position, thus the folding pedal is correctly locked.

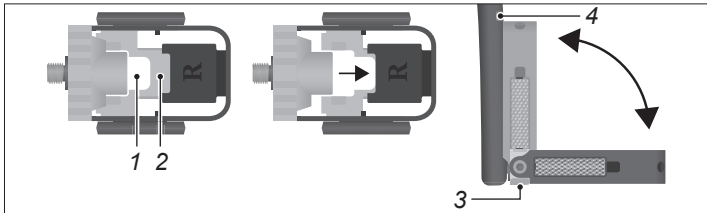


Fig. Folding direction

- 1 Opening
2 Lock

- 3 Stop
4 Pedal crank

9.3 Saddle

9.3.1 Basic information

The saddle is the part of the bicycle that supports the rider and allows them to sit in different positions whilst cycling. The shape of the saddle depends on the intended purpose of the bicycle as well as the physical characteristics of the rider.

1. Check if you can rotate your saddle.
 - If you can twist the saddle, tighten the clamp screw on the seat post clamp, making sure you apply the correct torque.
2. Check to see if you can push the saddle towards the handlebars.
 - If you are able to push the saddle towards the handlebars, you should re-adjust the saddle position (see Chapter "Seat position (standard seat post)" on page 75).

9.3.2 Settings



WARNING

Broken saddle or seat post due to excessive loads.

Risk of accident and injury!

- Always assess the load capacities of the saddle and seat post together.
- Never overload either the saddle or the seat post.

If you are not sure about the permissible load for the saddle and/or seat post, ask your specialist dealer.

Other components

The saddle and seat post comprise a single unit; this is why the load capacities must always be assessed together.

The load capacity depends on:

- the material
- the model
- the construction type
- the interior construction and
- the condition of the bicycle

Adjust the saddle so that you can assume a comfortable sitting position, easily operate all components on the handlebars and safely reach the ground with your feet.

9.3.3 Settings

Adjust the saddle so that you can assume a comfortable sitting position, easily reach all operating controls on the handlebars and safely reach the ground with your feet.

9.3.3.1 Saddle height



WARNING

Incorrect adjustment of the seat post.

Risk of accident and injury!

- Observe the minimum insertion depth for the seat post.

1. Hold the saddle firmly and loosen the seat post.
 - Unscrew the seat post clamp anti-clockwise until the seat post can be shifted up or down, or
 - Open the quick-release by turning the quick-release lever outwards.

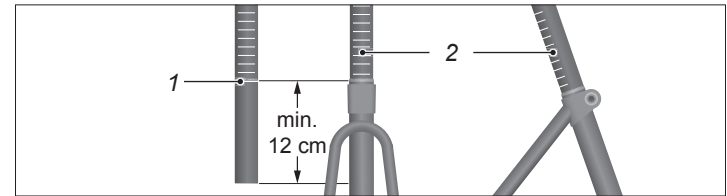


Fig. Seat post (example)

1 Lower marking

2 Calibration

- Adjust the saddle height so you can achieve a comfortable sitting position and can easily operate all components located on the handlebars while riding.
- Check that the lower marking on the seat post is not visible and that the seat post is inserted at least 12 cm into the frame.

Other components

2. Rotate the saddle so that it forms a straight line with the frame, when viewed from above.
3. Secure the seat post.
 - Turn the screws clockwise until the seat post no longer moves and tighten the screws, or
 - close the quick-release by turning the quick-release lever inwards.
 - If you can close the quick-release without using additional force, you should readjust the initial tension (see Chapter “Settings” on page 85).

9.3.3.2 Seat position (standard seat post)

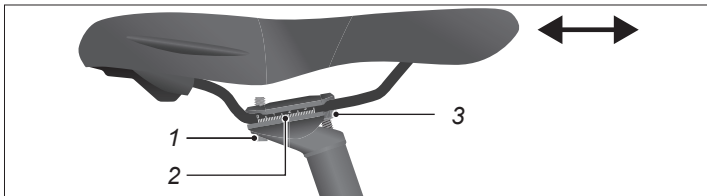


Fig. Standard seat post

1 Screw

3 Knurled nut

2 Calibration

- Loosen the screw underneath the saddle anti-clockwise until the saddle can be shifted forwards and backwards (see Fig. “Standard seat post”).

- Adjust the saddle position so you can achieve a comfortable sitting position and can easily operate all components located on the handlebars while riding.
- Check the seat incline and adjust, if necessary.
- Tighten the screw underneath the saddle in a clockwise direction.

9.3.3.3 Seat incline (standard seat post)

- Loosen the screw underneath the saddle anti-clockwise until the saddle can be tilted (see Fig. “Standard seat post”).
- Turn the knurled nut to tilt the saddle.
- Adjust the seat incline so you can achieve a comfortable sitting position and can easily operate all components located on the handlebars while riding.
- Check the saddle position and adjust, if necessary.
- Tighten the screw underneath the saddle in a clockwise direction.

Other components

9.3.3.4 Saddle position and incline (suspension seat post)

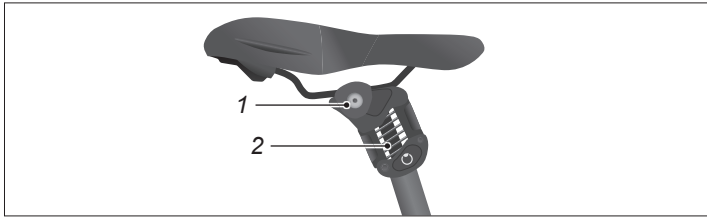


Fig. Suspension seat post

1 Screw

2 Suspension element

- Loosen the screw underneath the saddle anti-clockwise until the saddle can be tilted (see Fig. “Sprung seat post”).
- Adjust the saddle position and incline so you can achieve a comfortable sitting position and can easily operate all components located on the handlebars while riding.
- If the seat post suspension seems too hard or too soft, ask your specialist retailer to adjust the suspension seat post.

Note: The optimal seat incline is horizontal. Use a spirit level for the adjustment, if necessary.

9.3.4 Seat post theft protection

! NOTICE

Improper removal and installation of the seat post can cause damage.

Risk of damage!

- If you are unsure how to remove or install the seat post, ask a bike specialist for advice or have the work done by a professional.

9.3.4.1 Removing the seat post

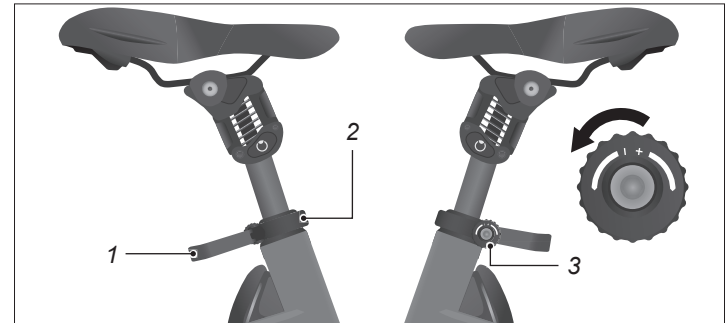


Fig. Opening the clamp

1 Clamp lever

2 Clamp

3 Pre-tensioning screw

Other components

1. Open the clamp.
2. Loosen the pre-tensioning screw on the clamp anti-clockwise until it can not be turned any further.
3. Turn the clamp clockwise 180 degrees.

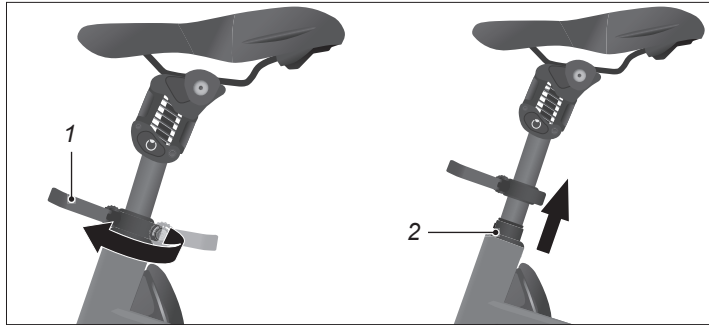


Fig. Removing the clamp

1 Clamp

2 Seat tube

4. Remove the clamp by pulling it upwards from the seat tube. If it is not possible to remove it by hand, use a suitable tool to remove it. Make sure that you do not damage the frame or clamp in the process.

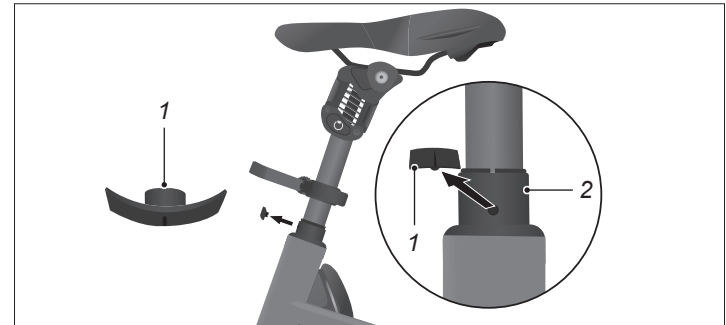


Fig. Removing the locking clip

1 Locking clip

2 Seat tube

5. Remove the locking clip from the seat tube.

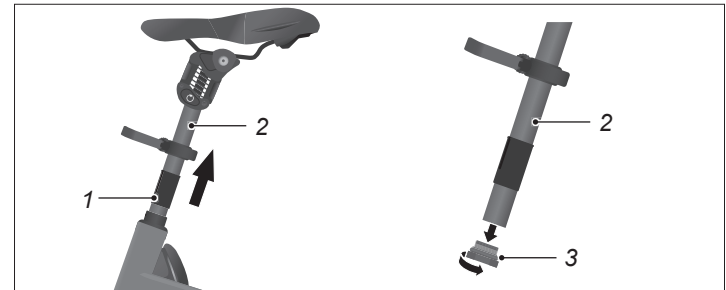


Fig. Pull out the seat post/loosen the locking nut

1 Reducing sleeve

3 Locking nut

2 Seat post

Other components

6. Pull the seat post (incl. reducing sleeve) up and out.
7. To remove the reducing sleeve from the seat post, loosen the locking nut on the underside of the seat post with a 36 mm spanner.
8. Then pull the reducing sleeve off the seat post.

9.3.4.2 Installing the seat post

1. Put the reducing sleeve on the seat post.
2. Tighten the locking nut on the underside of the seat post with a 36 mm spanner.
3. Insert the seat post (incl. reducing sleeve) into the seat tube. Make sure that the slot in the reducing sleeve is facing forwards.
4. Put the locking clip on the seat tube.
Make sure that the locking lip is inserted with the narrow edge facing upwards, otherwise it will be difficult to attach the clamp and the locking clip may be damaged.
5. Put the clamp on the seat tube.
6. Turn the clamp anti-clockwise 180 degrees.
7. Tighten the pre-tensioning screw on the clamp clockwise.
8. Close the clamp.

9.4 Pannier rack

9.4.1 Basic information

The pannier rack is a device on the bicycle that enables the rider to carry luggage.

The pannier rack is equipped with a mounting system. Baskets and other accessories are available for the pannier rack, which can be quickly and securely affixed using the mounting system.



WARNING

Risk of accident from unauthorised modification to or disassembly of the pannier rack.

Risk of accident and injury!

- Do not modify or disassemble the pannier rack. It is a load-bearing component that ensures that the whole bicycle is stable.
- If the pannier rack needs to be replaced, it must be done by a specialist retailer using an original spare part.



NOTICE

Damage to bicycle components caused by improper mounting of the pannier rack.

Risk of damage!

- Ask your specialist retailer to install the pannier rack.

Other components

- If your bicycle is fitted with a pannier rack, you should not make any modifications to the pannier rack.
 - Consult your specialist dealer if you wish to replace the pannier rack.
 - You can retrofit an approved pannier rack that complies with the DIN EN ISO 11243 standards.
 - Get your specialist dealer to mount your pannier rack for you.
 - Seek advice from your specialist dealer about the special features of a pannier rack system.
 - Do not overload the pannier rack.
 - Child seats should only be mounted on the frame. Securing attachments (child seat) with **clamps** can break the **pannier rack** and is **prohibited**.

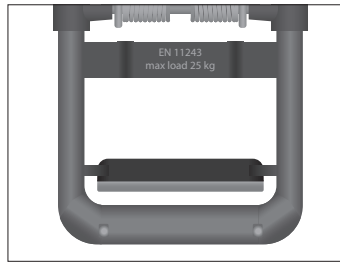


Fig. Maximum load

- Hold the bicycle firmly by the frame and take hold of the pannier rack. By moving the pannier rack backwards and forwards, check whether all screw connections are secure and do not move.
 - If the screw connections move while moving the pannier rack backwards and forwards, tighten all screw connections of the pannier rack.

The permissible maximum load often depends on the pannier rack (see Fig. “Maximum load”).



NOTICE

Overloading the pannier rack.

Risk of damage!

- Always observe the maximum permitted total weight.

Rear pannier rack:	27 kg
Front pannier rack:	12 kg

9.4.2 Operation



WARNING

Fall caused by incorrectly transported luggage.

Risk of accident and injury!

- Do not attempt to carry bags or other objects on the handlebars.
- Secure objects to pannier rack to prevent it from slipping or falling off.
- Only used undamaged bungee cords to secure your luggage.



WARNING

Changed riding characteristics due to additional weight.

Risk of accident and injury!

- Familiarise yourself with the how it feels to ride your bicycle with additional luggage before riding on the road.
- Any additional weight should be distributed evenly on both sides of the pannier rack or centrally on top of the rack.



CAUTION

The bungee cord or the clamp bracket may snap back and hit you.

Risk of injury!

- When using the bungee cord or the clamp bracket, ensure that you hold them so tightly that you cannot accidentally let go of them.

9.4.2.1 Pannier rack system

Take hold of the clamp bracket, carefully push it upwards and hold it in this position.

1. Place your luggage on the pannier rack.
2. Secure your luggage to the pannier rack by slowly releasing the clamp bracket.
3. If your pannier rack system has no clamp bracket, use sufficient system components for your purpose or use bungee cords to secure your luggage.

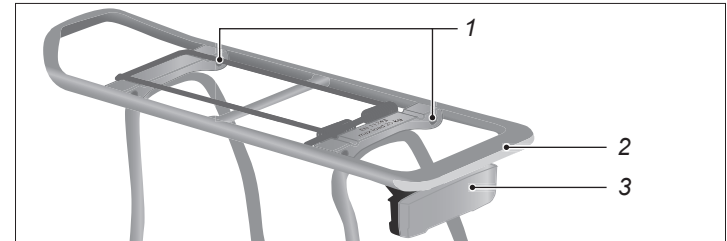


Fig. Pannier rack system (example)

- 1 Mounting point for system components
- 2 Rear light
- 3 Rear reflector

A pannier rack system can be adjusted to suit your requirements with just a few simple steps, e.g. adding a bicycle basket.

Other components

9.4.2.2 Front pannier rack

Depending on the model, your bicycle is fitted with a front pannier rack.

1. Place your luggage on the pannier rack.
 2. Secure your luggage to the pannier rack by using a bungee cord to secure your luggage.
- Position your load in such a way that it does not obscure reflectors or lights.

If you would like to mount a bicycle basket or a transport box on the front pannier rack, under certain circumstances it is necessary to dismantle the KlickFix bracket (see Fig. “*Front pannier rack with KlickFix bracket*”).

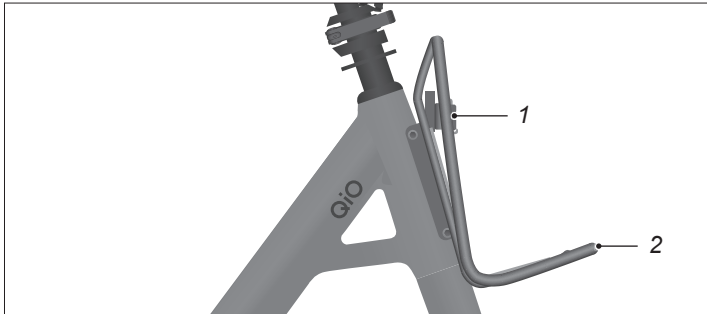


Fig. Front pannier rack with KlickFix bracket

1 KlickFix bracket

2 Front pannier rack

9.5 Baggage



WARNING

Changed riding characteristics due to saddle bags and front baskets.

Risk of accident and injury!

- Familiarise yourself with the how it feels to ride your bicycle with additional attachments such as saddle bags and front baskets before riding on the road.
 - **Saddle bags, front baskets and “lowriders” dramatically impair the steering behaviour.**
 - Adapt the way you ride to suit the changed handling of the bicycle.
-
- Position your load in such a way that it does not obscure reflectors or lights.
 - Apply the brakes sooner, expect a longer braking distance and less responsive steering.
 - Secure the baggage against slipping or falling off, e.g. using bungee cords.
 - Stow heavy objects in such a way that the principal weight is as near as possible to the wheel hub, e.g. in the lower area of the saddle bag.
 - If you use fasteners, e.g. bungee straps or cables, make sure that these cannot become caught in any moving parts.

Other components

- Any additional weight should be distributed evenly on both sides of the pannier rack or centrally on top of the rack (see Fig. "Transportation containers").

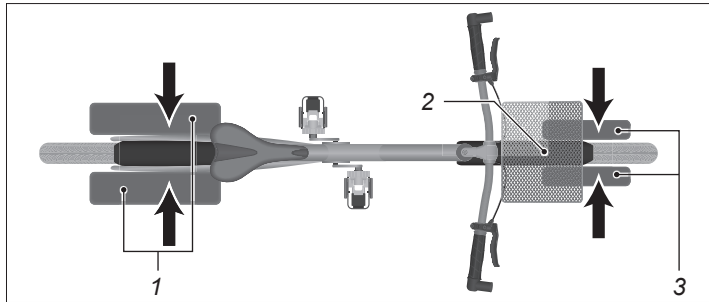


Fig. Transportation containers

1 Saddle bags

2 Baskets

3 Lowriders

9.6 Bell

9.6.1 Basic information

A bicycle bell is a metal bell on your bicycle that produces a clear ringing sound.

You can attract the attention of other road users by ringing the bell.

- If you do not hear a clear, high ringing sound when attempting to sound the bell, you should have the bell replaced by your specialist dealer.

9.6.2 Operation

- Press the button on the bell downwards or to the side and allow it to spring back.

9.6.3 Settings

Position the bell on your handlebars so that you can easily reach it at any time.

9.7 Prop stand

9.7.1 Basic information

The stand is a device that allows you to stand the bicycle in an upright position after use.

9.7.2 Operation

- To use the bicycle, hold it firmly and flip the kickstand upwards.
- To park the bicycle, hold it firmly and flip the stands downwards.
- Rest the bicycle on the stands.
- Once the bicycle is standing securely, let it go.
- Secure the bicycle against theft or unauthorised use.

9.7.3 Settings

Depending on the bicycle model, your bicycle will be fitted with an adjustable stand (not pictured).

- If you cannot securely position your bicycle using the stand, you should adjust the stand so it can be properly used.
- If you are unable to adjust the stand, have it adjusted by your specialist dealer.

9.8 Quick-release



WARNING

Risk of falling if the quick-release lever on the seat post is left open.

Risk of accident and injury!

- Before each ride, check that the quick-release lever on the seat post is closed with a sufficient amount of pre-tension.

9.8.1 Basic information

Quick-release mechanisms make it easy for you to quickly remove, install or adjust bicycle components without any additional tools.

Depending on the model, your bicycle may be fitted with quick-release on the seat tube clamp.

Use Fig. "Seat post clamp" to check whether your bicycle is equipped with a quick-release.

1. Open and close the quick-release lever and listen for unusual noises.
 - If you hear any unusual noises, you should ask your specialist dealer to inspect the quick-release mechanism.
2. Cleaning the quick-release.
3. Close and lock the quick-release.

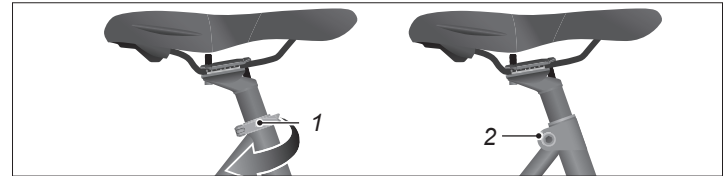


Fig. Seat post clamp (example)

1 Quick-release

2 Screw clamping

9.8.2 Operation



WARNING

Pinching or crushing of body parts.

Risk of injury!

- Open and close the quick-release slowly and carefully.

9.8.2.1 Opening the quick-release

- Turn the quick-release outwards.

9.8.2.2 Closing the quick-release

- Turn the quick-release inwards until it is flush against the seat post and/or the head tube.
 - If the seat post or the handlebars are not secure, adjust the quick-release levers.

9.8.3 Settings

1. Open the quick-release mechanism.
2. Turn the adjustment screw clockwise one quarter of a turn (see Fig. "Quick-release").
3. Close the quick-release and check whether the components are firmly tightened.
4. Repeat the process until the components are secure when the quick-release is closed.
5. If you can close the quick-release lever without using additional force, you should re-adjust the initial tension.
 - If you are not able to adjust the quick-release, ask your specialist dealer to inspect it.

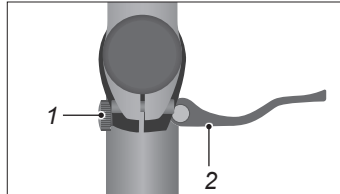


Fig. Quick-release

- 1 Adjustment screw
- 2 Quick-release lever

10 Wheels and tyres

10.1 Wheels

10.1.1 Basic information

The wheel is made up of a hub, spokes and a rim. The tyre is fitted in the rim of the wheel. Depending on the bicycle model, an inner tube is fitted inside the tyre. The front wheel and its tyre together are referred to as the front wheel; the rear wheel and its tyre are referred to as the rear wheel.

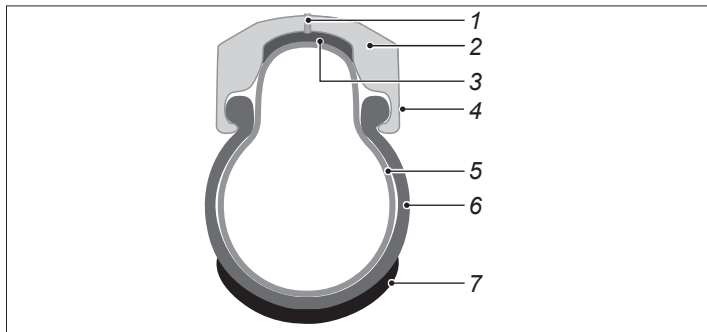


Fig. Cross-section of a wheel and tyre (example)

- | | |
|------------|--------------|
| 1 Spoke | 5 Inner tube |
| 2 Rim | 6 Tyre |
| 3 Rim tape | 7 Tyre tread |
| 4 Rim wall | |

- If an inner tube is included, rim tape is also fitted around the inside of the rim to protect the tube from the rim base and the spoke nipples.
- If the tyre does not have an inner tube, road bikes are fitted with so-called tubular tyres or mountain bikes are fitted with UST tyres (Universal System for Tubeless).

The wheels are exposed to considerable stresses and strains due to the weight of the rider and their luggage as well as the conditions of the road.

- After an initial riding period (at the latest after cycling 300 km, using the bike for over 15 hours or after 3 months – depending on which milestone is achieved first), you should get your specialist dealer to check the wheels and re-centre them.
- You should check your wheels regularly following the initial riding period.

10.1.1.1 Rims and spokes



WARNING

Risk of falling due to blocked rim brakes or wobbling wheels caused by the rims becoming laterally out of true.

Risk of accident and injury!

- Get your specialist dealer to true any untrue wheels.

Wheels and tyres

It is essential that all spokes are evenly tensioned in order for the wheel to run properly true. The tension of individual spokes can change if obstacles such as kerb edges are ridden over too quickly or if a spoke nipple becomes loose. The true running of the wheel and the stability of the rim are reduced if individual spokes are no longer under tension or damaged.

10.1.1.2 Wear limit

Depending on the bicycle model, indentations are imprinted in the rims to indicate the wear limit. The wear limit has been reached when the indentation is no longer perceptible.

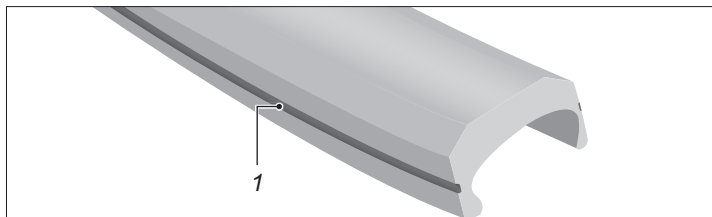


Fig. Rim (example)

1 Wear indicators

10.1.2 Settings

10.1.2.1 Checking and adjusting the spokes

- Press the spokes together with your thumbs and finger and check that the tension is equal on all spokes.
 - If the tension varies or if spokes are loose, ask your specialist dealer to tauten the spokes.

Alternatively, you can stroke a wooden or plastic baton over the spokes and listen for differences in sound.

10.1.2.2 Checking the wear limit or replacing the rims

1. Check whether the rims of your bicycle have indentations to indicate the wear limit (see Fig. “Rim”).
2. If the rims of your bicycle do have indentations, check to see if the wear limit has been reached.
3. Stroke a finger nail or a toothpick over the indentation in a vertical direction.
 - Do not use the bicycle if you cannot feel the indentation; there is a **risk of breakage**.
 - Ask your specialist dealer to replace the wheel rims.

10.2 Tyres and valves

10.2.1 Basic information



CAUTION

Poor visibility to other road users.

Risk of accident and injury!

- Make sure that all reflectors are clean and clearly visible.



CAUTION

Burst tyres caused by penetrating foreign bodies.

Risk of accident and injury!

- Check the tyres regularly for signs of damage and wear.
 - If you do not have the necessary expertise and the required tools, you should ask your specialist dealer to replace damaged or worn tyres.
-



NOTICE

Damage caused by fitting differently sized tyres than those originally intended for use.

Risk of damage!

- Consult your specialist dealer if you have any questions about the correct tyre size.
-

The tyres serve to give the bicycle grip on the road surface, to transfer the driving force to the road and to counterbalance irregularities in the road surface. Different types of tyres are used depending on the intended use of the bicycle.

The size of the tyre is indicated on the side of the respective tyre. Various different details may be included here, for example:

- Size in millimetres. If the tyre is described as '55–406', this means that the tyre is 55 mm wide when fully inflated and has an inner diameter of 406 mm.

- Size in inches. If the tyre is described as 26 × 2.35, this means that the tyre is 2.35" wide when fully inflated and has an inner diameter of 26".

With the exception of tubular tyres and UST tyres, rims and tyres alone are not airtight. An inner tube filled through a valve is used to keep the air inside the tyre.

- Check the tyres for cracks and damage caused by foreign bodies.
- Check whether the profile of the tyres can be clearly felt.
- If a tyre shows signs of cracks, is damaged or the profile depth is insufficient, have the tyre replaced by your specialist dealer.

10.2.1.1 Tyre pressure



WARNING

Too much pressure can cause the inner tubes to burst or to bulge out from the rim.

Risk of accident and injury!

- Observe the correct tyre pressure.
 - When pumping up your tyres, you should use a pump with a pressure gauge.
-

! NOTICE

Damage to the inner tube caused by too little pressure.

Risk of damage!

- Do not ride over sharp edges if the tyre pressure is too low.
- Observe the correct tyre pressure.
- When pumping up your tyres, you should use a pump with a pressure gauge.

10.2.1.2 Air pressure table

Additional load (rider + baggage)	Air pressure recommendation front/rear with tyre size 55–406 (standard)		
	Bar	psi	kPa
up to 75 kg	2.0–2.5	30–35	200–250
up to 100 kg	2.5–3.0	35–45	250–300

Observe the maximum tyre pressure, which is indicated by the lower of the two values printed on the rim or on the side of the tyre.

Tyre inflation pressure is indicated in psi (pound per square inch), kPa or bar.

The lower limit of the tire inflation pressure is suitable for light riders, for uneven ground and provides a higher suspension comfort with a higher rolling resistance. The upper limit of the tire inflation pressure is suitable for heavy riders, for level road surfaces and provides a low rolling resistance with lower suspension comfort.

- You should always ride with tyres filled to the prescribed tyre pressure.
- Check your tyre pressure regularly.
- Fill your tyres with air at least to the lower limit and at most, to the maximum limit indicated for tyre inflation pressure.
- When pumping up your tyres, you should use a pump with a pressure gauge.

Tyre pressure conversion			
psi	bar	psi	bar
12	0.8	80	5.5
15	1.5	90	6.2
30	2.1	100	6.9
40	2.8	110	7.6
50	3.5	120	8.3
60	4.1	130	9.0
70	4.8	140	9.7

Note: Depending on the manufacturer, the values are given in psi, kPa or bar.



Fig. Print on the side of the tyre (example)

10.2.2 Settings

1. To check or adjust the air pressure, screw or pull the protective cap off the valve and open the valve as appropriate.
2. Attach an air pressure gauge or an air pump with a pressure indicator to the valve and read the pressure values. Ensure that you are using the correct attachment for your type of valve.
 - If the air pressure is too low, pump the tyres with an air pump.
 - If the air pressure is too high, release some of the air.
 - Select an air pressure within the upper and lower limits given on the tyres and which is appropriate for your body weight, the bike's load and your riding habits.
3. Carefully screw or push the protective cap back onto the valve after adjusting the air pressure.
4. After adjusting the air pressure, check the lower knurled nut is secure and tighten it if necessary (see Fig. "Valve types").
 - Carefully tighten the knurled nut.

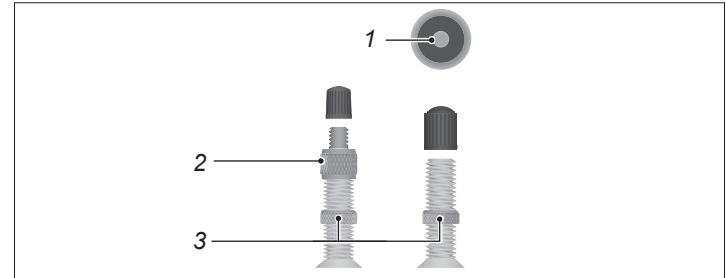


Fig. Valve types (example)

1 Valve tappet

2 Upper knurled nut

3 Lower knurled nut

11 Storage and disposal

11.1 Storage

Please observe the following points regarding storage if the bicycle is not to be used for a long period of time:

- Clean the bicycle.
- Store the bicycle in a dry room where it is protected from frost and large changes in temperature.
- To prevent the wheels from becoming distorted, the bicycle should be stored by hanging it from its frame.
- If your bicycle has derailleur gears, you should shift to the small chainring at the front and the smallest sprocket at the back, in order to relieve the gear cables of as much tension as possible.

Note: After storage, you should shift the gears on the front chainring and rear cassette into a suitable gear combination for riding, before using the bicycle again (see Chapter “*Gear combinations*” on page 48).



WARNING

Danger for children or for individuals with insufficient knowledge or abilities!

Risk of accident and injury!

- Do not allow children to play with the bicycle.
 - Do not allow children to clean, maintain or service the bicycle.
-



CAUTION

Pinching or crushing of body parts between moving parts.

Risk of injury!

- Exercise caution when handling moving parts to ensure that you do not get your fingers trapped.
 - Wear protective gloves.
-



NOTICE

Use of incorrect cleaning agents.

Risk of damage!

- Do not use any aggressive cleaning agents.
 - Do not use any sharp, angular or metallic cleaning utensils.
 - Never use a hard water jet or high pressure device to clean the bicycle.
-



NOTICE

Dripping oil or grease.

Environmental hazard!

- Take care to ensure that no oil or grease drips down.
- Wipe up spilled oil or grease with a cloth immediately.
- Spilled oil or excess grease should be disposed of in an environmentally responsible fashion, in accordance with applicable national and local regulations.

What should be used for cleaning:

- Clean cloths,
- Mild, lukewarm soapy solution,
- Soft brush or sponge,
- Cleaning and preservative agents.
- As and when required, seek advice from your specialist dealer on suitable cleaning and servicing products.
- Clean the bicycle regularly even if it is only slightly dirty.
- Wipe down all surfaces and components with a damp sponge.
- Use a mild soapy solution to dampen the sponge.
- After cleaning, wipe dry all surfaces and components.
- Maintain lacquered surfaces and metallic surfaces on the frame at least once every six months.
- If your bicycle is equipped with rim brakes, do not use maintenance products on the rims, likewise if it is fitted with disc brakes, do not use maintenance products on the brake discs.

- Read and follow the advice in the enclosed manufacturer's informational leaflets about cleaning individual components.

11.2 Disposal

- If you own an e-bike, you should also read the original user manual for information about disposal.

11.2.1 Disposing of the packaging

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

11.2.2 Disposing of lubricants and cleaning products

Dispose of lubricants, cleaning and maintenance products in an environmentally responsible fashion. These products do not belong in household waste, sewers or natural habitats. Read the instructions on the packaging. Dispose of lubricants, cleaners and maintenance products at a collection point for special waste.

11.2.3 Disposing of tyres and inner tubes

Tyres and inner tubes are not residual waste or household rubbish. Dispose of tyres and inner tubes at a recycling depot or at a recycling collection point run by your city or municipality.

11.2.4 Disposing of the bicycle

- Dispose of your bicycle at a recycling depot.

12 Inspection report

First inspection

After approximately 200 km or 2 months

Work done:

Materials installed:

Second inspection

After approximately 1000 km or 1 year

Work done:

Materials installed:

Third inspection

After approximately 2000 km or 2 years

Work done:

Materials installed:

Inspection report

Fourth inspection

After approximately 3000 km or 3 years

Work done:

Materials installed:

Fifth inspection

After approximately 4000 km or 4 years

Work done:

Materials installed:

Sixth inspection

After approximately 5000 km or 5 years

Work done:

Materials installed:

13 Bicycle passport

Brand / model Bosch (e-bike) _____

Frame no. _____ Colour _____

Tyre size _____

Brake

Front brake Rim brake Disc brake

Rear brake Rim brake Disc brake Coaster brake

Drivetrain Chain drive Belt drive

Suspension seat post Installed

Accessories

Pannier rack Installed Can be installed

Child seat Installed Can be installed Not suitable for child seats

Gear shift system Derailleur gears _____ Gear hub _____

Special features _____

Tip for the vendor: Make a copy of the bicycle passport and handover document and add the copies to your customer file.

14 Handover document

14.1 Dealer

The handover of the bicycle indicated in the bicycle passport to the customer took place once:

- the bicycle had been fully assembled
- all screw connections had been verified
- the functionality of all components had been tested
- excess oil and grease had been removed
- a test ride had taken place
- the bicycle had been adjusted to suit the customer
- the customer had been briefed on how to use the bicycle
- the customer had been informed that an inspection must be carried out after the first 200 km and
- the customer had been asked to read the user manual before using the bicycle for the first time.

Stamp _____

Place, date _____

Signature _____

14.2 Customer

Surname _____

First name _____

Street _____

Post code/city _____

Tel. _____

E-mail _____

- The bicycle passport was filled in by the specialist dealer.
- The bicycle has been adjusted to suit me.
- I have received an explanation of the basic operations of the bicycle.

I have been given the following user manuals:

Bicycle E-bike E-bike 45 km/h

Place, date _____

Signature _____

15 Legal notice

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