

**Návod k obsluze**  
**Návod na obsluhu**  
**Instruction book**  
**Gebrauchsanleitung**  
**Гарантийный паспорт**  
**Instrukcja obsługi**  
**Notice d'utilisation**



**ibfi**

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Dear Customer,

BIKE FUN INTERNATIONAL company thanks you for purchasing its product – a bike that is fitted with high-quality components from reputable companies. The mountain bike is adapted for cross-country riding and if it is not equipped with mudguards and a light, it is not designated for standard operation on roads. Mountain bikes and trekking bikes (city bikes) that are equipped with mudguards and a light are intended for riding on roads. Bikes may be used only for the purpose for which they have been produced. When using the bikes on public roads it is necessary to follow the relevant national regulations (e.g. governing lights and reflectors).

This Instruction Manual, which should be helpful for you when carrying out maintenance of your bike also contains a letter of guarantee and guarantee conditions.

BIKE FUN INTERNATIONAL, the manufacturer of your new bike wishes you many beautiful and safe kilometres.

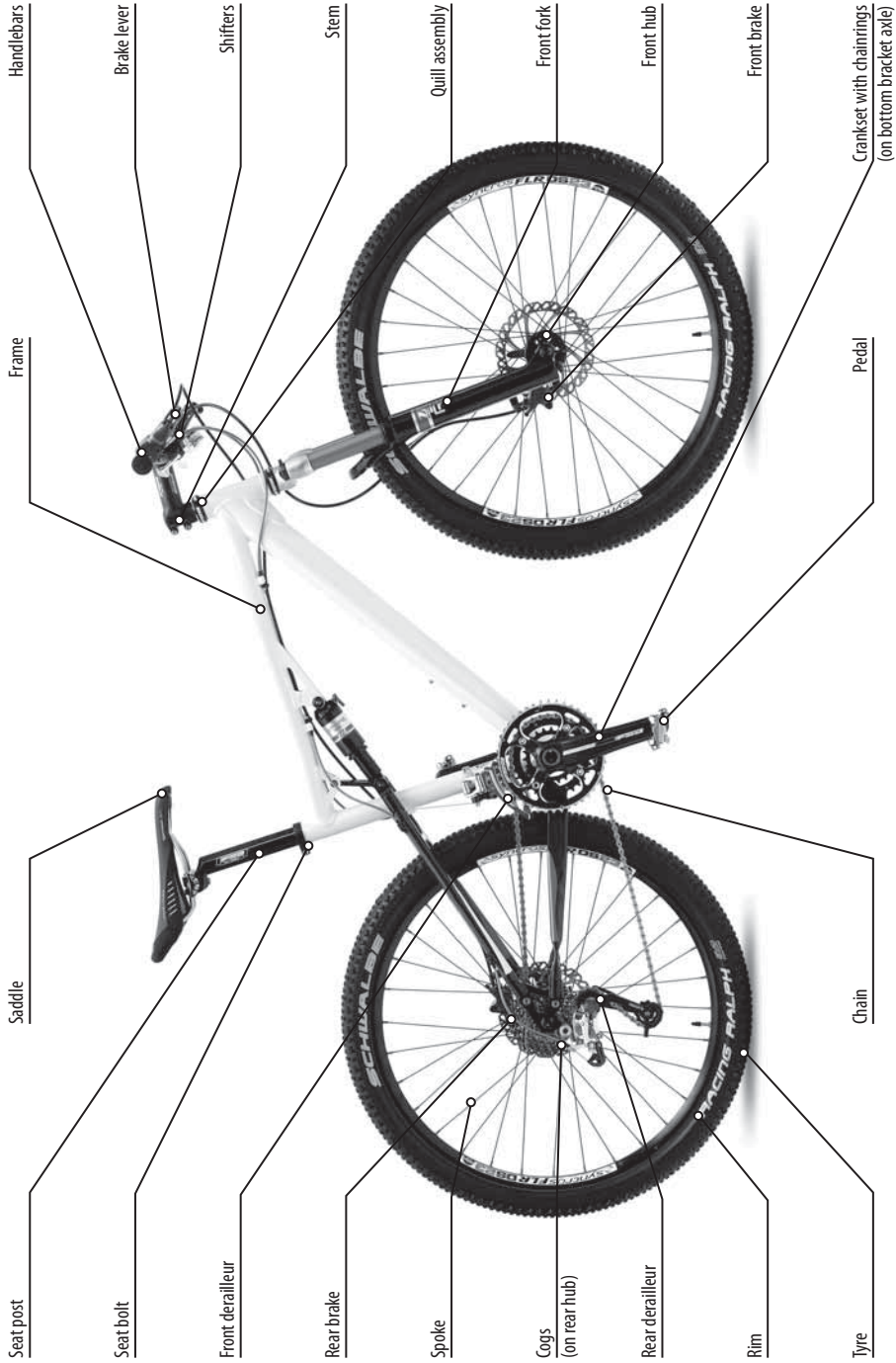
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#### **General warning**

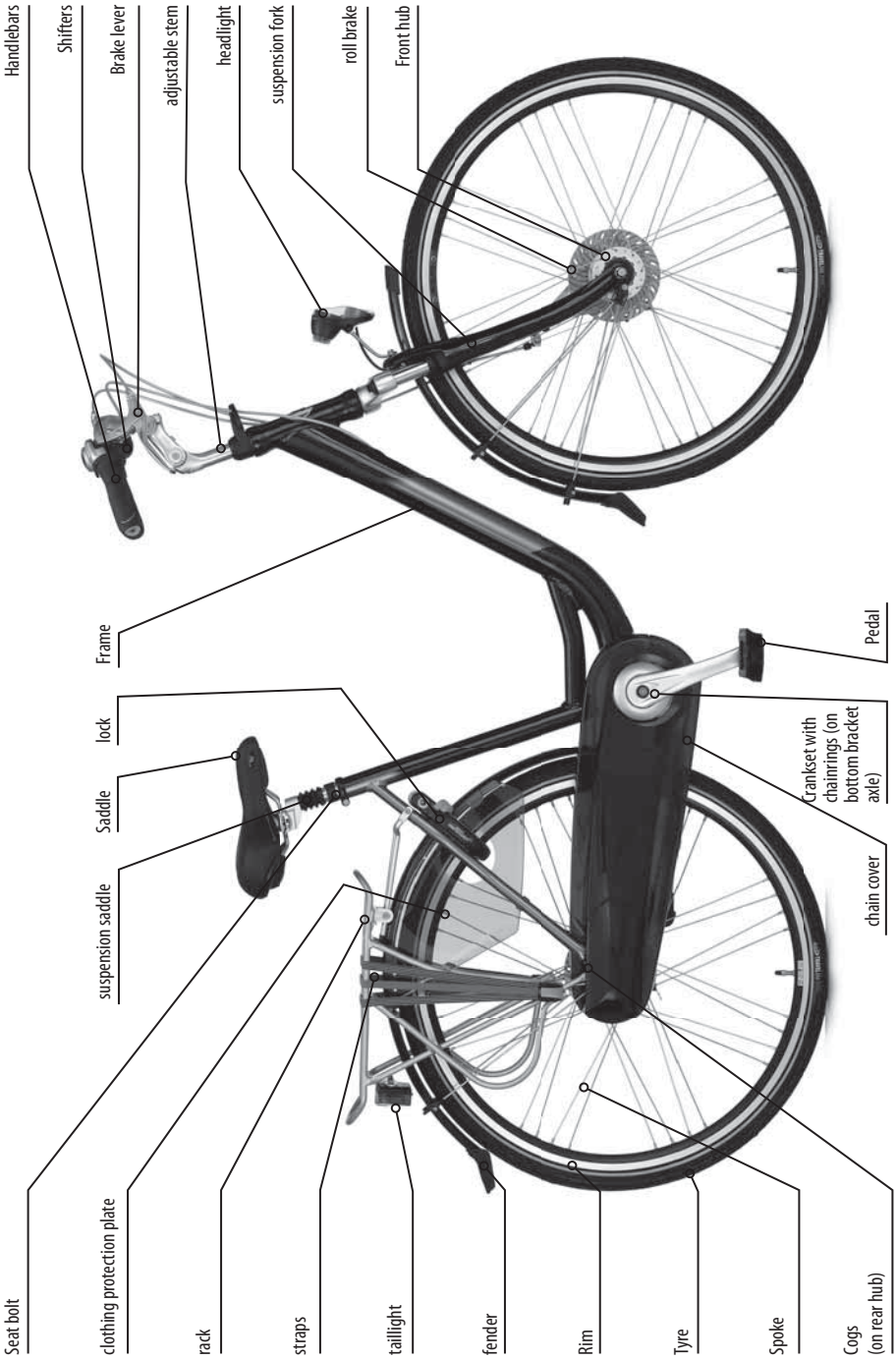
**Cycling may be hazardous even when using maximum caution. For that reason, thorough maintenance is critical as it reduces the risk of injury. This manual contains many warnings and cautions with respect to the consequences of neglected maintenance or irregular technical inspections of your bike. Many of these warnings and cautions say: “You may lose control and fall”. As serious injury or even death may result from each such fall, this warning should never be omitted. We recommend wearing a protective helmet of an approved type when riding a bike.**

BASIC NOMENCLATURE OF A BIKE

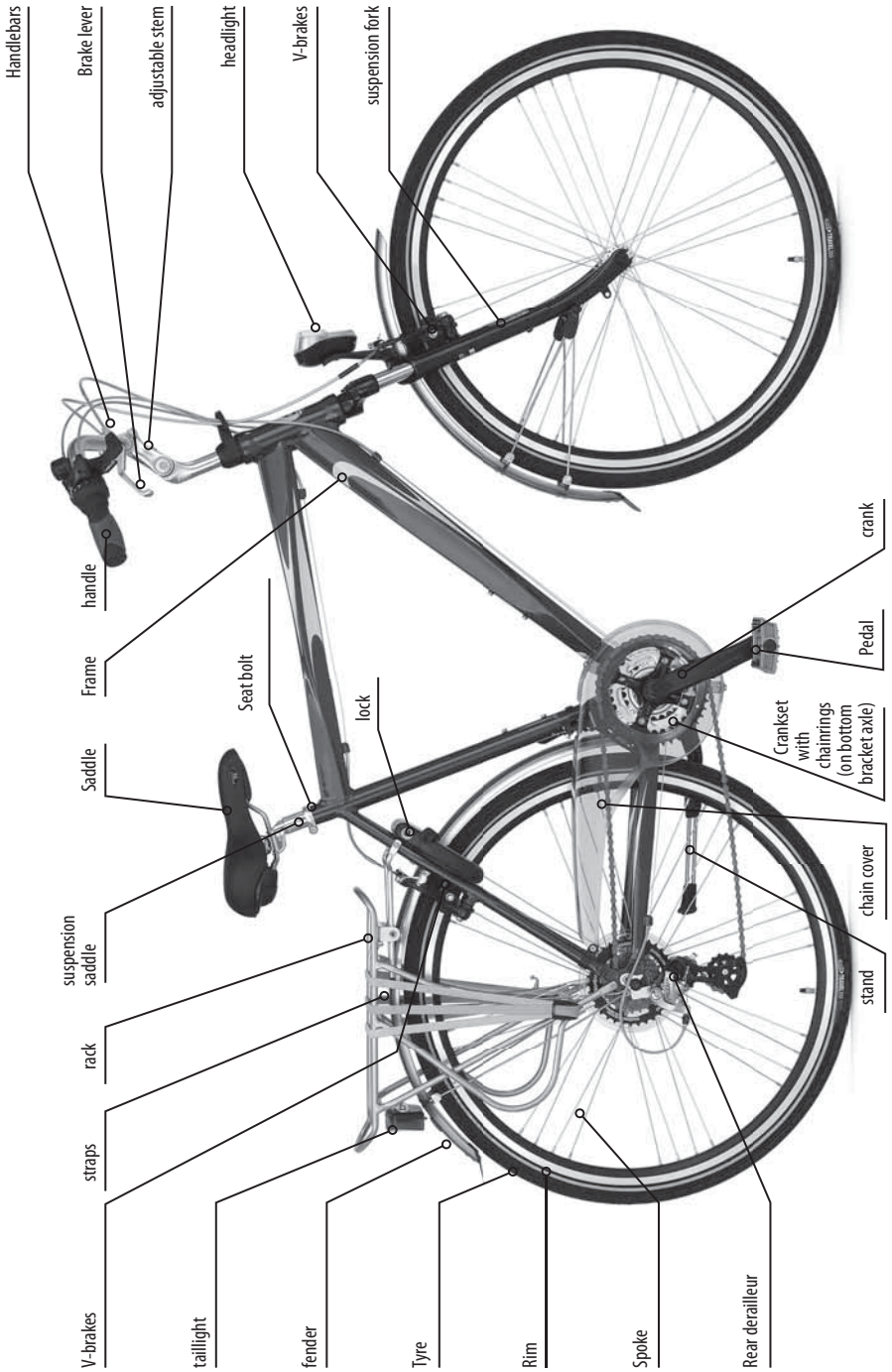


Note: Bike equipment changes according to the category!

## THE BASIC NOMENCLATURE OF A BICYCLE - CITY BIKE



THE BASIC NOMENCLATURE OF A BIKE - TREKKING BIKE



## INDIVIDUAL CATEGORIES OF BIKES AND THEIR USES:

**Children's bikes ISO 4210-2:** All children's bikes up to the wheel size 20" are intended for use in playgrounds and enclosed areas and only under the supervision of parents or a responsible person. Recommended load of the wheel size 20" up to 30 kg; wheel size 24" up to 45 kg.

**MTB bikes ISO 4210-2:** they are designed for sporty driving on the open ground. Recommended load up to 100 kg.

**Road bicycles ISO 4210-2:** are constructed solely for roads with a smooth surface. Recommended load: up to 100 kg.

**Trekking and city bikes ISO 4210-2:** they are designed to operate on public roads and mild terrain, with a focus on recreation and tourism. Recommended load up to 120 kg

**E-bikes:** Electronically Power Assisted Cycles (EPAC, also e-bikes or pedelec) that are subject to the same conditions valid for regular bicycles. No license plate, MOT certificate, IVA or damage liability is necessary. When riding an e-bike, you do not need a driving license, and if you are older than 18 years of age, you are not required to wear a helmet. Recommended load: up to 120 kg. E-bikes are machines that are legally classified among bicycles in most countries. Get information on the particular regional regulations and categorisations valid in your country.

Each of our bicycles is constructed so as to be capable of bearing a maximum total load (the total weight of the bicycle itself, its rider and load).

**Kid's Bicycles:** up to size 20" - 45 kg, up to size 24" - 60 kg

**Road and MTB:** 115 kg

**Trekking and City Bikes:** 140 kg

**E-bikes:** 145 kg

## CATEGORY OF BIKES:



### High-Performance Road

- TYPE 1 CONDITIONS: A bicycle intended for riding on hard surfaces where tyres never lose contact with the ground.
- SUITABLE: for riding on hard surfaces only.
- UNSUITABLE: for terrain, cyclo-cross or bike tour riding with panniers or baskets.
- COMPARISON: The use of materials is optimised in order to provide low weight and specific performance.



Category 2 bicycles are intended to be used on maintained gravel or dirt roads with modest gradients, where tyres do not necessarily need to be in contact with the surface. Maximum height of jumps and drops does not exceed 15 cm (6").

## BIKE CATEGORY

Mountain bikes are equipped with a rear suspension with short travel and are constructed for "standard", "racing", "cross-country" or "singletrack-trail" rides assuming adherence to the type-3 operating conditions.



### Type-3 operating conditions.

Riding on trails, crossing small obstacles and technical courses of medium difficulty as well as stretches where the tyres do not make contact with the ground for a short period of time; jumps and drops not exceeding 61 cm (24").

- UNSUITABLE: for "Hardcore Freeriding", "Extreme Downhill", "Dirt Jumping", "Slopestyle" styles or very aggressive or extreme riding. Unsuitable for jumping, hard landings and use on obstacles.



### All Mountain

- TYPE 4 CONDITIONS: Bicycles suitable for riding in type 1, 2, and 3 conditions in addition to riding on natural, more technically challenging surfaces with medium-sized obstacles and small humps.
- SUITABLE: for uphill trail riding. All-mountain bicycles allow riding in more difficult terrain, crossing larger obstacles and medium-sized humps (jumps and drops not exceeding 122 cm (48"))
- UNSUITABLE: for extreme jumps / riding "Hardcore Freeriding", "Freeriding", "Downhill", "North Shore", "Dirt Jumping", "Hucking"



### Gravity, Freeride a Downhill

- TYPE 5 CONDITIONS: Bicycles suitable for jumping, hucking, high speeds or aggressive riding on bumpy surfaces, or for landing on flat surfaces. However, this kind of riding is extremely dangerous and places unpredictable strains on the bicycle, which may overload the bike frame, fork, or individual parts. If you wish to ride in terrain that fulfils type-5 conditions, it is necessary that you perform the necessary precaution measures, such as more frequent bike checks and replacing equipment. In addition to these measures, you should use complex safety equipment, such as full face helmets, elbow and shin guards, and back protectors.
- SUITABLE: for riding in the most challenging terrain, where only the most experienced cyclists should venture. Terms, such as "Gravity", "Freeride", and "Downhill", describe riding in the following style: hardcore mountain, north shore, slopestyle. These styles are deemed to be extreme riding, and the terms used to describe them are constantly changing.
- UNSUITABLE: these bikes are not to be used as an excuse to attempt anything.



### Kid's Bicycles

Bicycles intended for children. Constant adult supervision is necessary. Avoid areas with car traffic, obstacles or any other dangers, including inclines, kerbs, stairs, or sewer hatches; additionally, avoid uneven surfaces and places located near pools.

If the weight of the rider and the load is higher, contact your dealer who will carry out adjustments and tuning up, if necessary. If the bike is used for any other purpose than is stated within the individual categories, not only may the bike wear down early, but important components can be damaged, or the user can be seriously injured. Neither the manufacturer nor the dealer shall be responsible should any of these issues occur. Incorrect use may also result in the warranty becoming void.

## LUGGAGE

There are various ways of transporting luggage on the bike. Your choice will primarily depend on the weight and volume of the luggage and on the bicycle you intend to use. Mountain bikers and racing cyclists usually wear backpacks. The suitability of carriers for your bicycle must be consulted with your bike dealer. If possible, entrust the qualified personnel of the store with the installation.

## ASSEMBLY AND USE OF BICYCLE ACCESSORIES

Before you buy any accessories for your bike (bike computer, bell, torch, panniers, bags, child bike seat, stand, etc.), always consult the bike dealer whether the particular accessories are suitable for your type of bike. Follow the instruction manuals provided by the accessory manufacturer or supplier during installation. Accessories that have been installed incorrectly, are unsuitable or not approved can impair the function of your bicycle and cause a loss of control, including crashes.

**When replacing cranks or tyres, or when adding mud catchers to your bicycle, we recommend that you pay attention to possible decreases in the distance between the tip of your shoe and the tyre.**

## TRANSPORT OF CHILDREN

The child seat is attached to the bicycle frame. Mounting solutions are often intended for occasional use and a child seat can thus be



attached to almost any bicycle, which is equipped with the necessary accessories.

A child bike seat can be installed only on the condition that the bicycle is equipped with a protective element consisting of saddle springs. To prevent your child from getting their fingers pinched in the springs, do not install the child bike seat on a bicycle without unprotected springs.

Inform yourself about the regulations for transporting children in your country. If you have any questions, please contact your bike dealer. It is generally forbidden to attach children's bike trailers behind the bike.

## BEFORE EVERY USE

Check the general condition of the bicycle before every use:

- if any connecting material is duly tightened, and if the parts have not been deformed, scratched or have not suffered any other mechanical damage,
- become thoroughly familiar with the bike controls, especially with the brakes, shifting and pedals,
- check the condition of your bike thoroughly - see the chapter "Basic Instructions".

## THE FIRST 150 KM

The first 150 km can be defined as a warm-up round in which the life of a cyclist is filled with emotions and eventful experiences from a new sport, on the other hand, the operational reliability and service life of the bike is being tested.

Always ride carefully on public roads and comply with traffic regulations so as not to endanger yourself or anyone else.

These regulations may vary in different regions and countries.

## WHY A STARTING PERIOD AND WHY JUST FOR 150 km?

A little theory hurts nobody. Everything, during use, follows a certain law as to the number of defects depending upon the length of its use. Mechanisms behave more or less obediently in accordance with the appropriately titled "bathtub-shaped curve" of the occurrence of defects that consists in three quite different operational periods. The numbers of defects drop relatively steeply at the beginning, a long section with a uniformly low occurrence of defects follows and in the end, defects will start to appear more and more frequently.

The starting period represents the first stage; the second stage can be considered to be an optimum period of operation. Long-term operation with a minimum number of defects is then a reward for your care and maintenance. An operational period with increased supervision expressed as the distance of 150 km should be considered to be a period suitable for execution of the first guarantee inspection specified on the basis of service experience. It is also based on the assumption that more expensive and more frequently used bikes will be monitored more carefully by their owners. However, don't assume the date of the first guarantee repair to be the day of the first inspection of your bike by anybody. That is to say, the service person could replace certain components, such as cranks or shifters, replace them with new ones – and at your expense. It is necessary to state that neglected maintenance is not covered even by a lifelong guarantee.

## WHAT TO MONITOR DURING THE STARTING PERIOD

Even if your bike is adjusted correctly before operation, the production technology of components and their assembly requires some time for the stabilization of correct operation. Generally, everything that moves and turns needs to find and smooth its path and everything connected mechanically should settle mutually and create the required contact areas. Backlashes of rotational or sliding assemblies are created by smoothing the roughness of contact surfaces while fixed connections are slackened.

What does this mean? The pedals may operate stiffly from the beginning but they can have considerable play after some time.

The same applies to the seatpost, with which adjustment of the saddle height was difficult. In the case of expensive components with polished paths, this problem can mostly be eliminated by a single additional adjustment. Conversely, components with pressed, often non-circular and small, hard surfaces for balls are difficult to adjust and achieving the status of an optimum setting for a long period is practically impossible. Individual intensively monitored places, the neglected maintenance of which can have serious consequences from the viewpoint of safe operation:

Recommendation: If parts or components of a bike become damaged as a result of use, replace them immediately!!! Use only

original spare parts purchased from authorized dealers!!! We recommend having your bike inspected by authorized service shops at regular intervals, at least once a year! In case of an accident, we strongly recommend having the bike inspected professionally in an authorized service shop.

### 1. Connection of cranks with the axle

- Check the connection of the cranks with the axle by tightening the crank bolt/nut in the axle with a spanner before each ride from the beginning and occasionally later, however, always when regular noise can be heard from the bottom bracket assembly or there is suspicion of creating a backlash. No claim for compensation or replacement applies to backlash created by insufficient tightening the crank bolt (deformation of the crank square).

### 2. Tightening the pedals in the cranks

- It is advisable to check using Spanner No. 15 whether the faces of axles fit sufficiently on the crank surfaces after the first ride and at regular intervals thereafter. No claim for compensation or replacement applies to insufficiently tightened pedals in cranks and the consequent pushing out (damage) of the thread in the cranks.

### 3. Quill assembly

- Before each ride, make sure that the locking nut has been tightened properly and test by tapping with the front wheel to ensure that no backlash has been created in the assembly that could progressively destroy the pans of the assembly completely. No claim for compensation or replacement applies to insufficient tightening and consequent destruction of the quill assembly.

#### Integrated quill assembly

- Before each ride, make sure that the Allen head screw positioned on top of the quill assembly has been tightened properly and test by tapping with the front wheel to ensure that no play in the assembly has been created that could progressively destroy the pans of the assembly completely. No claim for compensation or replacement applies to insufficient tightening and consequent destruction of the quill assembly.

### 4. Stem bolts

- It is advisable to tighten the stem spindle and, in particular, the sleeve bolt from time to time – turning handlebars are very dangerous for riding.

### 5. Brakes

- Before each ride, squeeze the brake levers and check visually to ensure that both the front and rear brake shoes are adjusted correctly with respect to the rims – see the Basic Instructions below.

## HOW DO I RIDE A BIKE DURING THE STARTING PERIOD?

More sensitively and perceptively than with a used bike. Ride more slowly and avoid extreme downhill rides in heavy terrain right from the beginning. You can afford these rides after you overcome your uncertainty and obtain skills in riding your new bike.

It will certainly pay to gain experience, monitor the bike and then adjust and retighten everything that becomes loose during the first kilometres. So always take tools, common sense and, in particular, instinct with you!

Quiet operation can be restored by tuning the adjustment screw of the rear derailleur, mostly by half a turn to a complete turn.

In the case of the front derailleur, carry out adjustment using the setting screw on the shifter but a shift cable that is stretched either too much or too little can make it necessary to adjust the pull. It also can happen that an unsuitable position of the guide causes dragging of the chain or even reduces the ability to change gears. The front derailleur should be parallel to the chainrings and adjusted at the correct height. Adjustment is a necessary condition for proper operation but not a sufficient one. If the chain is not in the proper condition, the drivetrain also cannot operate correctly. A rigid link means the reduction of the ability of the chain to pass through the guide, incorrect entry to the cog claws which is reflected in popping or skipping, in particular on the smallest cogs. Similarly, a dry chain makes riding more difficult with its mechanical resistance and considerably slows the gear-changing process. For lubrication, it is best to use thin oils with Teflon and high ability to rise inside (such as GT 85) or special lubricants for chains (Castrol). Standard machine oils are substantially cheaper, however, they should be completely penetrated with oil, excessive oil should be wiped off the surface and in spite of this measure, it is practically impossible to avoid the creation of black dirt. It is advisable to pay attention to the chain from the beginning until the end of its technical service life. That is to say, if you miss the right time for replacement, it is almost certain that you will also need to replace the cassette and probably the chainrings as well (however, this will not be certain to happen during the first 150 km).

And remember – if you disconnect the chain for any reason, do not put it on the black pins. The black connecting pins have a larger diameter than the others and by pushing them out, the hole in the link will be widened so that consequent pin insertion has no chance for reliable operation and it is very probable that the chain will become disconnected again. Use the black pins principally for connecting; avoid them when disconnecting.

## TOOLS YOU CANNOT DO WITHOUT

- Allen wrenches 8, 6, 5, 4, 3, 2
- Side open end spanners 17, 14, 13
- Fine and larger Phillips screwdrivers
- Tyre levers
- Side spanners 15, 10 (2), 9, 8
- Spanners for quill assembly 40, 36, 34 (2 according to the required dimensions)
- Tube repair kit
- Inflation pump

### Extra tools

- HG chain riveting device
- Crank puller (with corresponding side spanner)
- Fixture for cog loosening, 2 (lashes)
- Centring spanner
- Pullers or special cassette spanners
- Ring nut spanner 14 (15) mm
- Centring fork
- Gauges for chain and cog wear testing

Many service operations and repairs require professional knowledge and tools. Never start any modifications of your bike if you are in any doubt about your ability to complete the repair. Insufficient service may endanger your life or health or cause damage to your bike or harm to third parties.

## BASIC INSTRUCTIONS

**Warning:** There are many moving components on a bicycle (wheel sets, converter, chain, ...), the use of which bears the risk of capturing limbs, hair or parts of clothing. For this reason, exercise extreme caution not only during everyday use, but also during the maintenance of the bicycle.

The bike and its components have their own life expectancy, and the used materials may fatigue over time. If the lifespan of a component ends, it can suddenly fail and cause serious injury or death to the rider. Upon the occurrence of any sign indicating the end of life of a particular component, such component must be immediately replaced.

Accidents can prematurely terminate the lifespan of individual components of the bike. These can then suddenly fail and cause loss of steering control and endanger your life or health or cause damage to your bicycle or third parties. Bent parts, especially those made of aluminium, can break without warning. They also cannot be corrected, respectively straightened, as there is still a risk of breakage. This specifically applies to forks, handlebars, stems, cranks and pedals. If in doubt, it is safer to replace such parts. Please contact your bike dealer.

If the bicycle is exposed to direct sunlight for a long time, its fluorescent and neon colours can fade or change their tonality. We therefore do not recommend exposing the bicycle to or keeping it in direct sunlight.

If your bike is fitted with carbon components, it is imperative to have your bicycle professionally inspected by your bike dealer after an accident. Carbon is an extremely strong and durable material with low weight. Due to these characteristics it is suitable for the production of high quality components.

Carbon is also brittle, and in case of accident it tends to break at the point of the bend. If a carbon component is subjected to any strong impact or stress, the damage may not be outwardly manifested. But this does not mean that it remained intact. Damage to the inner carbon fibres may not be reflected on the surface of the material.

The use of carbon parts after they were exposed to a strong impact or stress is thus very dangerous. Damaged carbon components can suddenly break and cause serious injury to the rider.

If the carbon frame, forks or other components of your bike start to emit clicking sounds or display a burst, deformation, discoloration, scratch or groove, do not use the bike until the defective component is replaced! Contact and consult the situation with your bike dealer immediately.

Carbon components must never come into contact with high temperatures that are required, for example, for powder coating or firing paint. Such temperatures could damage the components. Also avoid storage of bicycles in vehicles when exposed to strong sunlight. Similarly, don't store your bike in the vicinity of heat sources.

### Front fork:

A bent or damaged fork should be replaced; never repair it.

### Front wheel:

The wheel should be fitted in the front fork and tightened properly with locking nuts. The hub is sealed against the penetration of moisture and dirt; however, it should be inspected regularly, in particular after riding over rough terrain (dusty or muddy ground or ground containing potholes etc. is regarded as rough terrain throughout this Manual). The wheel should revolve freely when

turned by hand, with very low friction and backlash.

Riding with incorrectly adjusted quick-release mechanisms may result in the wheel shaking or loosening, which may result in damage to the bike and serious injury or death; which may endanger your life or health or cause damage to your bike or to third parties.

For this reason, it is necessary:

- 1) To ask your dealer to assist you in precise procedures for installing and removing the wheel safely.
- 2) To understand and apply the correct methods of wheel clamping with the quick-release mechanisms.
- 3) To check before each ride that the wheel is mounted safely. Removal or damage of the quick-release mechanism is very dangerous and may result in cancellation of the guarantee and lead to serious injury or even death. Incorrect adjustment of the quick-release mechanism may result in the wheel shaking or loosening, which may result in serious injury or death.
- 4) To check before each ride to ensure that the rims are not worn excessively; this may endanger your life or health or cause damage to your bike or to third parties.

### **Rear wheel:**

The wheel should be fitted in the rear fork and tightened properly with locking nuts. The hub is sealed against the penetration of moisture and dirt; however, it should be inspected regularly, in particular after riding over rough terrain. The wheel should revolve when turned by hand freely, with very low friction and backlash. Riding with incorrectly adjusted quick-release mechanisms may result in the wheel swinging or loosening, which may result in damage to the bike and serious injury or death; which may endanger your life or health or cause damage to your bike or to third parties.

For that reason, it is necessary:

- 1) To ask your dealer to assist you in precise procedures and demonstrations for installing and removing the wheel safely.
- 2) To understand and apply correct methods of wheel clamping with the quick-release mechanisms.
- 3) To check before each ride that the wheel is mounted safely.

Removal or damage of the quick-release mechanism may cause the wheel to swing or loosen, which may endanger your life or health or cause damage to your bike or to third parties.

### **Rim:**

Keep the rims undamaged and centred correctly.

Check their condition and level of wear regularly.

Level of wear

- a) Safety system – rim wear is indicated by the depth of the longitudinal line in the braking area. If it reaches the minimum depth, do not use the rim and ask your dealer for a replacement.
- b) RDA system – wear or damage of the rim is indicated by a coloured liquid leaking from the rim cavities. If this is the case, do not use the rim and ask your dealer for a replacement.

### **Bottom bracket assembly:**

Inspect the bottom bracket assembly regularly and always after riding over rough terrain. The axle should turn smoothly without side backlash. The locking ring should be tightened and the bearings well lubricated.

### **Handlebars:**

Adapt them to your own comfort as much as possible and tighten all bolts of the stem sufficiently where the handlebars pass through it.

The mark of maximum extension may not be visible above the quill assembly. Damage to the handlebar grips may result in loss of control and falling. A loose handlebar grip may endanger your life or health or cause damage to your bike or to third parties.

We recommend tightening the handlebar mounting bolts with a torque of 7 Nm. If your handlebar is fitted with handlebar-ends (horns), we recommend tightening them with a torque of 7 Nm.

Aero bars or any other accessory mounted to the handlebar can have an adverse effect on a cyclist's ability to react while braking and cornering.

### Rear derailleur and front derailleur:

Keep them adjusted correctly. Change gears only if you are pedalling and try to alleviate the pressure of your legs when riding uphill (in order to reduce chain tension); you will avoid impact on the rear derailleur in this way.

If your rear or front derailleur is adjusted incorrectly, never change gears to the smallest or the largest cog. Chain blocking with a consequent loss of control and falling may occur.

### Chain:

- Measure the stretching regularly and carry out a replacement if necessary (after covering approximately 1,000 km).
- Lubricate and clean it frequently with thin oil; wipe off excessive lubricant with a cloth.
- The service life of the chain may vary according to the type of chain and operating conditions.

We recommend having the chain replaced by a specialized service shop.

In case of single-gear bikes, it is necessary to keep the chain stretched sufficiently. If slackening occurs, it is necessary to re-tension it. Tension the chain by loosening the nut of the rear wheel and pulling the wheel back. Finally, retighten the nut of the rear wheel.

City bikes are usually equipped with full chain cover. This cover protects the rider from mud, rainwater and also from grease on the chain. Inspect the chain tension regularly. Open the chain cover and inspect the tension. If you press on the chain (between the front and rear chain gear) and the chain moves up or down by approximately 10 mm, then the tension is ok. If the chain moves more than 10 mm the tension is too low and must be adjusted. Loosen the rear bolts and slide the rear wheel backwards. When done, tighten the bolts again.

Trekking bikes are usually equipped with an open chain cover, which protect the rider from the grease on the chain.

### Tyres:

Tyres are to be kept inflated at the correct pressure, i.e. to a pressure that is lower than the maximum pressure readings stated on the rim or tyre. Use a hand- or leg-operated tyre inflator. Check the correct position of tyres in the rim.

Never overinflate the tyres. Excessive pressure can damage the tyre or the rim and cause damage to the wheel, injury to the rider, passers-by or onlookers. Never use air hoses at gas stations for inflating your tyres.

### Cranks and pedals:

Lubricate the pedals occasionally, in particular after riding over rough terrain. Do not attempt to straighten potentially bent cranks or chainrings. Retighten the crank bolts and check the chainring bolts and pedal axles after the first ride. Never continue riding if a crank (crank square) on the central axle or a pedal in the crank becomes loose. No claim for compensation or replacement applies to play in the cranks and pedals created by insufficient maintenance.

The use of toe-clips requires a considerable level of skills. If you do not master it automatically, a considerable level of concentration is required, which may reduce your vigilance when riding and cause loss of control and falling. Train in the use of toe-clips only outside hazardous and busy roads. Do not tighten the toe-clips until you are sure of their use. Clipless pedals may be used only in combination with specially designed cycling shoes that fit firmly in the pedals. Riding requires a perfect knowledge of the use of clipless pedals; if this is not the case your vigilance when riding is reduced, which may lead to a loss of control and falling. Train in use of clipless pedals only outside hazardous and busy roads.

### Brakes:

#### DISC BRAKES:

Similar to bicycle rim brakes, disc brakes are also activated by pressing levers installed on the handlebar. These brakes are characterised by their excellent braking power and very good resistance to unfavourable weather conditions. In comparison to rim brakes, disc brakes work much faster in wet conditions, and reach their maximum braking power nearly immediately. Before new brake pads reach their optimum braking performance, they need to be run in. In order to run them in, speed up to approx. 30 km/h for 30 to 50 times, always breaking until the bike comes to a complete stop. Before your first ride, carefully read the enclosed instructions manual issued by the brake manufacturer, or made public on their website.

Disc brakes heat up when in use. It is therefore not advisable to touch neither the disc nor the brake caliper, especially when you

have just stopped after a long ride downhill.

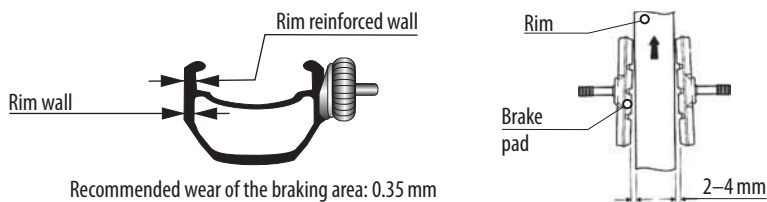
Do not use water or any other liquids to cool the brakes down.

Check the wear of the brake pads regularly. Visually inspect possible occurrences of any leakage in the hose / caliper / lever joints by regularly pressing the brake lever. If a brake fluid leakage appears, immediately contact the dealer where you bought your bicycle, as the leakage could cause your brakes to fail.

Brake pads and discs should be cleaned with alcohol or special cleaning agents only. Manufacturers of hydraulic and mechanical disc brakes include detailed instructions in the product packaging. These instructions must be read carefully before carrying out any adjustments.

Have the brakes regularly checked and adjusted by your dealer.

**Warning:** In the case of bike models with V – brakes or other brakes of a rim type, wearing occurs in the braking area of the rim. For that reason, it is necessary to pay attention to the wear of the rim and brake pads. You can find two types of rim wear indication on our models.



Keep the brake pads adjusted in a distance of 2–4 mm from the rim with a slight gradient as indicated in the figure. Check their wear and replace them if necessary. Clean oil or dirt accumulated on the rim and brake shoes.

Precise setting of the brakes is very important with respect to the range of movement of the brake lever so that the full braking force within this range can be utilized. If the maximum braking effect within the range of movement of the brake lever is not reached, you may lose control, which may lead to endangering your life or health or causing damage to your bike or to third parties.

**Caution: Riding on a wet surface is much more difficult than in dry conditions. The efficiency of the brakes is reduced in this case and that is why the cyclist should behave more cautiously.**

A braking power modulator can be used with a rim brake (V-brake), mechanical disc brake and roller brake (Shimano Inter-M).

Depending on its design, a mechanical brake may be equipped with a braking power modulator. This modulator measures out the power of the brake lever, thus preventing the front wheel from blocking. The modulator is located between the brake lever and the rim brake.

The Shimano Inter-M brake may make noises during braking. This is caused by the braking power modulator being in operation, and the noise is not a sign of any malfunction.

#### Control cables:

Stretch the cables correctly. Check them regularly, do not let them become slack and in case of excessive wear, carry out a replacement. Do not make loops on the cable under any circumstances. Use the aluminium terminals for protection against fraying of the cable end.

#### Saddle adaptation:

Adapt the height and angle for your own comfort. Do not pull the seatpost above the mark of the minimum insertion into the bike frame. If the saddle turns in the frame, tighten it using the seat bolt.

**If the seatpost is pulled above the mark of minimum insertion, breakage with a consequent loss of control and falling may occur. Whenever you work with the saddle, make sure that you have tightened it properly before riding; if this is not the case, destruction of the saddle or loss of control and falling may occur. Carry out checks regularly and make sure that the saddle is mounted properly. Riding with an improperly tightened seatpost may allow turning or movement of the saddle, which may result in loss of control and falling.**

**For this reason, it is necessary:**

- 1) **To ask your dealer to assist you in the precise procedures and methods of correct installation of the seatpost.**
- 2) **To understand and apply the correct methods of saddle mounting with the quick-release lever.**
- 3) **To check safe seatpost mounting before each ride.**

#### **Lights and reflector glass:**

Reflectors and reflector glass should be installed on the front fork, on the back sides of the pedals and on the wheel spokes. They should be replaced immediately in case of damage.

**Riding in dark conditions, during the night and during periods of reduced visibility without suitable lights and reflectors is hazardous and may lead to serious injury or death.**

#### **Frame:**

Carry out repeated checks for damage of the paint around the tube connections. Bending or breakage of the frame can be indicated in this way.

**Replace any bent or broken frames immediately as excessive stress on the other parts of the frame occurs, which creates a considerable risk of injury.**

#### **Adjusting the Suspension:**

In case your bicycle is equipped with a suspension element that can be adjusted, it is necessary that you get familiarised thoroughly with its instruction manual and recommendations provided by the suspension manufacturer.

#### **Quill assembly:**

Pay attention to proper tightening of the locking nut; the fork should rotate smoothly. Retighten the nuts and bolts regularly as required. Check regularly whether any components have not been damaged and pay attention to the correct installation of all components at quill unit re-assembly.

**Unsuitable modification of the quill assembly may affect riding ability and result in loss of control and falling. Take your bike to your dealer and have your quill assembly modified by a professional.**

## **INSTALLATION INSTRUCTIONS**

### **Tightening torques for bike components**

All tightening torques are expressed in <b>Newton metres [Nm]</b> . In case of any uncertainty, please contact your dealer.	
Component	Torque [Nm]
<b>– Spokes, hub, cassette –</b>	
Cassette	30–45
Tightening of the nuts on hub axle to frame (not applicable to quick-clamping types)	29–40
Idle gear	34–45
<b>– Quill assembly, handlebar, saddle, seatpost –</b>	
Stem bolt for threaded quill assembly	19–30
Stem fixation bolt (for “ahead” threadless quill assembly)	6–9
Stem – handlebar tightening with four bolts	9–12
MTB – handlebar ends	6–12
Saddle tightening in seatpost	2 bolts, 17–19 1 bolt, 24–30

Component	Torque [Nm]
Seatpost – tightening in the frame. CAUTION: The seatpost requires only minimum tightening to prevent it from slipping into the frame and turning. Excessive tightening may damage both the seatpost and the frame.	5–7
<b>– Cranks, bottom bracket assembly, pedal –</b>	
Pedal in crank	35–40
Shimano® Octalink XTR crank tightening with bolt (M15 thread) (NOT!! Hollowtech II)	40–49
Shimano® Hollowtech II bottom bracket assembly pans (2004 XTR, XT, Dura-Ace)	34–50
Shimano® Hollowtech II bottom bracket assembly pans (2004 XTR, Dura-Ace, XT)	10–15
Shimano® Hollowtech II left-hand side, adjusting bolt	0,5–0,7
Crank tightening on axle (including square axles, iSYS-type)	34–45
Encased bottom bracket assembly	40–50
<b>– Rear derailleur, front derailleur, gear changing system –</b>	
STI shifter on handlebar	5,5–8
Rotary shifter/shifter in handlebar grip	“Revo” shifter 5,6–7,9
FD sleeve (front derailleur)	5,0–6,8
FD sleeve (front derailleur) Carbon frames	1,2–2
FD cable tightening	4,5–6,8
RD tightening on frame (rear derailleur)	8–10
RD cable tightening	3,4
RD roller tightening	3,4–4
<b>– Brakes –</b>	
Brake jaws (road type)	7,9–10
MTB brake jaws	5,6–6,8
Brake pads – threaded	5,6–6,8
Brake pads – without thread	7,9–9
MTB brake jaws, cable tightening	5,6–7,9
Road brake jaws, cable tightening	5,6–7,9
Brake levers – MTB type	5,6–7,9
Brake levers – STI, ERGO	5,6–7,9
<b>– Disc brakes –</b>	
Disc rotor on hub	Hayes® 5,6
Hydraulic brake jaws / frame	5,6–7,9
Hydraulic hose / lever / jaws	4,5–6,8

**Conversions to different units:**

in-lb. = ft-lb. × 12

in-lb. = Nm × 8.851

in-lb. = kgf-cm / 1.15



## ADJUSTING THE BIKE ACCORDING TO THE BIKER'S NEEDS

Your height is a decisive factor when choosing the right frame size for you. Make sure you have enough space under your crotch – you will need it to prevent injury when jumping off the bike unexpectedly.

The seating position you are going to take on your bike largely influences the selection of a specific model. By replacing certain components you can adjust the bike to the specific proportions of your body. This applies namely to the seatpost, stem and brake levers.

All the operations described in this chapter require experience, suitable tools, manual skills and qualification. Just set the seat position and leave the other operations to qualified personnel. If you are not satisfied with the adjustment of your bike, seating position or a component, please contact your seller.

**CAUTION: Pay particular attention to tightening of bolt connections. Follow the prescribed torque moments, because too loose or too tight bolts can result in a damaged seatpost. Use a torque wrench and never exceed the maximum torque moment.**

## FRONT WHEEL INSTALLATION

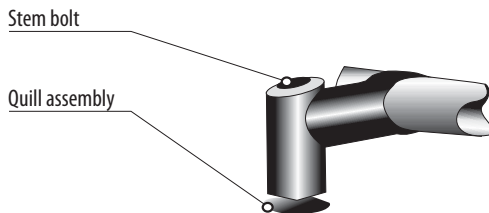
- Open the quick-release lever (nuts).
- Insert the wheel into the fork ends.
- Set the quick-release lever at the position of 90 degrees from the wheel axis and tighten the wing nut carefully.
- Close the quick-release level in the locked position (this should be done by using your thumb).
- **CAUTION: Check whether the wheel is locked using the quick-release mechanism or firmly tightened with nuts.**

## HANDLEBAR INSTALLATION

- Loosen the screw in the stem until the cone is loosened. Insert it into the front fork tube so that the mark of minimum insertion isn't visible!
- The handlebar should be perpendicular with respect to the front wheel.
- Before tightening, read carefully the specified tightening torques for the installation of carbon handlebars in the stem.
- Check to ensure that the tightening is correct by holding the front wheel between your legs and trying to turn the handlebar.

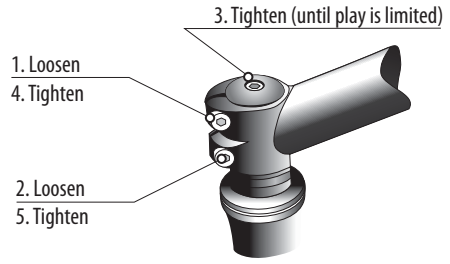
## INSTALLATION OF THE THREADED STEM IN THE FORK

- Loosen the screw in the stem until the cone is loose. Insert it in the front fork tube.
- Insert it so that the mark of minimum insertion isn't visible!
- The handlebar should be perpendicular with respect to the front wheel.
- Tighten the bolt in the stem firmly.
- Check to ensure that the tightening is correct by holding the front wheel between your legs and trying to turn the handlebar.
- **CAUTION: Never move the stem above the maximum or stop mark.**



## INSTALLATION OF THE AHEAD STEM ON THE FORK

- Loosen the face and side bolts in the stem and the quill assembly bolt. Put it on the front fork tube.
- The handlebar should be perpendicular with respect to the front wheel.
- Tighten the quill assembly bolt in the stem and all stem bolts firmly.
- Check to ensure that the tightening is correct by holding the front wheel between your legs and trying to turn the handlebar.
- **CAUTION: We recommend tightening the stem bolts with a torque of 7 Nm. Pay close attention so that you don't exceed the torque. Excessive tightening could result in stem damage.**



## SADDLE INSTALLATION

- Lubricate the seatpost and insert it into the frame. Do not exceed the line of minimum insertion. Mount it using the quick-release mechanism or bolt. Before tightening, read the specified tightening torques carefully.
- Adjust the saddle angle so that it is levelled horizontally. Tighten the saddle lock.
- Try to turn the saddle in order to check the tightening.

**NOTE: The saddle can be adjusted in the close or distant position with respect to the handlebars. This adjustment can be done by shifting the saddle in two coulisses and locking the saddle seatpost lock or by proper tightening the nut.**

**CAUTION: Never move the stem above the maximum or stop mark.**



## ADJUSTING SADDLE POSITION AND ANGLE

Your seating position and the related comfort and force on the pedals are partially connected with the distance between the saddle and the handlebars. This distance can be to some extent adjusted using the skids in the saddle support.

- For correct pedalling the saddle must be adjusted to a horizontal position. If you tilt it forward, you will move the centre of gravity towards the handlebars, and your weight will rest on your arms. You will also tend to slip down the saddle.

With new types of seatposts their supports determine both the angle and vertical position, tightened by a central Allen head screw.

Some seatposts have two screws for a more accurate angle setting. Other types use a so-called saddle tightening bolt, usually with two nuts mounted on one banjo bolt.

- Loosen one or both the bolts in the upper part of the seatpost. Make a maximum of two or three turns to the left, otherwise the bolts can fall out. Move the saddle forward or backward as needed. You can hit it lightly to move it.
- Before you tighten the bolts make sure the saddle is horizontal.

Make sure you have fixed the seatpost well - take the saddle on both ends in your hands and try to turn it. If this is not possible, everything is alright.

**NOTE: Don't forget the bolt connections must be tightened according to the prescribed torque. If you do not respect those values, the seatpost may move in the frame, or be damaged. You can find the prescribed values directly on the saddle, or in respective manuals. Fix the skids into the bolts only in the straight section to prevent the saddle from loosening!**

## SETTING THE CORRECT SEAT HEIGHT

The correct seat height is where you achieve maximum efficiency and comfort of pedalling. You should not be able to stretch your leg completely in the lowest point when pedalling, otherwise the movement will be clumsy. You can adjust the seat height simply as follows: If possible use shoes with flat soles.

- Mount the bike and place one heel on the pedal in the lowest position. Your leg should be straight and hips should not be tilted to either side.
- To adjust the seat height loosen the tightening bolt or seatpost quick-release mechanism (but first read the „Quick-release mechanism“ chapter). To loosen the bolt use proper tools; first make two or three turns counterclockwise.

**NOTE: With some MTB models a lower seat position allows better control of the bike. It is also advisable to lower the MTB seat position on steep slopes. However, longer rides with a lower seat position can result in pain in the knee ligaments.**

**Now you can set the seat to the required height.**

- **Be careful not to pull the seatpost up too high.** The stop mark on the seatpost must always be inside the frame. The minimum length of insertion of the seatpost in the frame is 2.5 times its diameter, e.g. a seatpost with diameter 30 mm must be inserted at least 75 mm into the frame.
- As regards aluminium materials (frame, seatpost), make sure the part of the seatpost inserted in the frame is always well lubricated.
- In the case of carbon components never apply the lubricant directly on the seatpost or frame. The contact surfaces should always be completely dry. Lubricant penetrates the surface layers of carbon components, reduces the friction coefficient and considerably reduces the strength of the connection. Where necessary apply special carbon assembly paste.
- If you cannot move the seatpost in the frame, do not use excessive force, ask your seller for advice instead. Adjust the saddle parallel to the frame.
- Fix the seatpost safely by tightening the sleeve. You will not need too much strength to tighten the seat sufficiently. If you do, it means the seatpost size does not match the frame.

**NOTE: Never ride your bike with the seatpost pulled above the stop, maximum or mark. The seatpost can break or cause serious damage to the frame.**

**Did you adjust the saddle height according to the procedure above? If yes, the position should perfectly meet your needs now.**

- Check whether you can balance on the bike safely - mount the bike and stretch your legs to the ground. If you can't do that lower the saddle and make sure you can touch the ground at least with the tips of your feet. Seat adjustment is a very individual matter. If you fail to find the correct position, contact your seller.

**NOTE: If you experience problems sitting on the bike, such as a numb crotch, the reason may be saddle type. Our seller offers a wide range of saddles and will be happy to help you.**

## CARBON SEATPOST INSTALLATION

- Never lubricate the seatpost with lubricating grease.
- Use only special FSA paste (dynamic assembly paste) for installation.

## INSTALLATION OF BREAK LINES – FOR MOUNTAIN AND DIRT BIKES

### Front brake cable:

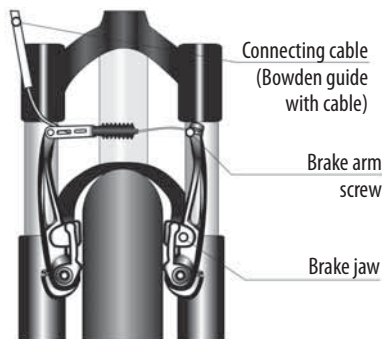
- Insert the cable barrel into a clamp in the left-hand brake lever.
- Pull the cable through the bowden and cable guide and then tighten the brake arm bolt.
- Push the jaws towards each other so that a play of 2-4 mm will remain between the brake pads and the rim.
- Then tighten the screw of the brake arm holding the cable.
- Cut the excessive cable away so that free end will have a length of about 40 mm.
- Put a protective cap on the cable end and squeeze it with pliers.
- Depress the protective cable cap with a torque of 20 mm.

### Rear brake cable:

- The procedure is identical to the installation of the front brake cable. The right-hand brake lever is used for the rear brake.

## BRAKE ADJUSTMENT (V-BRAKES)

- Rim brakes require occasional adjustment as the cables become stretched and the brake pads become worn. The brake pads should be at a distance of 2-4 mm from the rim. The rear brake lever is usually installed on the right-hand side of the handlebars while the front brake lever is on the left-hand side.
- To achieve better brake adjustment, loosen the adjustable barrel with a locking nut. In order to bring the rubber pads closer to the rim, turn the adjustable barrel outward. If the rubber pads rub against the rim, turn the adjustable barrel inward. Check the brake adjustment.
- The rubber pads may never touch the tyre. This prevents the pad from rubbing through the tyre.



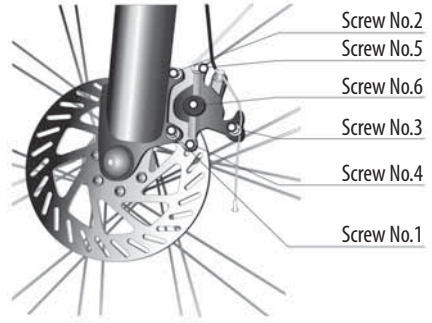
**Caution:** The left-hand lever is the front brake and the right-hand lever is the rear brake. If the rear brake in the rear hub is of a counteracting type, the front brake lever is positioned on the left-hand side.

**Pay attention to the brake lever; squeezing up to the grip (handle) may not occur; the brakes become ineffective in this case. Adjustment using the brake cables is then necessary.**

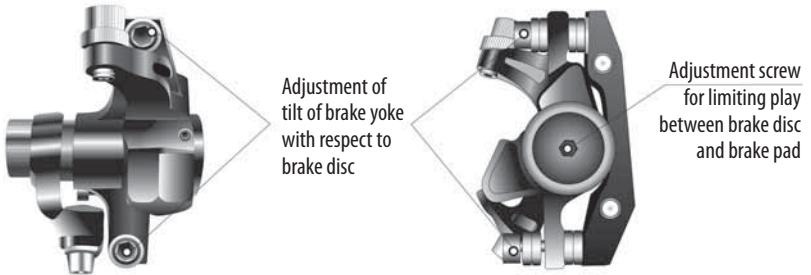
## DISC BRAKE

- Screws Nos. 1 and 2 hold the segment in the lock (fork)
- Screw No. 3 is used for holding the brake cable
- Screws Nos. 4 and 5 are adjusting screws for brake segment settings with respect to the disc
- Screw No. 6 is used for adjustment of the distance between the brake pad and the disk

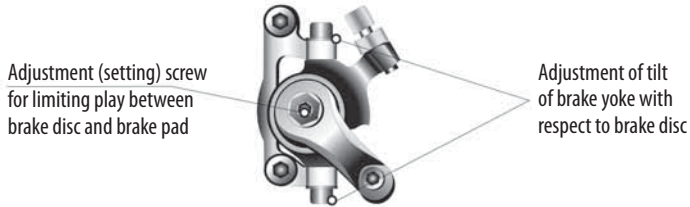
**Caution:** The brake efficiency can also be adjusted using the setting screw on the brake lever!



Rear disc brake

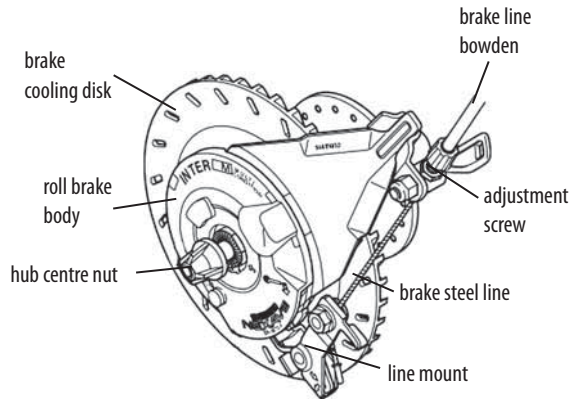


Front brake disk



## ROLL BRAKE

Roll brakes are used for city bikes. These brakes require almost no adjustment. If the brake needs adjusting, use the adjustment screw and adjust the length of the steel brake line. To loosen the brake, turn the screw counterclockwise. To tighten the line, turn the screw clockwise. Make sure that the wheel turns freely (when the brake is not engaged). If the wheel is not turning freely, slightly loosen (extend) the brake line by turning the screw clockwise.



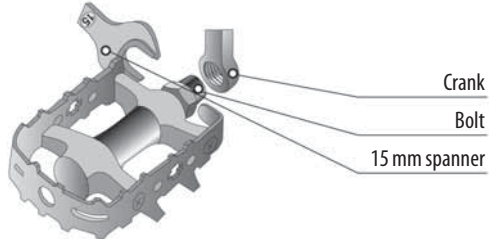
## BRAKE LEVERS

Brake levers allow you to control your brakes. Trekking or city bikes are usually equipped with two brake levers, installed on handle bars. Position of brake levers should allow the rider to use the brakes without excessive effort. Brake levers should be installed within your reach. The position of the brake levers may be adjusted in vertical and horizontal direction.

**IMPORTANT:** Correct function of your brakes is very important. Make sure that you know your brake system well before your first ride. Before each ride inspect your brakes carefully. Keep in mind that on trekking and city bikes the FRONT brake is usually controlled by the RIGHT lever and the REAR brake is usually controlled by the LEFT lever (mountain and dirt bikes brakes are usually designed the other way around).

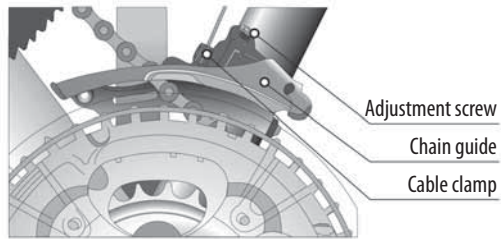
### PEDAL INSTALLATION

- The pedals are identified with the letters “R” and “L” on the bolt face side.
- Lubricate the pedal bolts. – Screw the pedal marked with an “R” by turning it clockwise (the side with the chainrings). Screw the pedal identified with “L” into the left-hand crank by turning it anti-clockwise.
- Tighten both the pedals firmly using Spanner No. 15.
- After covering a distance of approximately 50 km, retighten both pedals.



### OPERATION OF THE REAR AND FRONT DERAILLEURS

The gear changing system of your bike changes the gear ratio by shifting the chain from one cog onto another. You can change gears only while pedalling forwards. The smoothest movements are performed while pedalling is easy. The gear changing system is equipped with two shifters installed on the handlebar. The right-hand shifter controls the chain movement on the 6–7–8 or 9 rear cogs. The chain is shifted from the smallest cog (the hardest gear) to each larger cog (easier gear) by moving the shifter forward. The left-hand shifter controls the chain movement on three front chainrings. The chain is shifted from the smaller chainring to a larger one by moving the left-hand shifter forward. You will learn soon what positions should be used for different riding conditions. You will learn it through training only. Do not try to change gears while applying heavy pressure on the pedals. Never pedal backward when changing gears. This could result in the chain slipping down.



**Recommendation:** Do not use combinations of gears at which excessive chain crossing occurs. The complete gear-changing mechanism suffers from it.

### FRONT DERAILLEUR

- The chain guide should be aligned in line with the chainrings and should be 1–3 mm above the teeth of the largest chainring.
- If the front derailleur shifter (the left-hand one) is in the back position, check to ensure that the gear changing cable is not slackened excessively. The play can be eliminated by loosening the screw with the cable anchor, pulling the cable with pliers and retightening the screw.
- If the chain slips down from the largest chainring towards the right-hand crank, tighten the top adjustment front derailleur screw with one or two turns. Test the gear changing and adjust again, if necessary.



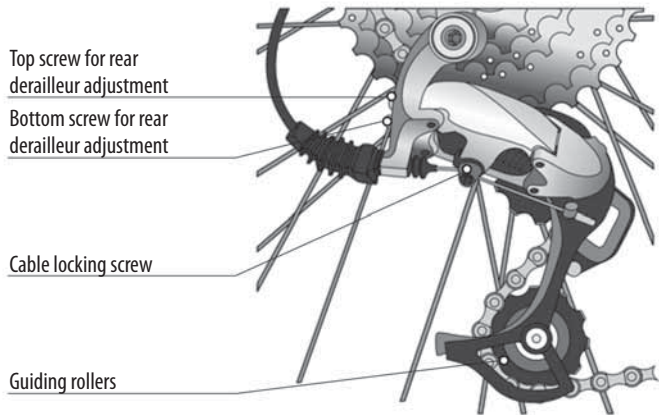
## REAR DERAILLEUR

- Lift the back wheel. While turning the crank, pull the right-hand shifter back. The chain should be positioned on the smallest cog. If this is not the case, continue turning the crank and loosen the top adjustment screw of the rear derailleur until the chain is on the smallest cog.
- While turning the crank, pull the shifter forwards completely until the chain is shifted to the second smallest cog. Pull the right-hand shifter back, the chain should be shifted smoothly on the smallest cog. - While turning the crank, pull the shifter forwards completely. The chain should be positioned on the largest rear cog. If this is not the case, continue turning the crank and turn the bottom adjustment screw of the rear derailleur until the chain is on the largest cog.
- While turning the crank, pull the shifter back slightly until the chain is on the second largest cog. Pull the shifter fully forward, the chain should be shifted smoothly to the largest cog.

**CAUTION: For bikes provided with the index gear changing system, see the adjustment procedure recommended by the manufacturer.**

## CABLE ADJUSTMENT

- Cable stretching may appear and cause incorrect gear changing. Cable stretching appears if a cable is slackened (when the shifters are pulled fully back). You can eliminate slackening if you loosen the cable locking screw, pull the cable out firmly and retighten the locking screw.



## ADJUSTMENT OF THE BEARINGS

Your mountain bike is provided with four sets of bearings that require adjustment and lubrication.

- 1) Quill assembly
- 2) Bottom bracket assembly
- 3) Wheel hub bearings
- 4) Pedal bearings

Inspect the bearings frequently, in particular after riding over rough terrain. The service interval depends on the number of kilometres covered and the riding conditions. Even if the bearings are sealed effectively, the sealings used on the bike are not fully resistant to water. You should be able to lubricate and adjust the bearings by yourself with some skills and the appropriate tools.

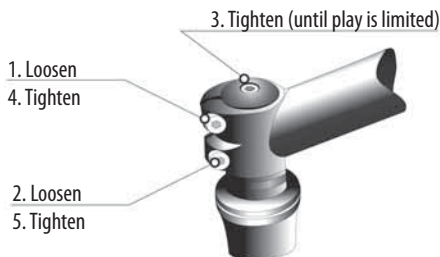


## QUILL ASSEMBLY

- Remove the front wheel to inspect the adjustment. The fork should allow free rotation; however without backlash.
- If the bearings require adjustment, loosen the locking nut with two side spanners. Tighten or loosen the adjustable ring. Install the locking nut and perform a check.
- Disassemble the handlebar for lubrication of the bearing. Remove the locking nut and the adjustable ring. Pull the fork out of the frame and remove the two ball cages. Clean the lubricant off all the components and inspect the bearing paths for wear and the presence of rust. Lubricate all the components again, in particular cover the ring sealing sufficiently. Install one ball cage on the fork. Insert the fork back into the frame and make sure that the ring has fitted back on the bottom of the stationary ring. Install the other ball cage on the stationary cone. Screw down the adjustable ring until a play exists. Screw in the locking nut.

## AHEAD QUILL ASSEMBLY TIGHTENING

- Loosen the bolts in the stem and the quill assembly bolt.
- The handlebar is perpendicular with respect to the front wheel.
- Tighten the quill assembly bolt in the stem and all stem bolts firmly.
- Check to ensure that the tightening is correct by holding the front wheel between your legs and trying to turn the handlebar.



## HUBS

- Remove the quick-release mechanism.
- Unscrew the axle locking nut, spring washer and the cone from one side of the axle. Pull the axle freely out of the hub core and remove the ball bearings.
- Check to ensure that the ball paths are not damaged or corroded (replace them if necessary).
- Lubricate the hub box and insert the bearings.
- Put back the axle. Screw the cone in until it touches the ball bearings. Put back the spring washer and locking nut. Try to turn the axle. It should rotate without backlash or dragging. Readjust if necessary and tighten the locking nut. Re-install the quick-release mechanism.

## QUICK-RELEASE MECHANISMS

Even though the quick-release mechanisms are rather simple, their incorrect use has repeatedly been the cause of many accidents. Make sure the tightening levers of both the quick-release mechanisms are oriented towards the opposite side from the chain.

### Safe tightening of components:

- Open the quick-release mechanism lever. You should be able to see the word "Open" on the lever. If you want to close the mechanism, pull the lever back. You should be able to see the word "Close" on the lever. At the beginning of the tightening process, approximately halfway through, the lever should be moving freely, e.g. without gripping the wheel.
- The force necessary to move the lever can increase considerably in the second half of the process. At the end it can be quite tight to move the lever, so use your thumb for pushing and other fingers to catch on some immovable part, such as the fork or rear - not the brake disc or spokes. In its final position the lever should be parallel with the wheel, not protruding to the side. The lever should be pushed close to the frame to prevent accidental opening.
- To check whether the lever is tight enough try to move it around when closed. Push the end of the lever as if you wanted to move it around. If you are able to move it, the wheel is not tightened safely. Open the lever again and half-turn the nut to increase the pull.
- Close the lever and check the wheel. If you are not able to turn the lever anymore, it means the wheel is tightened correctly.



- Finally lift the bike so that both wheels are a couple of centimetres above the ground, and hit the tyre gently from above. If the wheel is installed properly, it will remain fixed in the fork.

**Note: Incorrectly closed quick-release mechanisms can lead to loosening of the tightening components and consequently to an accident.**

**If your bike is equipped with a fixed axle, do not forget to carefully read the relevant materials supplied by the manufacturer of the fork and wheels. Your seller will also provide the necessary information.**

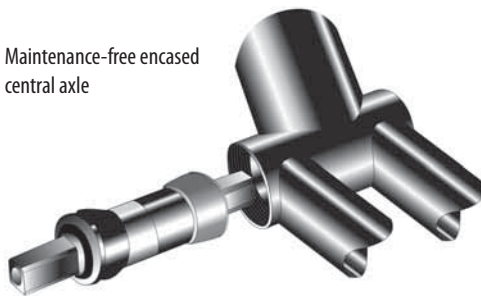
## BOTTOM BRACKET ASSEMBLY

Your bike is fitted with an encased bracket assembly; it is only necessary to try whether backlash has been created occasionally.

This type of bottom bracket assembly is maintenance-free.

**Caution:** The fixed pan is provided with screw thread.

Maintenance-free encased central axle



## PEDALS

- Turn each pedal and check it for dragging or strange noises. The pedal bearings require maintenance only seldom, however, if necessary, read below.
- Unscrew the pedal from the crank, remove the protective lid, locking nut and sealing. Unscrew the cone and pull the bolt from the pedal core. Clean the lubricant off all the components and check for wear.
- Lubricate the bearing rings and put back the same number of balls on both sides. Install the cone back on the screw, turn the screw to bring the cone close to the balls. Put back the sealing and locking nut. Check for backlash and dragging. Modify the cone, tighten the locking nut and install the pedals on the cranks.

## CHILDREN'S BIKES

Children's bikes are produced in accordance with European standard EN ISO 8098 that applies to bicycles with a maximum saddle height higher than 435 mm and lower than 635 mm.

Children's bikes are intended for use in playgrounds and enclosed areas and solely under the supervision of the parents or childminder. If you allow a child to ride a bike without supervision, an injury or even fatality may occur.

**NEVER LET CHILDREN RIDE WITHOUT SUPERVISION!**

We strongly recommend using a helmet of an approved type. The recommended load of a children's bike is up to 25 kg, including bags. Please pay attention to correct adjustment of your new bike before the first ride.

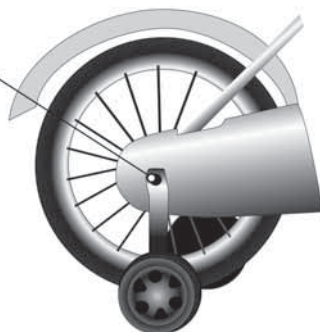
Adjust the height of the saddle so that the child can reach the handlebars comfortably without being excessively upright or, on the contrary, "lying" on the bike. Never pull the handlebars above the marked line (grooving and STOP or MAX sign). Explain to the child thoroughly that the bike is provided with a counter-acting rear brake. The brake lever for the front brake is positioned on the right-hand side of the handlebars. Never use only the front brake for braking.



## SPECIAL EQUIPMENT OF CHILDREN'S BIKES

A children's bike is provided with stabilization (balance) wheels from the manufacturer. These stabilization wheels are used to allow your child to ride more easily. They stabilize the lack of balance of a young cyclist and help him/her to learn to control the bike better and more easily. The young cyclist can concentrate rather on controlling the bike and learning how to brake on a bike. It is necessary to check the stabilization wheels for loosening of the screws mounting the supports to the bike and for sufficient mounting of the wheels to the supports. Insufficiently tightened screws may cause incorrect operation of the stabilization wheels. Loosening and consequent falling of the wheels resulting in injury or even death may occur.

Tighten with  
14/15 spanner



The wheel is provided with a counter-acting rear brake in order to allow the young cyclist to brake more easily and efficiently. Teaching a child how to brake is necessary for future use of the bike. For that reason, please devote sufficient time for learning so that you can be sure that the child is able to stop the bike safely. The bike is put in motion forward by the movement of the legs and the front derailleur cranks clockwise. In order to stop it, you need to depress a front derailleur crank in the opposite direction, i.e. anti-clockwise. Slow blocking of the ride up to a complete stop of the bike will occur.

### SPRING-LOADED FORK

If you wish to maintain perfect operation of the spring-loaded fork, regular maintenance, in particular of the friction surfaces between the inner and outer tubes, is necessary. The dust cover, preventing the access of dirt to the friction surfaces may not be damaged and should protect the entire friction area. When washing the fork, it is advisable to use a fine brush and warm, soapy water.

**Caution:** Water may not penetrate between the inner and outer tubes of the fork during washing. Just dirt and water have unfavourable effects on the components inside the fork.

### FORK LUBRICATION

There is a spring assembly with a layer of lubricant in the new spring-loaded fork. This layer of lubricant should be maintained continuously. Lubricate the fork always after riding in a wet environment (mud, wet sand, rain). If you do not have experience with the maintenance and repairs of forks, leave service to qualified specialists.

### COMPLETELY SPRING-LOADED FRAME

Maintenance: after riding in muddy terrain, it is necessary to clean all movable frame components; by doing this, you will extend their service life. If some components become worn, carry out replacement in order to avoid damage to the frame itself. Remember to check tightening of bolts of individual parts and to lubricate the sliding bearings of the springing unit.

## BICYCLE MAINTENANCE

The purpose of this section is not to explain individual technical techniques of bike maintenance and adjustment, but to keep your bicycle in good functional shape. The adjustment of individual parts is provided by specialised service points.

### FREQUENCY OF CHECKS OR MAINTENANCE INTERVALS FOR INDIVIDUAL PARTS

#### • Before every use:

Air pressure in tyres – the recommended pressure is stated on the side of each tyre. Check the function and wear of the brakes. Check the wear of the brake pads. Visually inspect possible occurrences of any leakage in the hose / caliper / lever joints by regularly pressing the brake lever. If a brake fluid leakage appears, immediately contact the dealer where you bought your bicycle. A leakage could cause your brakes to fail. Inspection of V-brake pads – removing dirt and impurities, especially gravel and metal shavings. If gravel or small stones get between the V-brake pad and the side of the rim, and the stones rub the rim, it is

advisable that you remove the gravel or stone immediately. Thus you will prevent wear from occurring on the rim and its premature replacement. Front suspension condition – the fork should be wiped with a damp cloth after each ride. The visible movable part should be greased with a suitable silicone lubricant. Condition of the rear stay and bearings of full-suspension bikes – full-suspension bikes require complex care of the rear stay, and it is highly recommended that you leave this process exclusively to service experts. If you have a full-suspension bike, it is advisable that you monitor if your shocks are working correctly (and if they have the correct pressure corresponding to the rider's weight), and especially if any play (clearance) has not appeared in the bearings and pivots of the rear stay. If you notice any play in the rear stay of a full-suspension bike, contact the dealer where you purchased your bicycle. The use of the bike with a jammed bearing can cause irreversible damage to the frame; please note that such damage is not covered by the bike frame warranty.

• every week

Condition of wheels – check if the spokes in the wheel are tightened and that no spokes are cracked. If yes, it is necessary to tighten or replace the spoke. If you have no experience with this task, it is advisable that you leave it to experts. Pressure level in the fork /if air is the suspension medium/ – the air is filled by a special pump that is not included with your bike.

• every month

Condition of the chain – the chain of a bicycle undergoes the most strain and also displays the greatest wear. The chain must be measured with a special tool that will tell you if the chain needs replacing. If you monitor how many kilometres you ride, depending on the terrain and the way you use your bicycle it is good to measure your chain for the first time after you have ridden approx. 500 - 800 kilometres. And then, the measurement should be taken after every subsequent 200 - 300 kilometres. Thus you will prevent early wear to the toothings of individual components. The degree of wear of the inner brake and gear cables – should a strand of a cable break, do not rely on the cable “keeping”, and replace it immediately. If you do not monitor how many kilometres you ride, it is good to check the length of your chain 2 or 3 times per season. It is a task that servicemen carry out in less than 20 seconds. Tightening all the bolts in your bicycle – stem, handlebar, brake levers, bottle cage, seatpost bolt, brake caliper bolts, front derailleur bolts and the front derailleur, rear derailleur bolts – never exceed the suggested torque stated on the individual components. Components and parts made of carbon in particular can be damaged irreversibly. Cracks in the components caused by obvious excessive tightening are not covered by the warranty. Lubricate the seatpost. When dealing with aluminium (frame, seatpost), always make sure that the part of the seatpost that is inserted into the frame is well lubricated.

In the case of carbon components, lubricants should never be applied directly onto the seatpost or seat tube. Contact surfaces must be absolutely dry. Lubrication penetrates the surface layer of carbon components, decreases the friction factor and thus greatly decreases the stability of the interlock of the components. Instead of a lubricant, a special paste for the installation of carbon components should be applied on the contact surfaces of the seatpost and the frame.

Condition of the crankset – completeness and tightening the individual bolts in the chainring. In particular, this applies to the bolt that holds the crank on the axle. If the crank get loose on the axle, it is necessary to do away with the problem IMMEDIATELY, as even a short ride with a “loose” crank can cause irreversible degradation to the cranks. The same technique should be used to check the tightening of pedals in the crank, too. Brake and gear cables – again, do not rely on the fact that the cable “will keep” even when damaged mechanically. Bike frame inspection – this relates especially to welds where a crack may appear in isolated cases.

• every year

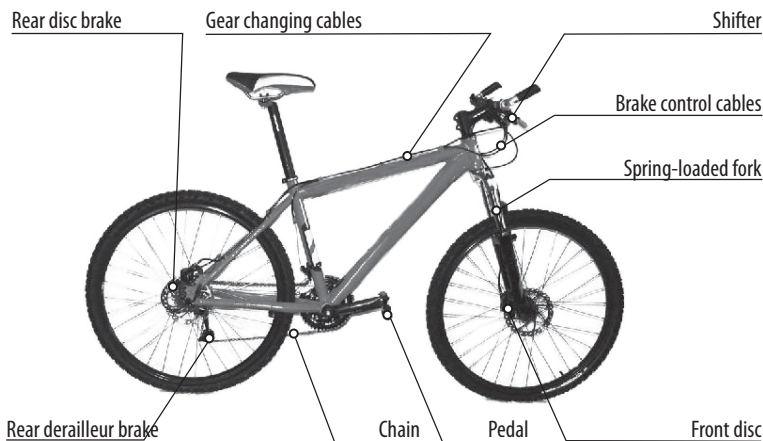
Have the bike checked at an authorised service point before each cycling season. Not all defects and flaws, especially hidden ones, are obvious to casual riders. Trust your service place – dealer.

Consult your dealer about the exact service plan and maintenance schedule of your bicycle. The dealer shall propose the schedule depending on the model of your bicycle and the way you use it. The intervals stated above are the recommended maximum intervals for regular bicycle maintenance, i.e. they cannot be extended under any circumstance. If you ride your bicycle more intensely, or if your dealer advises you, we recommend that you shorten the intervals and extend the scope of tasks carried out. For example, if you ride your bicycle in adverse climatic conditions, on hard terrain or you have equipped your bicycle with specific components with a different service interval and scope of regular maintenance stated by the manufacturer (exact instructions regarding the service of particular components will be provided by your dealer).

## GUARANTEE – GENERAL PRINCIPLES

- 1) **BIKE FUN INTERNATIONAL, s.r.o.**, provides a guarantee for its products within the scope specified in the letter of guarantee.
- 2) **BIKE FUN INTERNATIONAL, s.r.o.**, will repair, at its own expense, all defects resulting from defective material, processing, construction and assembly that appear within the guarantee period. The guarantee does not apply to damage resulting from an accident, frame or overstressing the bike with an extreme load, incorrect use, operation or maintenance different from the procedure specified by the manufacturer in the manual, poor storage or unprofessionally performed repair.
- 3) The product has been submitted to the customer in perfect condition and ready for riding.
- 4) The guarantee should be claimed without undue delay. Repair shops will carry out repairs within 30 days. The guarantee period will be extended by the period during which a guarantee repair is carried out. The manufacturer of the bike bears no liability for damage resulting from a defect that did not exist when the manufacturer launched the product in the market or occurred later and the manufacturer also bears no liability for any damage caused by the injured party by its behaviour or neglect by such a party or a person for whom the injured party is responsible. In particular, failure to observe the principles mentioned in this Operation Manual is considered to be such behaviour or neglect.

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## PROVISION OF GUARANTEE IN INDIVIDUAL SPECIFIC CASES

- Frame and front fixed fork** – the guarantee applies to defects of the material, its connections and perforation by rusting. A guarantee cannot be claimed in cases caused by accident or unprofessional repair. Deformations of the arms and ends forward, backward or to the side are always caused by overloading or accident.
- Gear changing system** – the guarantee applies to material defects. Deformation of the stem in case of pulling past the mark is not accepted.
- Bottom bracket assembly** – the guarantee covers defects of material and its thermal processing. Standard adjustment for backlash is not a subject of guarantee repairs; deformed or torn out threads of components and a damaged crank square will also not be accepted.

- Pedals** – the guarantee applies to material defects. The guarantee cannot be claimed in case of a broken pedal frame, bent pedal axle or pedal torn from the crank.
- Tyres** – the guarantee is provided for production defects (deformed tyre etc.). The guarantee does not apply to a tyre rubbed through by the brake pads, tyres worn by riding or braking action.
- Wheels** – the standard guarantee covers material defects (broken rim, hub, cog, axle, spoke – within 30 days) including surface finish defects.
- Brakes, rear derailleur and front derailleur** – the guarantee covers material defects. The guarantee does not apply to adjustments. Setting changes partially due to storage, handling and riding and tuning belongs to standard maintenance.
- Saddle, seatpost** – material defects are accepted, they are considered from the viewpoint of fulfilling its function. Grooves resulting from the seatpost moving in the saddle tube cannot be claimed.
- Chain** – a material defect or breakage is a subject of the guarantee. The guarantee does not apply to standard wear and tear or reduction of function as a result of neglecting maintenance.
- Reflectors** – broken reflectors are not a subject of the guarantee.
- Completely spring-loaded frame** – the guarantee applies to material, welds and individual movable components. In principle, it cannot be claimed in case of damage caused by:
- **accident**
  - **sport competition activity**
  - **overloading in extreme conditions (difficult downhill ride, riding in water and snow)**
  - **exposure to weather effects (rain, sunshine, storage in a wet environment)**
  - **unprofessional repair**
  - **by two persons riding on one bicycle**
  - **violent damage**
  - **jumps when riding**
  - **insufficient maintenance**

The guarantee does not apply to the movable parts of a mechanism if these components were not tightened properly and the bike was used in spite of this fact. These components become worn by usage and for that reason, regular maintenance is necessary.

**Caution:** If you do not have experience in the repair of completely spring-loaded frames, leave service to a qualified mechanic.

Each fall may result in a risk to your life or health or cause damage to your bike or to third parties. This warning should never be forgotten when riding a bicycle.

## IMPORTANT CAUTION

**Claims do not apply to standard maintenance of the bike:**

1. Loosened cranks on the central axle (insufficiently tightened central bolt)
2. Backlash in the quill assembly (insufficiently tightened locking nuts of the quill assembly)
3. Incorrect operation of the brakes (resulting from the use and consequent wear of the brake shoes, stretching of the brake cables)
4. Chain slipping down (resulting from incorrect gear changing and consequent chain crossing and slipping or dragging against other cogs)
5. Incorrect rear or front derailleur operation (tearing out of the control cables and consequent insufficient maintenance)
6. Backlash in the front and rear hubs (insufficiently tightened cones in the hubs)

## **LETTER OF GUARANTEE**

GUARANTEE FOR THE FRAME AND COMPONENTS

- 24 months for the frame

- 24 months for the components

### **GENERAL PRINCIPLES**

BIKE FUN INTERNATIONAL, s.r.o. confirms herewith that the bicycle of the mentioned type and serial number complies with the national standards and technical regulations. The company provides a guarantee for this bicycle from the date of its sale to the final customer. The guarantee period will be extended by the period of execution of a potential guarantee repair. The company will repair, at its own expense, all defects occurring during that period resulting from defective material, processing, construction and assembly.

### **GUARANTEE CONDITIONS**

- The product must be used solely for the purpose for which it has been produced
- The product must be stored properly and maintained in accordance with the manual
- When claiming a guarantee, it is necessary to submit a properly completed letter of guarantee; the bike must be complete and cleaned
- The guarantee must be applied without undue delay from the business organization from which the product has been purchased

### **CLAIMS RESULTING FROM THE GUARANTEE WILL BECOME VOID**

- If it is ascertained that the user bears the fault for product damage (resulting from an accident, unprofessional repair, poor storage etc.) and not the manufacturer
- By failing to assert a claim resulting from guarantee within the guarantee period
- If the product has not been used properly and maintained in accordance with the manual
- If a properly completed Letter of Guarantee has not been submitted when asserting a claim following from the guarantee
- The guarantee does not cover the standard wear and tear of individual components

