

# STEVENS USER MANUAL CITY | TREKKING

CITY AND TREKKING BICYCLES
JUNIOR BICYCLES
BICYCLES FOR YOUNG CHILDREN

EN ISO 4210-2 CYCLES – SAFETY REQUIREMENTS FOR BICYCLES
EN ISO 8098 CYCLES – SAFETY REQUIREMENTS FOR BICYCLES FOR YOUNG CHILDREN

For more information see the operating instructions on our website at www.stevensbikes.de





#### **STEVENS User Manual CITY I TREKKING**



These operating instructions comply with the requirements of the EN ISO standard 4210-2 for city and trekking bicycles as well as of the EN ISO standard 8098 for bicycles for young children. There is a separate manual for STEVENS e-bikes that you can find on our website at www.stevensbikes.de/manual



#### **Caution:**

Be sure to also observe the instructions of the component manufacturers on our website at www.stevensbikes.de/manual. These operating instructions are subject to European law. If the STEVENS bicycle is delivered to countries outside Europe, supplementary instructions may have to be provided by the manufacturer.



#### **Caution:**

Read pages 6 to 19 before your first ride! Perform the functional check on pages 20 and 21 before every ride! Observe the service schedule, the bike card and the handover report!

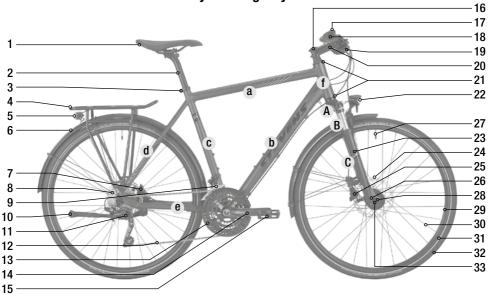


#### Note:

You find the instructions of the component manufacturers and the respective weblinks on our website at www.stevensbikes.de/manual

#### **Component Description**

#### City/trekking bicycle



#### Frame:

- a Top tube
- **b** Down tube
- c Seat tube
- **d** Rear stay
- e Chainstay
- f Head tube

#### Suspension fork:

- A Fork crown
- **B** Stanchion tube
- **C** Lower leg

- 1 Saddle
- 2 Seat post
- 3 Seat post clamp
- 4 Pannier rack
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#### Wheel:

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# Some Notes on these STEVENS Operating Instructions

The picture on the front page of the STEVENS operating instructions shows a typical STEVENS city/trekking bike. This bicycle corresponds to the STEVENS bicycle you purchased. Today's bicycles come in various types that are designed for specific uses and equipped accordingly. The STEVENS operating instructions include the following bicycle types:

Trekking City City Cross X Cross Urban Junior Tour

Pay particular attention to the following symbols:



#### Danger:

This symbol indicates an imminent risk to your life or health unless you comply with the instructions given or take preventive measures.



#### **Caution:**

This symbol warns you of wrongdoings which may result in damage to property and environment.



#### Note:

This symbol provides you with information about how to handle the product or refers to a passage in the operating instructions that deserves your special attention.

The described possible consequences will not be repeated in the STEVENS operating instructions every time one of the symbols appears. These operating instructions are not intended to help you assemble a STEVENS bicycle from individual components, to repair it or to make a partly assembled bicycle ready-foruse.

These STEVENS operating instructions are not applicable to any other than the displayed bicycle types.

#### **General Safety Instructions**

#### Dear STEVENS customer.

In purchasing this STEVENS bicycle you have chosen a product of high quality and technology. Each component of your new STEVENS bicycle has been designed, manufactured and assembled with great care and expertise. Your STEVENS dealer gave the bicycle its final assembly and adjustment to guarantee proper operation and many enjoyable riding experiences with complete peace of mind from the very first metres.

This manual contains a wealth of information on the proper use of your STEVENS bicycle and a lot of interesting facts about bicycle technology, maintenance and care. Read these STEVENS operating instructions thoroughly. We are sure that even if you have been cycling all your life you will find useful and detailed information. Bicycle technology has developed at a rapid pace during recent years.

Therefore, before setting off on your new STEVENS bicycle, be sure to read at least the chapter "Before Your FIRST Ride".

To ensure as much fun and safety as possible during cycling, be sure to carry out the functional check described in the chapter "Before EVERY Ride" before setting off on your STEVENS bicycle.

Even a manual as big as an encyclopaedia could not describe any possible combination of bicycle models and components or parts on the market. The STEVENS operating instructions therefore focus on your newly purchased STEVENS bicycle and standard components and provides useful information and warnings.

When doing any adjusting and maintenance work, be aware that the detailed instructions provided in your manual only refer to this STEVENS bicycle.

The information included here is not applicable to any other bicycle type. As bicycles come in a wide variety of designs with frequent model changes, the routines described may require complementary information. Be sure to also observe the instructions of the component manufacturers.

Be aware that these STEVENS operating instructions may require further explanation, depending on the experience and/or skills of the person doing the work. For some jobs you may require additional (special) tools or supplementary instructions. This manual cannot teach you the skills of a bicycle mechanic.









#### Caution:

If you have purchased a STEVENS e-bike/
EPAC, be sure to read the supplied translation of the original STEVENS operating instructions. There you will find further categories.







Before you set off, let us point out a few things that are very important to every cyclist: Never ride without a properly adjusted helmet and without glasses and take care to always wear suitable, bright clothing. At least you should wear straight cut trousers or leg bands and sturdy shoes fitting the pedal system. Always ride carefully on public roads and observe the traffic rules so as not to endanger yourself or others.

This manual cannot teach you how to ride. Be aware that cycling is a potentially dangerous activity that requires the rider to stay in control of his or her STEVENS bicycle at all times.

Like any sport, cycling involves the risk of injury and damage. Keep this in mind. When you decide to ride a STEVENS bicycle you need to accept the risk inherent to cycling. Note that on a STEVENS bicycle you have no protection technology around you (e.g. bodywork, ABS or air bag) like you have in a car. Therefore, always ride carefully and do respect the other traffic participants.

Never ride under the influence of drugs, medication, alcohol or when you are tired. Be sure to never ride with a second person on your STEVENS bicycle (except on a STEVENS tandem) and always ride with your hands on the handlebars.

Observe the legal regulations concerning off-road cycling. These regulations may differ in each country. Respect nature when riding through the forest and in the open countryside. Ride on signposted, well maintained trails and hard-surface roads only.

If you bought a STEVENS kids' bicycle, observe the tips before your child sets off on it for the first time. In some countries there are specific regulations for children. Read the chapter "Kids' and Junior Bicycles", before your child uses the STEVENS bicycle for the first time.

First we would like to familiarise you with the various components used on your STEVENS bicycle. On the front page of the STEVENS operating instructions you find a typical STEVENS city/trekking bike showing all the essential components.



You find all STEVENS user manuals, the instructions of the component manufacturers as well as detailed information on your STEVENS bicycle at www.stevensbikes.de/manual

Note:

Register your STEVENS bike at www.stevensbikes.de. You will be informed about technical upgrades, if necessary.



#### Danger:

For your own safety, never do work on your electric bicycle unless you feel absolutely sure about it. If you are in doubt or if you have any questions, contact your STEVENS dealer.

Have a lot of fun with your new STEVENS bicycle!

#### **Intended Use**

Your bicycle was designed for a specific use by our STEVENS engineers. Be sure to use your STEVENS bicycle only for its intended purpose, as it may otherwise not withstand the stress and fail. Risk of accident!

#### **Categories**

Keep in mind that every bicycle type, referred to in the following as **category** is built for a specific intended use. Be sure to use your STEVENS bicycle exclusively according to its intended use. Otherwise your STEVENS bicycle may not withstand the stress, fail and cause an accident with unforeseeable consequences!

Any improper use will invalidate the warranty.

The category of your STEVENS bicycle is specified on the category sticker on your STEVENS bicycle.









For more information see the bike card. Ask your STEVENS bicycle dealer to confirm the category to which your STEVENS bicycle belongs.



#### Note:

Inform yourself at www.stevensbikes.de and check the category your STEVENS bicycle belongs to.



#### Danger:

There are different types of bicycles that are subject to different legal framework conditions. Therefore, be sure to observe the sticker on your STEVENS bicycle.



#### Danger:

Be sure to observe the category to which your STEVENS bicycle belongs. From the category you can conclude which grounds and riding actions are suitable for your STEVENS bicycle.



Detailed information on your STEVENS bicycle is provided at www.stevensbikes.de/manual





#### Danger:

STEVENS bicycles of the categories 0 and 1 are not suitable for off-road use, jumps, slides, stair riding, stoppies, wheelies, tricks etc.!

#### Categories 0 and 1: STEVENS city, trekking and kids' bicycles

**STEVENS city, trekking** and **kids' bicycles** are intended for hard-surface terrain, i.e. for tarred roads and bicycle lanes or gravel field tracks, where the wheels remain in permanent contact to the ground. These bicycles are not suitable for off-road and competitive use of any kind whatsoever.

Due to their design and equipment, STEVENS city, trekking and kids' bicycles
are not always suitable for being used on public roads. If you want to use them
on public roads, these bikes must be equipped with the prescribed equipment.
Observe the traffic rules when riding on public roads. For more information see
the chapter "Legal Requirements for Riding on Public Roads".



#### Category 0: STEVENS kids' bicycles

This category describes **STEVENS kids' bicycles** with wheel sizes up to 24 inches. STEVENS Junior Sport / Junior Tour.

- The maximum permissible overall weight (child incl. luggage and bicycle) should not exceed 65 kg.
- Children should not ride near precipices, staircases or swimming pools as well as on paths used by automotive mobiles.
- STEVENS kids' bicycles are not designed for mounting stabilisers!
- For STEVENS kids' bicycles trailers and child seats are not permitted.







#### Category 1: STEVENS city and trekking bicycles

This category describes **STEVENS city** and **trekking bicycles**. STEVENS City Cross, Urban, Trekking Premium, Trekking, City, Junior Tour from 26".

- The maximum permissible overall weight (comprising rider, luggage, possibly trailer load and bicycle) should not exceed 130 kg. Under certain circumstances this maximum permissible overall weight can be further limited by the component manufacturers' recommendations for use.
- STEVENS city and trekking bikes are designed for a trailer load of 40 kg without and 80 kg with trailer brake.
- Child seats are permitted on STEVENS city and trekking bikes. For more information see the chapter "Use of Child Seats".

#### Category 4: STEVENS cross and gravel bikes

This category describes **STEVENS cross and gravel bikes**. They have 28"-wheels with narrow tyres. The tyre width is 28 to max. 42 mm. STEVENS X Cross, STEVENS Gravel.

STEVENS cross and gravel bikes are intended for hard-surface terrain, i.e. for tarred roads and bicycle lanes or gravel field tracks, where the wheels remain in permanent contact to the ground. In addition, they are suitable for well maintained gravel field and forest tracks as well as for off-road trails with a slight slope where a temporary loss of tyre contact with the ground due to small steps may occur. They are not suitable for off-road use (mountain bike use), namely for all mountain, enduro, downhill (DH), freeride, dual slalom, downhill/freeride parks, jumps, drops and in bike parks etc.

- Due to their design and equipment, STEVENS cross and gravel bikes are not always suitable for being used on public roads. If you want to use them on public roads, these bikes must be equipped with the prescribed equipment. Observe the traffic rules when riding on public roads. For more information see the chapter "Legal Requirements for Riding on Public Roads".
- The maximum permissible overall weight (comprising rider, luggage, possibly trailer load and bicycle) should not exceed 130 kg. Under certain circumstances this maximum permissible overall weight can be further limited by the component manufacturers' recommendations for use or weight restrictions. You find more information in the instructions or on the websites of the respective component manufacturers.
- STEVENS cross and gravel bikes are designed for a trailer load of 40 kg without and 80 kg with trailer brake. On STEVENS gravel bikes made of carbon, however, the use of trailers is not permitted.
- On STEVENS cross and gravel bikes made of carbon child seats are not permitted. On STEVENS cross and gravel bikes made of aluminium child seats are permitted. For more information see the chapter "Use of Child Seats".







#### Danger:

STEVENS bikes of the category 4 are not suitable for off-road use, jumps, slides, stair riding, stoppies, wheelies, tricks etc.!



#### Categories 5 to 7: Mountain bikes

There is no longer such a thing as "the mountain bike". Various types of mountain bikes for specific uses have been developed instead. Be sure to use your STEVENS mountain bike only according to its intended use. Observe the traffic rules when riding on public roads.

- Due to their design and equipment STEVENS mountain bikes of the categories
  5 to 7 are not always suitable for being used on public roads. If you want to
  use them on public roads, these bikes must be equipped with the prescribed
  equipment. Observe the traffic rules when riding on public roads. For more
  information see the chapter "Legal Requirements for Riding on Public
  Roads".
- The maximum permissible overall weight (rider incl. luggage and bicycle) should not exceed 115 kg. Under certain circumstances this maximum permissible overall weight can be further limited by the component manufacturers' recommendations for use or weight restrictions. You find more information in the instructions or on the websites of the respective component manufacturers.

Category 5: STEVENS cross-country, marathon and touring mountain bikes
This category describes STEVENS cross-country, marathon and touring
mountain bikes. STEVENS hardtail mountain bikes and full suspension STEVENS
bikes with short suspension travel are typical for this category. STEVENS Marathon,
XC Carbon, XC Alloy and Junior Sport.

STEVENS cross-country, marathon and touring mountain bikes are suitable for off-road use, but not for blocked terrain, tricks, stair riding etc. as well as training and competitive use in the categories freeride, dirt, downhill. STEVENS bikes of this category can be used on surfaces permitted for bikes of the categories 1 and 3 and are in addition suitable for rough and unpaved terrains. Sporadic jumps are also included in the field of use of these STEVENS bikes. But particularly inexperienced riders doing jumps may land inappropriately, thus increasing the acting forces significantly which may result in damage and injuries. We recommend that you train your skills in a riding technique course. If necessary, ask your STEVENS dealer to inspect your STEVENS bicycle at shorter intervals than according to the service and maintenance schedule.

- On full suspension STEVENS mountain bikes made of aluminium the use of trailers is permitted. On full suspension STEVENS mountain bikes made of carbon trailers are, however, not permitted.
- On full suspension STEVENS mountain bikes (made of aluminium and carbon)
  as well as on STEVENS hardtail mountain bikes made of carbon child seats
  are not permitted. On STEVENS hardtail mountain bikes made of aluminium
  child seats are permitted. For more information see the chapter "Use of Child
  Seats"





STEVENS bikes of the category 5 are not suitable for use on blocked terrain, for high and long jumps, slides, stair riding, stoppies, wheelies, tricks etc.!

#### **Maximum Permissible Overall Weight**

The maximum permissible overall weight is indicated on the category sticker on your STEVENS bicycle.

The maximum permissible overall weight limit is made up as follows:

Weight cyclist (kg)

- + Weight bicycle (kg)
- + Weight luggage (kg)
- + Overall weight trailer incl. cargo and/or persons (if in place) (kg)
- = Maximum permissible overall weight (kg)



#### **Use of Trailers**

Most STEVENS bikes are approved for being used with trailers to transport cargo and children.

With special child trailers that are towed behind a bicycle you can transport one or two children.

#### The following STEVENS bicycles are approved for being used with trailers:

- · STEVENS city and trekking bikes
- STEVENS cyclocross/gravel bikes made of aluminium
- STEVENS hardtail mountain bikes
- Full suspension STEVENS bikes made of aluminium

#### The following bicycles are not approved for being used with trailers:

- STEVENS bicycles with carbon frames or forks
- Full suspension STEVENS bicycles made of carbon
- STEVENS cyclocross/gravel bikes made of carbon
- STEVENS speed pedelecs
- STEVENS kids' and junior bikes
- · STEVENS track bicycles
- STEVENS tandem bicycles



#### Danger:

Danger:

Attaching the trailer

coupling to the frame tubes, rear stays or seat

post is not permitted.

Keep in mind that your stopping distance increases with the additional load due to the transport of children and cargo.



#### Danger:

Persons must only be transported in trailers approved for this purpose.



#### Danger:

Trailers affect the braking behaviour and the width of your STEVENS bicycle. First, practise riding with an empty trailer. Equip the trailer with a long pole with coloured pennant to increase visibility.



#### Danger:

If the lighting equipment on your STEVENS bicycle is covered by the trailer, it has to be mounted visibly to the trailer. When riding in the dark, provide the rear end of the trailer with a battery/accumulator-operated lamp.

#### When using a trailer, observe the following points:

- The trailer with its actual weight incl. cargo is considered to be part of the permissible weight of your STEVENS bicycle. For more information see the chapter "Maximum Permissible Overall Weight".
- Be sure to fix the trailer coupling exclusively to the rear axle or to specific mounts at the drop-out.



#### **Danger:**

With some trailer models it is necessary to replace the original thru axle by a specific thru axle of the trailer manufacturer or to clamp an adapter with the original thru axle. In this case, make sure that the axle thread and the axle nut thread are fully covered.

The possibly required replacement axles must comply with the specifications of the original axle of your STEVENS bicycle (clamping width, thread pitch and thread length, material and diameter).



#### Danger:

The permissible maximum speed indicated by the trailer manufacturer must be observed. Also observe the instructions of the trailer manufacturer.



#### Danger:

Always secure the children with the seat belt, as uncontrolled movements inside the trailer can make your STEVENS bicycle or the trailer tilt.



#### Danger:

Make sure your child always wears a suitable helmet. A trailer is only an insufficient protection in case of an accident. Keep in mind that you always wear a helmet, as well.



#### Note:

You find all STEVENS user manuals, the instructions of the component manufacturers as well as the respective weblinks at www.stevensbikes.de/manual





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#### Danger:

Child seats that are mounted to the seat tube are the only child seats permitted. Child seats that are mounted to the seat post or the top tube are not permitted.



#### Danger:

Be sure to only use child seats which are mounted in the rear with the child sitting behind the rider. Child seats that are mounted in front of the rider are not permitted.



#### Danger:

When mounting a child seat, observe the maximum permissible overall weight of your STEVENS bike. For more information see the chapter "Maximum Permissible Overall Weight".

#### **Use of Child Seats**

Most STEVENS bicycles are approved for being used with child seats.

The following STEVENS bicycles are approved for being used with child seats:

- · STEVENS city and trekking bikes
- STEVENS cross and cyclocross bikes made of aluminium
- STEVENS gravel bikes made of aluminium
- · STEVENS hardtail mountain bikes made of aluminium

#### The use of child seats is **not permitted** on:

- STEVENS bicycles with carbon frames or forks
- STEVENS road racing and triathlon bikes as well as time trial machines
- Full suspension STEVENS bikes
- STEVENS cross and cyclocross bikes made of carbon
- STEVENS gravel bikes made of carbon
- STEVENS speed pedelecs
- · STEVENS kids' and junior bikes
- · STEVENS tandem bicycles

#### When taking your child with you in a child seat, observe the following points:

- Always put a fitting helmet on your child and this already before you place him/ she in the child seat. Many accidents happen when the bicycle is stationary, e.g. when it tips over. Be a good example and remember to always wear a helmet yourself.
- Never set off before having buckled up your child in the child seat. Uncontrolled movements of the child can make your STEVENS bicycle tilt.
- Do not overload your child seat. Overloading can result in breakage of the frame, the fork or the components. Risk of accident and injury!
- Cover the springs of your saddle to make sure that your child will not have the fingers pinched.
- Adjust the tyre pressure to the additional weight. The maximum pressure is indicated on the tyre side



#### Danger:

Child seats mounted with a suitable adapter for pannier racks/luggage carriers are only permitted, when the pannier rack complies with the requirements of ISO 11243 and has a maximum payload of at least 25 kg.



#### Danger:

Child seats are only permitted on STEVENS bikes, when indicated in the bike card.



#### Danger:

Observe the maximum permissible overall weight of the child seat and be sure not to exceed it. You find more information in the instructions of the child seat manufacturer.



#### Note:

You find all STEVENS user manuals, the instructions of the component manufacturers as well as the respective weblinks at www.stevensbikes.de/manual





#### **Danger:**

Have your child seat mounted exclusively by your STEVENS dealer.



#### Danger:

Be sure to only mount and use a child seat, if permitted by the national and regional regulations of the country where you are travelling.











Be aware that the distance you need to stop your bicycle increases, when you are riding with your hands on bar ends or on multi position handlebars. The brake levers are not in all grip positions within easy reach.

Danger:

#### **Before Your First Ride**

- If you want to use your bicycle on public roads, it has to comply with the
  respective legal requirements. These regulations differ from country to country. Therefore, bicycles are not necessarily equipped completely. Ask your
  STEVENS dealer for the laws and regulations applicable in your country or in
  the country where you intend to use the STEVENS bicycle. Have your STEVENS
  bicycle equipped accordingly, before using it on public roads.
- Are you familiar with the brake system? Have a look at the bike card and check whether the brake lever of the front brake is on the side you are used to (right or left). If it is not, ask your STEVENS dealer to switch the brake levers before you set off for the first time.

Your new bicycle is equipped with modern brakes which may be far more powerful than those you were used to so far. Be sure to first practise using the brakes on a level, non-slip surface off public roads!

For more information see the chapter "The Brake System" further below as well as the instructions of the component manufacturers.

Are you familiar with the type and functioning of the gears? Ask your STEVENS dealer to explain to you the gear system and make yourself familiar with your new gears in an area free of traffic, if necessary.

For more information see the chapter "The Gears" further below as well as the instructions of the component manufacturers.

4. Are both saddle and handlebars properly adjusted? The saddle should be set to a height from which you can just reach the pedal in its lowest position with your heel. Check whether your toes reach to the floor when you are sitting on the saddle.

For more information see the chapter "Adjusting the STEVENS Bicycle to the Rider" further below as well as the instructions of the component manufacturers.



#### Note:

It is recommendable that you take out a private liability insurance. Contact your insurance agency. Becoming member in a bicycle association may also provide insurance coverage.

5. If your STEVENS bicycle is equipped with clipless or step-in pedals: Have you ever tried the shoes they go with? Do not set off until you have practised engaging and disengaging the shoes from the pedals in standing. Ask your STEVENS dealer to explain to you the pedals.

For more information see the chapter "The Pedal Systems" as well as the instructions of the component manufacturers.

6. If you have bought a STEVENS bicycle with suspension, you should ask your STEVENS dealer to properly adjust the chassis. Improperly adjusted suspension components are liable to malfunction or damage. In any case, the riding behaviour deteriorates and you do not achieve maximum riding safety and riding pleasure.

For more information see the chapter "Suspension Forks" as well as the instructions of the component manufacturers.







#### Danger:

In case you had a crash with your STEVENS bicycle, perform at least the check described in the chapter "Before Every Ride". Ride back very carefully by taking the shortest route possible, even if your STEVENS bicycle went through this check without any problems. Do not accelerate or brake hard and do not ride your bicycle out of the saddle. If you are in doubt, have yourself picked up by car, instead of taking any risk. Back home you need to check once again your STEVENS bicycle thoroughly. If you are in doubt or if you have any questions, contact your STEVENS dealer!



#### Note:

Be sure to observe the STEVENS user manuals, the instructions of the component manufacturers as well as the respective weblinks on our website at www.stevensbikes.de/manual





#### **Caution:**

Prior to towing a trailer with your STEVENS bicycle or mounting a child seat, read the chapters "Use of Child Seats" and "Use of Trailers" and have a look at the bike card. If you are in doubt or if you have any questions, ask your STEVENS dealer.











#### **Before Every Ride**

Your STEVENS bicycle has undergone numerous tests during production and a final check has been carried out by your STEVENS dealer. Nevertheless, be sure to check the following points before you set off for the first time to exclude any malfunctioning that may be due to the transport of your STEVENS bicycle or to changes a third person may have performed on your STEVENS bicycle during a standstill:

 Are the quick-release levers or the bolted connections of the front and rear wheel, the seat post and other components properly closed and tightened?

For more information see the chapter "How to Use Quick-Releases" further below as well as the instructions of the component manufacturers.

Are the tyres in good condition and do they have sufficient pressure? The minimum and maximum pressure (in bar or PSI) is indicated on the tyre side.

For more information see the chapter "The Wheels" further below as well as the instructions of the component manufacturers.

Spin the wheels to check whether the rims are true. Watch the gap between rim and brake pad or, in the case of disc brakes, between frame and rim or tyre. Poor concentricity can also be an indication of laterally burst tyres, broken axles or torn spokes.

For more information see the chapter "The Wheels" further below as well as the instructions of the component manufacturers.

Test the brakes in stationary by firmly pulling the brake levers towards the handlebars.

The brake pads of **rim brakes** must hit the rim evenly with their entire surface without touching the tyre during braking or in open condition or in between. Make sure you cannot pull the brake levers all the way to the handlebars and check the hydraulic brake hoses for leaks! Check the thickness of the brake pads as well.

With **disc brakes** you should have a stable pressure point at once. If you have to actuate the brake lever more than once to get a positive braking response, have your STEVENS bicycle checked by your STEVENS dealer.

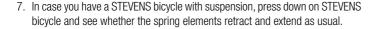
For more information see the chapter "The Brake System" further below as well as the instructions of the component manufacturers.



Improperly closed fastenings can cause components of your STEVENS bicycle to come loose and result in serious accidents!

- Let your STEVENS bicycle bounce on the ground from a small height. If there is any rattling, see where it comes from. Check the bearings and bolts, if necessarv.
- 6. If you want to ride on public roads, make sure your STEVENS bicycle is equipped according to the regulations of the respective country. In any case, riding without lights and reflectors in dark or dim conditions is very dangerous. A lighting set that corresponds to the regulations is a must on public roads. Turn on the lights as soon as dusk sets in.

For more information see the chapter "Legal Requirements for Riding on Public Roads".



For more information see the chapter "Suspension Forks" as well as the instructions of the component manufacturers.

- 8. Make sure the kick stand, is fully raised before you set off. Risk of accident!
- Do not forget to take a high quality folding, D- or chain lock with you on your ride. The only way to effectively protect your STEVENS bicycle against theft is to lock it to an immovable object.







#### Danger:

Be aware that the distance you need to stop your bicycle increases, when you are riding with your hands on bar ends or on multi position handlebars. The brake levers are not in all grip positions within easy reach.



#### Danger:

During use your STEVENS bicycle is undergoing stress resulting from the surface of the road and from the rider's action. Due to these dynamic loads, the different parts of your bicycle react with wear and fatigue. Check your STEVENS bicycle regularly for wear marks, scratches, deformations, colour changes and any indication of cracking. Components which have reached the end of their service life may break without previous warning. Let your STEVENS dealer maintain and service your STEVENS bicycle regularly and in cases of doubt it is always best to replace components.



#### Danger:

Do not use your STEVENS bicycle, if it fails on one these points! Riding a defective STEVENS bicycle can result in serious accidents! If you are in doubt or if you have any questions, contact your STEVENS dealer.





#### **Legal Requirements for Riding on Public Roads**

If you want to use your STEVENS bicycle for riding on public roads, it has to be equipped according to the regulations of the respective country.

Pay particular attention to your STEVENS bicycle being equipped with the required set of lights and reflectors.

Ask your STEVENS dealer to inform you about the regulations in force in the country where you use your STEVENS bicycle. Make yourself familiar with the road traffic rules for riding on public roads and off-road.



You find more important tips on cycling in the chapter "General Safety Instructions".



#### Danger:

For your own safety, be sure to switch on the light as soon as dusk sets in.



#### Danger:

Keep the lighting set clean and check its functioning at regular intervals.



#### Note:

If you want to use your STEVENS bicycle for riding on public roads, it has to be equipped according to the regulations of the respective country. Ask your STEVENS dealer about the regulations in force in your country or in the country where you intend to use the STEVENS bicycle.



#### Note:

When riding on public roads cyclists must in general observe the same traffic rules as car drivers. Make yourself familiar with the road traffic rules of your country.

#### Adjusting the STEVENS Bicycle to the Rider

Your body height and proportions are decisive for the frame size of your STEVENS bicycle. Make particularly sure there is enough space between your crotch and the top tube so that you do not hurt yourself, if you have to get off your bike quickly.



By choosing a specific type of bicycle you roughly determine the posture you will be riding in. However, some components of your STEVENS bicycle are especially designed so that you can adjust them to your body proportions up to a certain degree. This includes the seat post, the handlebars and stem as well as the brake levers or brake levers/shifters.



As these adjustments require know-how, experience, appropriate tools and a certain amount of skill, you should restrict yourself to the adjustment of the seating position. Ask your STEVENS dealer for the correct seating position or if you want something changed. They will see to your wishes the next time you leave the STEVENS bicycle at the workshop, e.g. for the first inspection.

After any adjustment/assembly work, be sure to make a short functional check as described in the chapter "Before Every Ride" and do a test ride on your STEVENS bicycle in an area free of traffic.



#### Danger:

If you have a very small frame, there may be the danger of your foot colliding with the front wheel. Therefore, make sure your cleats are properly adjusted.



#### Danger:

All tasks described in the following require the know-how of a mechanic and appropriate tools. Make it a rule to tighten the bolted connections always with greatest attention. Increase the torque values bit by bit and check the fit of the component in between. Use a torque wrench and never exceed the maximum torque values! You find them on the components themselves and/or in the chapter "Recommended Torque Settings".



#### Note:

If sitting on the saddle causes you trouble, e.g. because it numbs your crotch, this may be due to the saddle. Your STEVENS dealer has a very wide range of saddles available and can offer advice on position.



#### Danger:

When replacing the saddle, make sure the saddle rail is compatible with the seat post. If you are in doubt or if you have any questions, contact your STEVENS dealer.



#### Note:

The seating position depends highly on how you want to use the STEVENS bicycle. Ask your STEVENS dealer or your trainer for help. The advices given below are suitable for typical city and trekking bikes.





#### Adjusting the Saddle to the Correct Height

The correct saddle height depends on the length of your legs. When pedalling, the ball of your foot should be positioned above the centre of the pedal axle. With your feet in this position you should not be able to stretch your legs completely straight at the lowest point, otherwise your pedalling will become awkward. Check the height of your saddle with flat-soled shoes. This is best done with suitable cycling shoes. Sit on the saddle and put your heel on the pedal at its lowest point. Your leg should be fully stretched and your hips should remain horizontal.

To adjust the saddle height loosen the quick-release lever (see the chapter "How to Use Quick-Releases") or the binder bolt of the seat post clamp at the top of the seat tube. The latter requires suitable tools, e.g. an Allen key, with which you turn the bolt two to three turns anticlockwise.





**Rule of thumb to determine the suitable saddle height:** Inside leg (barefoot) x 0.885

Now you can perform the vertical adjustment of the seat post. Be sure not to pull out the seat post too far — the mark on the seat post (max., min., stop or the like) should always remain within the seat tube — and to grease the surface of an aluminium or titanium seat post that is inserted into a seat tube made of aluminium, titanium or steel. Do not grease carbon seat posts and/or carbon seat tubes in the clamping area! Use special carbon assembly paste instead.

Align the saddle with the frame by using the saddle nose and the bottom bracket or top tube as a reference point.



force!

Children and adolescents need to have the saddle height and the position of saddle and handlebars checked at least every three months!

**Caution:** 

If the seat post wobbles

in the seat tube or does

not slide easily, ask your STEVENS dealer for

advice. Do not use brute





Clamp the seat post tight again by closing the quick-release, as described in the chapter "How to Use Quick-Releases" or by turning the seat post binder bolts clockwise in half turns. You should not need much strength in your hands to clamp the seat post sufficiently tight. Otherwise the seat post does not match the frame.









Verify in between that the seat post is sufficiently tight by taking hold of the saddle at both ends and then trying to rotate the seat post inside the seat tube. If it does rotate, gently retighten the clamping bolt by half a turn and do the check again.

Does the leg stretch test now produce the right result? Check by moving your foot and pedal to the lowest point. When the ball of your foot is exactly above the pedal centre in the ideal pedalling position, your knee should be slightly bent. If it is, you have adjusted the saddle height correctly. Check whether you can touch the ground safely while sitting on the saddle by stretching your feet to the floor. If you cannot, you should lower the saddle a little, at least to begin with.



#### Danger:

Under no circumstances grease the seat tube of a carbon frame. If you mount a carbon seat post, do not put any grease on it, even if the frame is made of metal. Once greased, carbon components may never again ensure reliable clamping! Use special carbon assembly paste instead.



#### **Caution:**

Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. You find them on the components themselves and/or in the chapter "Recommended Torque Settings". Do not exceed the maximum torque value indicated by the manufacturer!



#### Danger:

Never ride your bike with the seat post drawn out beyond the limit, maximum, or stop mark! The seat post might break or cause severe damage to the frame. In the case of frames with seat tubes that extend beyond the top of the frame's top tube the seat post should be inserted into the seat tube at least below the bottom of the top tube and below the top of the seat stays! If seat post and frame require different minimum insertion depths, you should opt for the deeper insertion depth.



#### Danger:

Make sure not to overtighten the binder bolt of the seat post clamp. Otherwise you may damage the seat post or the frame. Risk of accident!



#### Danger:

The stem is one of the load bearing parts of your STEVENS bicycle. Changes to it can impair your safety. If you are in doubt or if you have any questions, contact your STEVENS dealer!



#### **Adjusting the Height of the Handlebars**

The height of the handlebars compared to the saddle and the distance between saddle and handlebars determine how much your upper body will be inclined forward. Lowering the handlebars gives you a streamlined position and brings more weight to bear on the front wheel. However, it also entails an extremely forward leaning posture which is tiring and less comfortable, because it increases the strain on your wrists, arms, back, upper body and neck.

There are three different stem systems that allow vertical adjustment of the handlebars, i.e. the conventional, the adjustable and the Aheadset®-stem. These systems require special knowledge. In this regard, the descriptions hereafter may be incomplete. If you are in doubt or if you have any questions, contact your STEVENS dealer.

#### **Conventional Stems**

Handlebars with conventional stems allow limited vertical adjustment. This is done by moving the stem up or down inside the fork steerer tube.

For more information see the chapter "Adjusting the Height of the Handlebars" as well as the instructions of the component manufacturers.



#### **Danger:**

Never ride a STEVENS bicycle with a stem that has been drawn out beyond the mark for the maximum permissible height! Check all bolted connections and test your brakes before you set off!



#### **Caution:**

Never try to unscrew the top race of the headset when you only want to adjust the stem, as you will otherwise alter the bearing play!



#### Danger:

The bolted connections of stem and handlebars have to be tightened to the prescribed torque values. If you disregard the prescribed values, the handlebars or stem may come loose or break. Use a torque wrench and never exceed the maximum torque values! You find them on the components themselves and/or in the chapter "Recommended Torque Settings".

#### **Adjustable Stems**

There are various solutions for adjusting the tilt of the front part of adjustable stems: Some designs use bolts on the sides of the joint, others have bolts on the upper or bottom side, and other again are equipped with additional locking mechanisms or adjusting bolts.



For more information see the chapter "Adjusting the Height of the Handlebars" as well as the instructions of the component manufacturers.

#### Stems for Threadless Systems, the Aheadset®-System







In the case of STEVENS bicycles with Aheadset® the stem also serves to adjust the bearing preload. If you change the position of the stem you have to readjust the bearing play.

You can adjust the height to a limited extent by displacing the spacers or by turning the stem around in the case of flip-flop models, see the chapter "The Headset"



#### **Caution:**

Keep in mind that readjusting the position of the stem changes the position of handlebars, brake levers and shifters. Readjust these components, as described in the chapter "Adjusting the Tilt of the Handlebars, Bar Ends and Brake Levers".



#### Danger:

Do not mount any stem extenders, speed-lifters or the like.



#### Danger:

Spacers must be removed by the STEVENS dealer only, as this requires the shortening of the fork steerer.



#### Danger:

These routines require a certain amount of manual skill and (special) tools and are best left to your STEVENS dealer. Nevertheless, if you want to try it by yourself, read the chapter "Adjusting the Height of the Handlebars" beforehand.



#### Note:

When doing any adjusting observe the instructions of the stem manufacturer. Ask your STEVENS dealer to explain to you both function and adjustment of your stem or let him do that work.





#### Danger:

Poorly tightened or loosening bolts can fail. Risk of accident!



#### Danger:

The setting range of the saddle is very small. Replacing the stem allows you to make far bigger adjustments to the rider's fore-to-aft position, as stems come in different lengths. In doing so you may achieve differences of more than ten centimetres. In this case you usually would have to adjust the length of the cables - a job best left to your STEVENS dealer!

#### Correcting the Fore-to-Aft Position and Tilt of the Saddle

The inclination of your upper body, and hence your riding comfort and riding dynamics, are also influenced by the distance between the grips of the handlebars and the saddle. This distance can be altered slightly by changing the position of the saddle rails in the seat post clamp. However, this also influences your pedalling. Whether the saddle is positioned more to the front or to the back of the bicycle will alter how rearward the pedalling position of your legs is. You need to have the saddle horizontal in order to pedal in a relaxed manner. If it is tilted, you will constantly have to lean against the handlebars to prevent yourself from slipping off the saddle.

#### **Adjusting Saddle Position and Tilt**

There are some seat posts mounted STEVENS bicycles which have two Allen bolts positioned one after the other holding the seat post head and fix the tilt as well as the horizontal position of the saddle. Some seat posts have two bolts side-by-side.

Release the bolt(s) at the top of the seat post. Release the bolt(s) two to three turns anticlockwise at the most, otherwise the whole assembly can come apart. Move the saddle forward or backward by sliding its rails in the loosened seat post clamp. You may have to give the saddle a light tap to move it.

With **patent seat posts** a single bolt fixes the clamping mechanism, which controls both the tilt and the horizontal position of the saddle. Some seat posts have two bolts side-by-side.

Observe the marking on the saddle rail and do not go beyond. Make sure the seat of the saddle remains horizontal as you retighten the bolt(s). STEVENS bicycle should stand on level ground while you adjust the saddle.







#### Danger:

Check the bolts by using a torque wrench once a month according to the values indicated on the components themselves and/or in the instructions of the component manufacturers.

Having found your preferred position, make sure both clamp halves fit snugly around the saddle rails before tightening the bolt(s) to the correct torque value as prescribed by the seat post manufacturer.

Retighten the bolt(s) with a torque wrench according to the instructions of the manufacturer. After fastening the saddle, check whether it resists tilting by bringing your weight to bear on it once with your hands at either end of the saddle.









#### Danger:

The bolted connections of the seat post have to be tightened to the prescribed torque value. Use a torque wrench and never exceed the maximum torque values! You find them on the components themselves and/or in the chapter "Recommended Torque Settings".



#### Danger:

Make sure the saddle is clamped within the range of the marking on the saddle rail. Otherwise the saddle rail can fail! Check the bolts by using a torque wrench once a month according to the values indicated on the components themselves and/or in the chapter "Recommended Torque Settings".



#### Danger:

The saddle clamping bolts belong to the most delicate bolts of the entire STEVENS bicycle. Therefore, strictly observe the recommended minimum and maximum torque values. Do not under- or overtighten. You find them on the components themselves and/or in the chapter "Recommended Torque Settings". Always use a torque wrench.









#### Danger:

Make sure you cannot pull the brake levers all the way to the handle-bars. Your maximum brake force should be reached short of this point.



#### Note:

If you have hydraulic brakes and disc brakes, follow the instructions of the brake manufacturer. If you are in doubt or if you have any questions, contact your STEVENS dealer.

#### **Adjusting the Brake Lever Reach**

With most brake systems the distance between the brake levers and the handlebar grips is adjustable. This gives in particular riders with small hands the convenience of bringing the brake levers closer to the handlebars.

On most bicycles there is a small adjusting screw near the point where the brake cable of a cable brake enters the brake lever unit or at the lever itself. Turn the bolt clockwise and watch how the lever adjusts as you do so.

With hydraulic brakes you also have adjusting devices at the brake lever. There are different systems, ask your STEVENS dealer for help or read the instructions of the component manufacturers. When adjusting the lever reach, make sure the first phalanx of the index finger reaches around the brake lever. Check the proper adjustment and functioning of the brake system subsequently, as described in the chapter "The Brake System" further below as well as in the instructions of the brake manufacturer.

# Adjusting the Tilt of Handlebars, Bar Ends and Brake Levers of STEVENS City, Trekking, Cross, Kids' and Junior Bikes

The handlebars are usually slightly bent at the ends. Set the handlebars to a position in which your wrists are relaxed and not turned too much outwards.

To adjust the angle of the handlebars, release the Allen bolt(s) on the underside or front side of the stem. Turn the handlebars to the desired position. Make sure the handlebars are accurately centred in the stem. Carefully retighten the bolt(s) with the torque wrench.

Make sure the upper and lower clamping slots of the stem are parallel and identical in width. If you have a stem with several bolts, tighten them evenly in a cross pattern by using a torque wrench and observe the recommended torque values.





Try rotating the handlebars once clamped in the stem and tighten the bolt a little more, if necessary. Use a torque wrench and never exceed the maximum torque values! You find them on the components themselves and/or in the chapter "Recommended Torque Settings".

After adjusting the handlebars you need to adjust the brake levers and shifters. Release the Allen bolt at either mount. Turn the levers relative to the handlebars. Sit in the saddle and place your fingers on the brake levers.

Check whether the back of your hand forms a straight line with the line of your forearm. Retighten the mounts with a torque wrench and do a twist test!

Bar ends and multi position handlebars give you additional ways of gripping the handlebars. Bar ends are usually fixed in a position that gives the rider a comfortable grip when pedalling out of the saddle, i.e. almost parallel to the ground or tilted slightly upwards (by about 25°).

Release the bolts, which are usually located on the underside of the bar ends, by one to two complete turns. Turn the bar ends to the desired position making sure the angle is the same on both sides. Retighten the bolts to the required torque value. Check whether the bar ends are firmly fixed by trying to twist them out of position.







#### Danger:

Be aware that the distance you need to stop your bicycle increases, when you are riding with your hands on bar ends or on multi position handlebars. The brake levers are not in all grip positions within easy reach.



#### Danger:

Tighten the bolts at the stem until the clamping slots between the stem body and the faceplate are parallel and identical in width in the top and in the bottom. Tighten the bolts evenly and in a cross pattern, i.e. alternately and gradually, by using a torque wrench to the lower value of the recommended torque settings.



#### Danger:

Never fix bar ends in vertical position or with their ends pointing rearwards as this would increase the risk of injury in the event of an accident.









#### The Pedal Systems

Not all shoes are suited for cycling. Shoes used for cycling should have a stiff sole and provide a firm support for your feet. If the soles are too soft, the pedals can press through and cause foot pain. The force transmission is less efficient. The sole should be not too broad near the heels, as the rear stays will otherwise get in the way of your pedalling. This will prevent your feet from assuming a natural position and may cause knee pain in the long run.

#### Different Systems at a Glance – How They Work

We recommend pedals that provide a lock and release mechanism for your shoe, known as step-in pedals. The firm connection between shoe and pedal prevents your feet from slipping off when pedalling fast or when riding over rough ground. Besides this, it enables you not only to push but also to pull the pedals, which makes your pedalling more fluent. A further advantage is that the ball of your big toe comes to rest biomechanically just at the right place on the pedal spindle and that you do not block unintentionally the front wheel with the tips of your feet during steering.

Step-in pedals come with a special type of cycling shoe which locks onto the pedal similarly to a ski binding.



Read the operating instructions of the pedal and shoe manufacturers carefully. In case of inquiries, ask your STEVENS dealer for advice.



#### Danger:

Taking up the pedals, engaging the shoes and disengaging them by turning the heel outward should first be practised while stationary. Later you can refine your technique in a place clear of traffic.



#### Danger:

Only use clipless pedals allowing you to engage and disengage smoothly. A defective pedal or a badly worn cleat can make the shoe disengage from the pedal. Risk of accident!

To engage with the pedal is to turn it to the horizontal using the tip of the cleat (the plate on the sole of the shoe) and then rest your foot on it. Most step-in pedals are equipped with a double-sided lock-in mechanism, so that you can step on the pedal with either face up. The shoe engages with the pedal with a click which you will hear and feel clearly. With all commercially available systems the shoe is disengaged from the pedal by twisting the heel outward.

Lean against a wall or ask someone to hold you when you try to engage and disengage the shoe from the pedal.

Functional differences between the pedal systems concern the shape of the cleat, the release angle and the rigidity of the connection. Cyclists predisposed to knee trouble should choose a pedal system that has some "float", so that the heel can move sideways a little while the shoe is engaged with the pedal. Some step-in pedals have cleats embedded into the sole which is a great advantage, as it ensures stable walking.

An older system is the strap pedal system. With this kind of pedal the shoe tip is held by a bracket. A strap running over the bridge of the foot fixes the shoe.

#### **Adjustment and Maintenance**

Current pedal systems can show considerable differences in technical design. Nevertheless, there are some general rules for adjustment which apply to all of them.

- The cleat has to be fastened to the shoe in such a position that the ball of the foot comes to rest on the pedal axle.
- Your feet should assume a natural position when pedalling. For most people
  this means that the heels will point inward a little. Make sure the fastening
  bolts are properly tightened, as you will find it almost impossible to disengage
  your shoe from a loose plate!
- Adjust the required releasing force according to your needs. It is advisable to
  adopt a low releasing force setting to begin with. Turn the small Allen bolt and
  examine the change in releasing force when you engage and disengage the
  shoe from the pedal.
- Exposed springs and other components that attract dirt have to be cleaned and regreased regularly.
- Squeaking or creaking cleats can often be silenced by applying a little grease to the point of contact between cleat and pedal. These noises may also be signs of wear.
- Check the cleats regularly for wear, especially in case of plastic cleats.
- If your shoe wobbles on the pedal, the cleat or the sole of your shoes might be worn.









#### Note:

Before mounting the pedals, check the marking on the pedal axles first. "R" stands for right pedal and "L" for left pedal. Note that the left pedal has a left-handed thread that has to be tightened contrary to the direction you are accustomed to, i.e. anticlockwise.





## Danger:

Be careful while getting used to the brakes. Practise emergency stops in a place clear of traffic until you are comfortable controlling your STEVENS bicycle. This can save you from having accidents.



#### Danger:

Ensure that braking surfaces and brake pads are absolutely free of wax, grease and oil. Risk of accident!

#### **The Brake System**

Brakes are used for adjusting one's speed to the surrounding terrain and traffic. In an emergency situation, the brakes must bring the STEVENS bicycle to a halt as quickly as possible. In the event of such emergency braking, the rider's weight shifts forward abruptly, thus reducing the load on the rear wheel. On a grippy surface it is therefore more likely that the rear wheel will come up and that the STEVENS bicycle will overturn than that the tyres will lose grip. Such a problem becomes particularly acute when riding downhill. Therefore, in case of an emergency braking situation you must try to shift your weight back and down as far as possible.

Actuate both brakes simultaneously and bear in mind that due to the weight transfer the front brakes can achieve a higher braking force.

With **rim brakes** long lasting braking or permanent dragging of the brake pads can overheat the rim. This can affect the inner tube negatively or cause the tyre to slip on the inner rim. Sudden loss of pressure while cycling can result in a serious accident.

With **disc brakes** prolonged braking or permanent dragging of brake pads can overheat the brake system. This can result in a loss of braking force, even to the point of total brake failure, provoking serious accidents.

Therefore, check your riding manners and make it a habit to brake hard and then to open the brake again, whenever the road surface and the situation allows it. It is better to stop for a moment and let the rim cool down will the brake lever released rather than to risk anything.

#### **Functioning and Wear**

Actuating the hand lever on the handlebar or back-pedalling causes a stationary brake pad to be pressed against a rotating braking surface, and the resulting friction slows down the wheel. The rate of deceleration is not only determined by the force with which the brake pad is pressed against the braking surface, but also to a decisive degree by the coefficient of friction, which depends on the two materials that are rubbed against each other.

When water, dirt or oil gets in contact with one of the engaging surfaces, this changes the coefficient of friction. This is why brakes respond at a slight delay and less powerfully in wet weather. This applies in particular to rim brakes.

In order to maintain their effectiveness brakes need to be checked and readjusted from time to time.

#### **Rim Brakes (General)**

The friction generated by braking causes wear to the brake pads as well as to the rims. Frequent rides in the rain and soiling hasten wear on both engaging surfaces. Once the abrasion of the rim has reached a certain critical point, the rim may break under the tyre pressure. This can make the wheel jam or the inner tube burst, both of which can cause a fall!

Contact your STEVENS dealer and have the remaining thickness of the rims checked when you have worn through your second set of brake pads at the latest. The rim thickness can be checked by a specialist with special measuring instruments.

Some rims are provided with wear indicators. Once the abrasion of the rim has reached a certain critical point, the brake indicator becomes visible in form of small slots or a permanent strip or disappears (according to the model). In this case you should also go and see your STEVENS dealer at once and have your rim replaced.

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#### **Checking, Readjusting and Synchronizing V-Brakes**

Common V-brake designs have two brake arms mounted separately on either side of the rim. Actuating the brake lever creates a pull on the brake cable which draws the arms towards each other. On this occasion the brake arms turn slightly inwards around the suspension point, a friction of the brake pads being generated on the rim sides.



#### **Caution:**

When replacing any parts, be sure to only use parts that bear the appropriate mark and, to be on the safe side, original spare parts. Your STEVENS dealer will be pleased to help you.



#### Danger:

Wet weather reduces the braking effect and the road grip of the tyres. Be aware of longer stopping distances when riding in the rain, reduce your speed and actuate the brakes carefully.



#### Danger:

The assignment of brake lever to brake calliper can vary, e.g. left lever acts on front brake. Have a look at the bike card and check whether the brake lever of the front brake is on the side you are used to (right or left). If it is not, ask your STEVENS dealer to switch the brake levers before you set off for the first time.



#### Danger:

Damaged brake cables that are for example frayed should be replaced immediately, as they can otherwise fail in a critical moment, possibly causing a crash.



#### Danger:

Clean the brake pads at regular intervals.





#### **Functional Check**

- Check whether the brake pads are accurately aligned with the rims and still sufficiently thick. You can tell this by the grooves in the brake pads. If the pads are worn down, it is time to replace them.
- Furthermore, the brake pads should touch the rim with their front part first.
   At the moment of the first contact the rear part of the brake pad should be a millimetre away from the rim. Seen from the top the brake pads form a "V" with the trough pointing to the front. This V-shaped setting prevents screeching when the brakes are applied.
- When you pull the brake lever, both brake arms must contact the rim simultaneously.
- The brake lever must always remain clear of the handlebars. You should not be able to pull it all the way to the handlebars, even in the event of an emergency braking.
- Only a successful passing of all these points will ensure a correctly adjusted brake.



#### **Vertical Adjustment of the Brake Pads**

- Release the fastening bolt of the brake pad by one to at most two complete turns.
- Push the brake pad to the correct height, i.e. the brake pad must hit the rim
  with its entire surface. Make sure the brake pad is in parallel to the rim and pull
  the brake lever to fix the brake pads. Retighten the fastening bolt of the brake
  pad to the recommended torque value.



# Danger:

When replacing brake pads, be sure to only use marked brake pads matching your rim. Your STEVENS dealer will be pleased to help you. Ensure that braking surfaces are absolutely free of wax, grease and oil. Ask an expert to check the rims at the latest when you are through your second set of brake pads or when the wear indicators are visible. Worn down rims may make the inner tube burst and result in a fall! Ask your STEVENS dealer for help.

#### Synchronizing and Readjusting the Brakes

- For synchronizing the brake, almost all cantilever and V-brakes have a bolt on the side of one brake body to adjust the spring preload. Screw this bolt until the clearance between brake pad and rim is the same on either side.
- To readjust the brakes, release the knurled lock ring located at the point where the brake cable enters the brake lever on the handlebars.
- Unscrew the knurled, slotted adjusting bolt by a few turns. This shortens the free travel of the brake lever.
- Keeping the adjusting bolt fixed, tighten the lock ring against the brake lever mount. This prevents the adjusting bolt from coming loose by itself.
- Ensure that the slot of the bolt faces neither forward nor upward, as this would permit water or dirt to enter.









# Danger:

Adjusting the position of the brake pads relative to the rims requires a considerable degree of skill. Replacing and adjusting the brake pads is a job best left to your STEVENS dealer.



#### Danger:

Always test the brakes' function when stationary after adjusting them, making sure the brake pads engage fully with the rim when you pull them hard.







# **Checking and Readjusting Hydraulic Rim Brakes**

Hydraulic brakes are extremely powerful and require very little maintenance.

With hydraulic rim brakes, as well, the brake pads wear down and the lever travel increases. Most brake models are, however, fitted with a bolt or a small knob (TPA, Turbo Pad Adjuster, for tool less brake pad wear for Magura HS33) at the control unit, brake lever to compensate the wear.

Check the pads regularly for wear and alignment relative to the rim. Indicators, i.e. usually grooves in the pads, tell you whether the brake pads are worn down or not. If the pads are worn down to the bottom of the grooves, it is time to replace them.

Keep the brake callipers, especially the brake pad area, clean, as dirt can prevent the pads from travelling back in their rest position. Regularly check the hoses and connections for leaks.



# Danger:

Manufacturers of hydraulic rim brakes deliver their products with detailed instructions. You find them on our website at www.stevensbikes.de/manual. Read them carefully before removing the wheel or doing any maintenance work. Misuse can lead to brake failure or accidents!



# Danger:

Open connections and leaky hoses result in a severely reduced brake performance. If you find leaks in the system or bent hoses, contact your STEVENS dealer. Risk of accident!

# **Hydraulic Disc Brakes (General)**

The most striking feature of hydraulic disc brakes is that they combine outstanding braking effect with good weather resistance. They respond a lot faster in wet conditions than rim brakes do and achieve their normal high braking power within a very short time. They also require fairly little maintenance and do not wear down the rims as rim brakes do.

One drawback of disc brakes is that they tend to be noisy.

The brake levers can be adjusted to the size of your hands, too, allowing you to operate them with optimal effectiveness.

In most cases this is done by means of a small Allen bolt located directly at the hand lever. Keep in mind that you may need to readjust the brake pads, as well. Be sure to read the operating instructions of the brake manufacturer on our website at www.stevensbikes.de/manual







### Danger:

Keep oil or cleaning agent off the brake pads. If, despite all precaution, it does happen, you have to replace the brake pads, as the functional condition of soiled brake pads can no longer be restored.



#### **Caution:**

Manufacturers of hydraulic disc brakes deliver their products with detailed operating instructions. You find them on our website at www.stevensbikes.de/manual. Be sure to read them carefully before you dismount a wheel or do any maintenance work.



#### Note:

New brake pads have to be bedded in before they reach their optimal braking performance. For this purpose, accelerate the bicycle 30 to 50 times to around 30 km/h (18 mph) and bring it to a halt each time by braking forcefully. This procedure is finished, when the force required at the lever for braking has stopped decreasing.



# Danger:

Disc brakes get hot in use. For this reason do not touch the brakes directly after stopping, especially after a long downhill ride.



#### Note:

Under different conditions, e.g. in wet conditions, disc brakes tend to be noisy. These noises are normal and have technical reasons. As long as the operativeness of the brake is not impaired there is no reason for concern.



#### **Checking and Readjusting Hydraulic Disc Brakes**

Check the hoses and connections regularly for leaks while pulling on the lever. If hydraulic oil or brake fluid leaks out, you should see your STEVENS dealer immediately, as a leak can render your brakes ineffective.

Make sure you have always a clearly defined pressure point when pulling the brake lever. If this is not the case, stop cycling and contact a STEVENS dealer immediately. The hydraulic disc brakes from Magura and Shimano have a fully automated brake pad wear adjuster. It ensures that the brake lever travel does not change with the wear of the brake pads and there is therefore no need to readjust the brake. Check the thickness of the brake pads regularly. The overall thickness of the pads should not be less than 2.5 mm.

Check the pads for wear by inspecting the thickness of the braking material attached to the backing plate within the brake calliper or view through the window on the upper side of the calliper. If there is approximately 1 mm of material left on each brake pad, remove the pads according to the manufacturer's instructions on our website at www.stevensbikes.de/manual and check them thoroughly.

With a thickness of 0.5 mm (measured without holder) the brake pads have to be replaced at the latest.

For more information on the respective brake system see: www.magura.com
https://si.shimano.com
www.sram.com
www.tektro.com
https://trpcycling.com



# Danger:

When you state a changed pressure point when braking forcefully or when you have to pump with the lever repeatedly to achieve a braking effect, stop cycling and contact your STEVENS dealer.



# Danger:

Open connections and leaky hoses result in a severely reduced brake performance. If you find leaks in the brake system or bent hoses, contact your STEVENS dealer. Risk of accident!



# Danger:

Disc brakes can only be mounted on bicycles with a solid disc brake mount. Do not use an adapter for mounting.



# Danger:

Do not open the brake hoses. Leaking out brake fluid is very unhealthy and aggressive to the coating.

#### **Back-Pedal Brakes**

This type of brake is used on city bikes and kids' bicycles. The brake mechanism of this brake is fully enclosed and mostly combined with a multi-speed hub.

This back-pedal brake is operated by pedalling backward. For maximum braking force, step on one of the pedals in its rearmost position with the cranks horizontal. With Sram models braking force is increased when you have switched to a lower gear beforehand.

With back-pedal brakes the chain tension has to be checked regularly. You should not be able to pull the chain upwards and downwards by more than two centimetres in the middle between sprocket and chainring.





# Danger:

Check regularly whether the brake torque arm is firmly attached to the frame or fork.





# **The Gears**

The gears of the STEVENS bicycle serve to adjust the gear ratio to the terrain you are riding on and the desired speed. The gears do not reduce the physical work to be performed which remains the same with the identical distance to be performed at identical speed, but the pedalling force per crank rotation. That means: A low gear (where in the case of derailleur gears the chain runs on the small chainring and a large sprocket) allows you to climb steep hills with moderate pedalling force. You must, however, pedal relatively fast.

High gears (large chainring, small sprocket) are for riding downhill. Every turn of the pedals takes you many metres forward at correspondingly high speed.

To ride economically you frequently have to shift gears. As with a motor vehicle, your "engine" wants to be kept within a certain speed range, if it is to give its best performance. On level ground your pedalling speed, also referred to as cadence, should be higher than 60 strokes a minute. Racing cyclists pedal at a rate between 90 and 110 strokes a minute on level ground. When climbing uphill, your cadence will naturally fall off somewhat. Your pedalling should, however, always remain fluid.

Finely graduated adjustments as well as an easy operability of modern bike gears are the best preconditions for an efficient riding. In addition, it reduces chain and sprocket wear as well as the strain on your knee joints.

#### **Derailleur Gears**

Derailleur gears are currently the most effective type of power transmission on bicycles. About 97 to 98 percent of the pedalling force performed is transmitted to the rear wheel with well-maintained and greased derailleur gears.

With specially designed sprocket teeth, flexible chains and clear-cut lever positions, shifting gears has become very easy. Most systems have an indicator on the handlebars showing the currently used gear.



Be sure to always wear straight cut trousers or use trouser clips or the like to make sure your trousers do not get caught in the chain or the chainrings thus provoking a fall.

#### **Functioning and Operation**

Gear shifting is initiated by actuating a shifter, a combined brake and gear lever unit or by a short turn of the wrist with the twist grip.

#### **Push-Button Shifters**

Shifters in form of push-button shifters work in different ways. With most of them pressing the large shifter moves the chain to the larger chainrings. The small shifter located in front of the handlebars, from the rider's viewpoint, moves the chain towards the smaller chainrings.

This means that any gear shift made by pushing the large thumb shifter on the right produces a lower gear, while pressing the large thumb shifter on the left moves the chain to the larger chainring, thus producing a higher gear.

With the Shimano inverse technology this gear shift pattern for the rear derailleur of the Rapidfire finger shifter can be reversed and actuating the right thumb push-button shifts on a small sprocket with a heavier gear ratio.

The Shimano Rapidfire Plus shifters work according to the usual Rapidfire principle (see above), they offer however the possibility to operate the front "index finger lever" with the thumb initiating the same gear shifting action as with the index finger operation. The chain moves to the small chainring or small sprockets. You can therefore shift either with the thumb and the index finger or only with the thumb

In addition, you can shift through several gears with one lever movement, i.e. a short lever movement shifts from one gear to the next gear, whereas a longer lever travel shifts over the next two gears.

#### **Twist Grip Shifters**

The principle of twist grips is different. Twisting the right-hand grip towards you moves the chain to a larger sprocket giving you a lower gear, while the same movement on the left produces a higher gear by moving the chain to the larger chainrings.

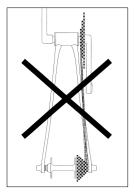
The shifter transmits the shifting command to the rear derailleur via Bowden cable. Then the rear derailleur swivels, causing the chain to climb onto the next sprocket. It is therefore important when changing gears to continue pedalling smoothly without force as long as the chain is moving between sprockets or chain-rings! On today's bicycles there are, however, special guides in the chainrings which allow for changing gears under force. Shifting gears under load shortens, however, the service life of your chain considerably.

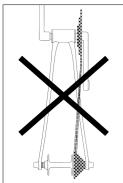
Furthermore, this can lead to a chain-suck, i.e. the chain can get jammed between chainstay and chainrings. Therefore, avoid shifting gears while pedalling with force, in particular when changing gears with the front derailleur.











Derailleur gears always work according to the following principle:

Large front chainring – heavy gear – bigger gear ratio Small front chainring – easy gear – smaller gear ratio Large rear sprocket – easy gear – smaller gear ratio Small rear sprocket – heavy gear – bigger gear ratio

Normally, the shifters are mounted as follows: Right-hand shifter – rear sprockets Left-hand shifter – front chainrings

Modern city/trekking bicycles can have up to 30 gears. As there are, however, overlapping ranges, actually 15 to 18 gears are usable.

It is not advisable to use gears which involve an extremely oblique run of the chain, as this reduces power transmission efficiency and hastens wear of the chain. An unfavourable run of the chain is when the smallest chainring is used with one of the two or three outermost (smallest) sprockets or when the largest chainring is used with one of the inmost (largest) sprockets.



# Danger:

Practise shifting gears in a place free of traffic until you are familiar with the functioning of the different levers or twist grips. If you do so in road traffic, your attention might be drawn off from possible risks.



# Danger:

Shifting gears under load, i.e. while pedalling hard, can make the chain slip. At the front derailleur the chain may even slip off the chainrings when shifting under load. Furthermore, this can lead to a chain-suck, i.e. the chain can get jammed between chainstay and chainrings. This can result in a fall. This will at least shorten the service life of the chain and damage the frame.



# Note:

Avoid gears which involve an extremely oblique run of the chain.

#### **Checking and Readjusting the Gears**

The derailleur gears of your the STEVENS bicycle were carefully adjusted by your STEVENS dealer before delivery. The Bowden cables may, however, give way or compress the cable housings on the first kilometres making gear changing imprecise. This will result in the chain not wanting to climb onto the next smaller sprocket.

#### **Rear Derailleur**

In the case of imprecise shifting increase the tension of the Bowden cable by turning the adjusting bolt through which it passes at the entry to the shift lever or rear derailleur. To do so, shift to the smallest sprocket and turn the clicking bolts anticlockwise in half turns until the cable is slightly tensioned.



After tensioning the Bowden cable check whether the chain readily climbs onto the next larger sprocket. To find out you either have to turn the cranks by hand or ride the STEVENS bicycle.

If the chain readily climbs onto the next larger sprocket, check whether it also readily shifts to the small sprockets when you change to a higher gear. You may need several tries to get the derailleur system properly adjusted.

#### **Adjusting the Limit Stops**

The rear derailleur is equipped with limit screws which limit the swivel range of the rear derailleur, thus preventing the rear derailleur and chain from colliding with the spokes or the chain from dropping off the smallest sprocket. The limit screws are adjusted by your STEVENS dealer. They do not alter their position during normal use. After a fall you should however always check the proper adjustment.

Shift with the right shifting lever to the highest gear. The inner cable is then totally relaxed and the chain will run on the smallest sprocket. Look from the rear of the bicycle at the cassette and check whether the teeth of the smallest sprocket and the teeth of the guide pulley are all in a perfectly vertical line.





#### **Caution:**

If your STEVENS bicycle has tipped over or the rear derailleur received a blow, the rear derailleur or its mount may be bent. It is advisable to check its range of movement and readjust the limit screws, if necessary, after such an incident or after mounting new wheels on your STEVENS bicycle.



# **Caution:**

Adjusting the front and rear derailleur accurately is a job for an experienced mechanic. Also observe the operating instructions of the brake manufacturer on our website at www.stevensbikes.de/ manual. If you have any problems with the gears, contact your STEVENS dealer.



#### **Caution:**

Always check after an accident whether the quide plates of the front derailleur are still parallel to the chainrings!



#### Danger:

Adjusting the front derailleur is a very delicate iob. Improper adjustment can cause the chain to jump off, thus interrupting suddenly the drive force. There is the risk of accident!

If necessary, correct the position by means of the limit screws. The limit screws on rear derailleurs are often marked "H" for high gear and "L" for low gear. In this case high gear stands for high transmission ratio, i.e. with the chain running on the smallest sprocket.

If the screws are not marked, you will have to find out by trial and error. Turn one of the screws counting the number of turns and watch the rear derailleur. If it does not move, you are turning the wrong one. Turn back the counted rotations to find its original position.

Turn the screw clockwise to shift the rear derailleur towards the wheel and anticlockwise to shift it away from the wheel.

Continue by shifting the rear derailleur to the largest sprocket. Be careful as you do so, as not to let the rear derailleur collide with the spokes. When the chain runs on the biggest sprocket, see whether you can take the rear derailleur even further by moving the shift lever to the end of its travel. Then press the rear derailleur further towards the spokes by hand. Spin the wheel. If the derailleur cage moves towards the spokes or if the chain begins to move beyond the largest sprocket, the derailleur movement range needs to be limited. Turn the limit screw marked "L" clockwise until the rear derailleur is clear of the spokes.

#### **Front Derailleur**

Adjusting the front derailleur is a delicate job. The range within which the front derailleur keeps the chain on the chainring without itself touching the chain is very small. It is often better to let the chain drag slightly on the derailleur than to risk having the chain fall off the chainring, which would block the drive. The swivelling range is reduced in the same way as with the rear derailleur, i.e. by turning the limit screws marked "H" and "L". This is a job you should leave to your STEVENS dealer.

As with the rear derailleur, the cable of the front derailleur is subject to lengthening and hence to reduced precision in gear changing.

If necessary, shift to the small chainring and increase the tension of the Bowden cable by turning the adjusting bolt through which it passes at the entry to the gear shifter.







# Danger:

Be sure to go on a test ride in a place free of traffic, after adjusting the gears of your bicycle.

# **Multi-Speed Hubs**

One of the advantages of multi-speed hubs is their enclosed design which prevents them from being soiled. Another advantage is the simple operation, i.e. all gears can be shifted through with one gear shifter. The chain is not involved in the gear shifting, it is only important for the force transmission and always runs on the same chainring/sprocket.



Due to these favourable factors, the chain lasts a lot longer than with derailleur gears, provided regular care. Multi-speed hubs are available in combination with freewheel and rim brake and with integrated back-pedal brakes. The Rohloff gear hub and Shimano Alfine can also be combined with disc brake.

#### **Functioning and Operation**

Multi-speed hubs are equipped with a twist grip or thumb shifter for changing gears as well as with an indicator showing the current gear. Depending on the hub manufacturer you can either continue pedalling during the shifting process or the STEVENS bicycle must roll without pedalling. For more information read the operating instructions of the gear manufacturer or ask your STEVENS dealer. Always make sure the shifting process makes as little noise as possible. Also observe the operating instructions of the gear manufacturer on our website at www.stevensbikes.de/manual



#### Readjusting

The different gear steps are also adjusted via the cables. The systems of different manufacturers differ a lot. The adjusting mechanism is mainly located at the hub or at the gear shifter. There are two (red) marks which have to be brought into alignment. Therefore carefully read the operating instructions of the gear manufacturer on our website at www.stevensbikes.de/manual. In case of inquiries ask your STEVENS dealer for advice.



# Danger:

Regularly check the reliable fit of the bolted connection of the hub or back-pedal brake support at the frame (brake torque arm).



# Danger:

If your STEVENS bicycle has hydraulic disc brakes, do not place it upside down for repair purposes, i.e. handlebar and saddle on the ground. This would render the brake ineffective.



#### **Caution:**

When working in the area of the rear wheel hub and its gear mechanism, be aware of the risk of crushing the fingers. Therefore, do not turn the cranks during the work or do not push your STEVENS bicycle backwards.



# Danger:

Make yourself familiar with the gears on a road with little traffic or in an open area. Practise, above all, using the brakes. If you do so in road traffic, practising shifting and braking could distract your attention too much from possible risks.







# Danger:

Check all bolts after 100 km (60 miles) of riding or alternatively after 5 hours of use.



### Danger:

An unusually low tension can make the belt skip and thus affect the performance. Too high a tension of the belt will render the drive system sluggish and unnecessarily increase the wear of the belt and the bearings.



# Caution:

A too tight chain or belt tension will severely increase the wear of chain or belt as well as chainrings or belt sprocket.

#### **Checking the Chain Tension**

In the case of multi-speed hubs which are not equipped with a sprung load chain tensioner the tension of the drive chain has to be checked occasionally, i.e. every 1.000 km (600 miles) according to use. You should not be able to pull the chain upwards and downwards by more than two centimetres in the middle between sprocket and chainring.

#### Checking and Readjusting the Chain or Belt Tension on Wheels with **Adjustable Drop-Outs**

#### Checking

Check the chain tension. You should not be able to pull the chain upwards and downwards by more than two centimetres in the middle between sprocket and chainring.

Check the belt tension by using the Gates Carbon Drive™ Mobile-App. You find more information at:

https://de.gatescarbondrive.com/resources/handling-and-tension

#### Readjusting

There are two different mechanisms to adjust the chain or belt tension.

On most STEVENS bicycles you can readjust the chain or belt tension by means of two forward-facing adjusting bolts above and in front of the two wheel axle mounts.

Start by loosening the two outer fastening bolts on the left and right by using a 4 mm Allen key. You do not have to unscrew the bolts completely, one or two turns will do.

Subsequently, screw in the forward-facing adjusting bolts on the right and left by one turn clockwise respectively by using a 4 mm Allen key. In doing so, hold the bolt nut located in the frame recess by using an 8 mm open-end wrench.

Check the tension again and screw in the bolt by another turn, if necessary. Make sure you screw in both adjusting bolts by the same number of turns, otherwise the rear wheel will be out of alignment.



# Danger:

Insufficient chain tension can make the chain come off, thus resulting in an immediate loss of pedalling resistance. The loss of drive resulting thereof can result in a loss of control and in an accident with serious consequences.

After having adjusted the chain or belt tension properly tighten the four fastening bolts to a torque of 10 Nm by using a torque wrench.

To adjust the chain or belt tension of the other mechanism the bolted connections of the rear wheel axle have to be loosened on both sides. Subsequently, pull the rear wheel evenly by hand towards the rear and retighten the rear wheel axle on both sides.

Make sure that the rim and the tyre are centred between the rear stays of the rear frame.

After having adjusted the chain or belt tension properly tighten the bolts of the rear wheel axle bolts to a torque of 30–45 Nm by using a torque wrench.

#### The Pinion Gear Box

The Pinion 18-speed gear box of your STEVENS bicycle is directly on the frame. There is only one sprocket with freewheel at the rear wheel. Keep in mind that this is the only way you can operate the Pinion. The combination with a fixed hub, derailleur gears, multi-speed hubs or a hub with back-pedal brake is not provided. Other combinations than those built in by the manufacturer can result in failure and accidents.

All 18 speeds can be shifted through with a twist grip. The speed indicator in form of arrows on the grip and numbers on the twist grip indicate the chosen speed. In principle, you can shift through several gears with one action.

Gear shifting is possible at a standstill or while turning the cranks backwards and is good for the Pinion gear box.

Shifting to the higher gears under load is also possible. It is, however, better to shortly reduce the pressure on the pedal. In particular, when shifting from the 6th to the 7th and from the 12th to the 13th gear you have to reduce the force on the pedals deliberately and for a longer period of time. When shifting in the 7th and 13th gear you may possibly hear a click, which is however uncritical.

Downshifting under load is possible to a limited extent and not very good for the service life of the gear box. Therefore, reduce the pressure on the pedal until the next gear is properly engaged. Noisy gear shifts indicate too much pedalling force during shifting.

# Adjusting the Gears

Your Pinion gear box was properly adjusted before delivery. The cables may however lengthen over time. As a consequence the gear indicator may become imprecise. This can be corrected with the adjusting screws on both Bowden cables directly on the twist grip. For more information read the Pinion user manual on our website at www.stevensbikes.de/manual



#### Note:

Adjusting the chain or belt tension is only necessary on bikes with multi-speed hubs, as the chain on a bicycle with derailleur gears is automatically tensioned by the rear derailleur.







#### **Changing the Gear Ratio**

If the gear ratio of your STEVENS bicycle is not suitable for the terrain you are riding on, ask your STEVENS dealer to change it. Both, the front chain ring as well as the rear sprocket can be changed. On this occasion the chain or belt length must be adjusted or readjusted, too. Discuss your wishes with your STEVENS dealer.

#### **Chain Tension (Models with Chain Tensioner)**

Some bicycle models have a Pinion chain tensioner. If your chain touches the frame when riding on a rough surface or during compression, the chain tension on the Pinion chain tensioner can be increased. Ask your STEVENS dealer to do this job or read the respective chapter in the Pinion user manual on our website at www.stevensbikes.de/manual

#### Maintenance

The Pinion gear box is mainly maintenance-free. On the occasion of the annual service your STEVENS dealer will carry out an oil change. Furthermore, Pinion recommend that you have the cranks dismounted, regreased and remounted with an offset once a year. Therefore, ask your STEVENS dealer in time to carry out the scheduled service.



# Danger:

If you want to do any maintenance work on your Pinion gear box, you should have a certain degree of manual skill, mechanical practice and suitable tools.



#### **Caution:**

Do not combine the Pinion gear box with derailleur gears or multi-speed hubs.



#### Note:

For more information see the Pinion user manual on our website at www.stevensbikes.de/ manual

#### **Chain Maintenance**

It's all that simple: Proper lubrication makes for enjoyable riding. What counts is, however, not the quantity, but the distribution and regular application of lubricant.

- Clean your chain from dirt and lubricant with an oily rag from time to time.
   There is no need to use special degreasers.
- Having cleaned the chain as thoroughly as possible, apply chain oil, wax or grease to the chain links.
- To lubricate the chain, drip the lubricant onto the rollers while you turn the crank. Once this is done, turn the chain a few more times. Let the STEVENS bicycle then rest for a few minutes so that the lubricant can disperse in the chain.
- Finally rub off excess lubricant with a rag so that it does not spatter around or attract dirt during riding.





For the sake of the environment, only use biodegradable lubricants. Bear in mind that some of the lubricant can end up on the ground, especially in wet conditions.



#### Danger:

Keep cleaning agent or lubricants off the rotors and the brake pads. In case this happens nevertheless, clean the rotor immediately with pure isopropyl alcohol. Once a brake rotor is soiled, it will never be as effective as the original one.

With **belt drive** a carbon drive belt replaces the otherwise usual chain.

Thanks to the carbon fibre surface, the belt remains free of dirt. Therefore, it will do to clean the belt with water, if necessary. The carbon belt must or may not be lubricated or oiled.







# Danger:

An improperly joined, insufficiently locked or heavily worn chain can break and result in a fall. Have the chain replaced by your STEVENS dealer.

#### **Chain Wear**

Although the chain is one of the wearing parts of your bicycle, there are still ways of influencing its service life. Make sure the chain is lubricated regularly, especially after riding in the rain. Try to only use gears which run the chain in the straightest line between the sprockets and chainrings and get in the habit of high cadence pedalling. Chains running on derailleur gears are often worn out as early as after about 1,000 to 3,000 km (600 to 1,800 miles). Heavily stretched chains impair the operation of derailleur gears. Cycling with a worn-out chain also accelerates the wear of the sprockets and chainrings. Replacing these components is relatively expensive compared with the costs of a new chain.

It is therefore advisable to check the condition of the chain at regular intervals. For this purpose shift the chain on the large chainring. Take the chain between your thumb and index finger and try to lift it off the teeth. If you can lift it off clearly, it is seriously lengthened and probably in need of replacement.

Your STEVENS dealer has accurate measuring instruments for precise chain inspection. Replacing the chain should be left to an expert, as some of the modern chains are not equipped with a master link. Instead they often have a continuous design and require special-purpose tools for mounting. If you need help, ask your STEVENS dealer to select and mount a chain appropriate to your gear system.

### The Wheels

The wheels of your bicycle create the contact to the road or track you are riding on. They are subject to considerable stress through the weight of rider, the luggage and through bumpy road surfaces or ground. Although the wheels are manufactured with great care and delivered accurately trued, this does not prevent the spokes from losing a little tension on the first kilometres. Ask your STEVENS dealer to true up the wheels after a short "break-in" period of about 100 to 300 kilometres (60 to 180 miles) already. Check the wheels regularly after this "break-in" period. It will rarely be necessary to tighten the spokes.

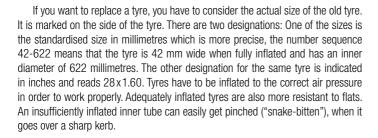


The wheel consists of hub, spokes and rim. The tyre is mounted onto the rim so that it encases the inner tube. There is a rim tape running around the base of the rim to protect the sensitive inner tube against the spoke nipples and the edges of the rim base, which are often sharp.

# Tyres, Tubes, Rim Tapes, Valves, Inflation Pressure

The tyres provide grip and traction on the road which is absolutely necessary for braking, accelerating and taking turns.

In addition, they provide smooth running and riding comfort by absorbing inferior shocks. The cross-country mobility or the inclination of the road depends on the nature of the tyre carcass and the tyre tread. As some of the requirements are mutually exclusive, there are many different tyre types for different uses. Ask your STEVENS dealer to inform you about the best tyre for you.



The air pressure recommended by the manufacturer is given on the side of the tyre or on the type label. The lower of the two pressure specifications makes for better cushioning and is therefore best for off-road cycling. Rolling resistance decreases with growing pressure, but so does comfort. A high tyre pressure is therefore most suitable for riding on tarred roads. A higher pressure hardly means a lower resistance, it only makes the tyre harder.



#### Conversion table for tyre pressure psi in bar

psi	bar
45	3.1
50	3.4
55	3.8
60	4.1
65	4.5
70	4.8
75	5.2
80	5.5
85	5.9
90	6.2
95	6.6
100	6.9







Ask your STEVENS dealer for advice. Inflation pressure is often given in the old system of units, i.e. in psi (pounds per square inch). In the table the common pressure values are converted. The tyre and rim alone are not able to hold the air. Therefore, an inner tube has to be placed inside the tyre to retain the air pressure. The tube is pumped up via a valve.

Exceptions to this are the tubeless wheel/tyre systems. With these systems rim and tyres are tight without inner tube (tubeless/UST tyres) or sealed with specific rim tapes and/or sealed with liquid sealants (Tubeless-Ready/NoTubes system).

Read the respective instructions before doing any work on such tyres or contact your STEVENS dealer.

There are three valve types in general use on bicycles:

- Dunlop or Woods valves, the usual valves
- Sclaverand or Presta valves: This type is meanwhile used on almost all types
  of bicycles. It is designed to withstand extremely high pressures
- Schrader or car valve: This is an adapted car tyre valve.

These three valve types are fitted with a plastic cap to protect them from dirt. The car valve can be inflated with a suitable pump directly after removing the protective cap.

With **Presta valves** you first have to undo the small knurled nut a little and press it in carefully until air starts to escape. With this valve type it may happen that the valve body is not screwed in properly and that air leaks out slowly. Check the seat of the valve body in its stem.





Tyres with **car valves** can conveniently be inflated at car filling stations with a compressed air dispenser. A compressed air dispenser must be used very carefully as you may otherwise overinflate the tyre. It might burst! To let out air press the needle in the centre of the valve by using e.g. a spanner/key.



Treat your tyres well, in particular avoid sharp edges where possible! Never inflate your tyres beyond the maximum permissible pressure, otherwise they might burst or come off the rim during the ride. Risk of accident!

Hand pumps are often unsuitable for inflating tyres to the necessary pressure. A better choice is a stand or foot operated pump equipped with a manometer which enables you to check the pressure at home.

Your STEVENS dealer has adapters for all valve types. They allow you to inflate any type of inner tube at the filling station.

Replace tyres with a worn tread or brittle or frayed sides. Dampness and dirt penetrating the tyre can cause damage to its inner structure. Replace spoilt rim tapes immediately. In the extreme case, the inner tube may suddenly burst!

# **Rim Trueness, Spoke Tension**

The spokes connect the rim to the hub in the middle of the wheel. An even spoke tension makes for the true running of the wheel. If the tension of individual spokes changes, e.g. as a result of riding too fast over a kerb or due to spoke breakage, the tensile forces acting on the rim become unbalanced and the wheel will no longer run true.

The functioning of your STEVENS bicycle may even be impaired before you notice the wobbling appearance of a wheel that has gone out of true.

With rim brakes the sides of the rims also serve as braking surfaces. An untrue wheel can impair the braking effect.

It is therefore advisable to check the wheels for trueness from time to time. For this purpose lift the wheel from the ground and spin it with your hand. Watch the gap between rim and brake pad or, in the case of disc brakes, between frame and rim or tyre. If the gap varies by more than a millimetre, you should ask a skilled mechanic to true up the wheel. Poor concentricity can also be an indication of laterally burst tyres, broken axles or torn spokes.



#### Danger:

Always ride your bicycle with the prescribed tyre pressure and check the pressure at regular intervals.





# Danger:

Loose spokes must be tensioned at once. Otherwise the load on the other spokes and the rim will increase.



#### Note:

Truing wheels is a difficult job which you should definitely leave to your STEVENS dealer!



#### Danger:

Do not ride with untrue wheels. In the case of extreme side-to-side wobbles, the brake pads can miss the rim and get caught in the spokes! This normally results in an immediate blocking of the wheels. Risk of accident!





# ٨

Never ride a STEVENS bicycle without having checked first whether the wheels are securely fastened. Risk of accident!

Danger:



# Danger:

With an insufficiently closed quick-release the wheel can come loose, thus creating a serious risk of accident!



#### **Caution:**

Be sure to lock the wheels fastened with quick-releases together with the frame to an immovable object when parking the STEVENS bicycle.

# **How to Use Quick-Releases**

Most STEVENS bicycles are equipped with quick-releases to ensure fast adjustments, assembly and disassembly. Be sure to check whether all quick-releases are tight before you set off on your STEVENS bicycle. Quick-releases should be handled with greatest care, as they directly affect your safety.

Practise the proper use of guick-releases to avoid any accidents.

Quick-release mechanisms essentially consist of two operative elements:

- 1. The hand lever on one side which creates a clamping force via a cam when you close it.
- 2. The tightening nut on the other side with which the preload on the threaded rod (quick-release axle) is set.







# Danger:

Do not touch the rotor directly after having stopped, e.g. after a long down-hill ride, you may burn your fingers! Always let the rotor cool down before opening the quick-release.



# Danger:

Make sure the levers of both wheel quick-releases are always on the side opposite to the chain. This will help you to avoid mounting the front wheel accidentally the wrong way round. On STEVENS bicycles with disc brakes and quick-releases with 5-mm-axle, it may be reasonable to mount the quick-release with the levers on the side of the chain drive. This would help you not to come into contact with the hot rotor and prevent you from having your fingers burnt. If you are in doubt or if you have any questions, contact your STEVENS dealer.

#### **How to Fasten Components Securely with a Quick-Release**

Open the quick-release. The marking "Open" on the lever should become visible now. Make sure the component to be fastened is in the accurate position.

For more information see the chapter "Adjusting the STEVENS Bicycle to the Rider" and "The Wheels" further below as well as the instructions of the component manufacturers.

Move the lever back, as if to close it. Now you should be able to read "Close" on the outside of the lever. When you start closing the lever you should feel virtually no resistance with your hand until the lever is at a right angle to the frame/fork.

When continuing to close the lever the resistance you feel should increase significantly and towards the end even more strength is required to close the lever. Use the ball of your thumb to push it in all the way while your fingers pull on an immovable part, such as the fork or the rear stay, but not on a rotor or spoke.

In its end position, the lever should be at a right angle to the quick-release axle, i.e. it should not stick out. The lever should lie close to the frame or the fork so that it cannot be opened accidentally. Make sure, however, that the lever is easy to handle for an actually quick use.

To check whether the lever is securely locked apply pressure to the end of the hand lever and try to turn it while it is closed. If you can turn the lever around, open it and increase the preload. Screw the tightening nut on the opposite side clockwise by half a turn. Close the quick-release and check it again for tightness.

Finally lift the bicycle a few centimetres so that the wheel no longer touches the ground and slightly hit the tyre from above. If it is properly fastened, the wheel will remain firmly fixed in the drop-outs of the frame or fork without producing any rattling.

If your seat post is equipped with a quick-release mechanism, check whether the saddle is firmly fixed by trying to twist it relative to the frame.



#### **Caution:**

If you have hub dynamos, insert the connector into the respective socket immediately.



#### Note:

To be on the safe side you can replace the quick-releases by special locks. They can only be opened and closed with a special, coded key or an Allen key. If you are in doubt or if you have any questions, contact your STEVENS dealer.





















# **Thru Axles**

Thru axles are mounted in almost all fields when STEVENS bicycles are exposed to high loads, i.e. when riding cross-country, all mountain, enduro as well as in the field of road racing, cyclocross, electric-assisted bikes and allround. They provide suspension forks with a suitable stiffness.

#### **Useful Information for Mounting Wheels with Thru Axles**

There is a wide range of thru-axle systems available now. Some systems are tightened with quick-releases. Other systems require special tools for assembly or disassembly.

Check the fixing after the first one to two hours of use and subsequently every 20 hours of use.

To dismount the wheel, open the quick-release of the axle at the fork. Once it is open the thru axle can be loosened and the axle can be fully removed from the hub.

If you are in doubt or if you have any questions, contact your STEVENS dealer.



# **Caution:**

Check the thru axle fixing after one to two hours of use and subsequently every 20 hours of use.



# Note:

Before mounting or replacing a fork/wheel combination with thru axle system, be sure to read the instructions of the respective suspension fork or wheel manufacturer first.



# Danger:

Improperly mounted wheels may throw you off your bicycle or result in serious accidents! Ask your STEVENS dealer to show you how to handle the thru axle type you have.



#### Note:

Before removing the wheel or doing any maintenance work, be sure to read the operating instructions of the fork, thru axle and wheel manufacturers first!



# **Caution:**

To mount the axle only use the tools recommended by the manufacturer. Make it a rule to use a torque wrench. Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Do not exceed the maximum torque value indicated by the manufacturer! You find them on the components themselves and/or in the chapter "Recommended Torque Settings". A too tight fixing of the axle can damage the axle or the fork leg.

# **Repairing Punctures**

Tyre punctures can happen to any cyclist. As long as you have the necessary tools for changing tyres and tubes and a spare tube or a tyre repair kit, this need not mean the end of your cycle tour, however. For bikes with quick-releases all you need are two tyre levers made of plastic and a pump; if your wheels are secured with nuts you also need a suitable wrench for removing the wheel.

#### **Wheel Removal**

If your bicycle has **cantilever brakes** and V-brakes you first have to unhook the brake cable from the brake arm. To do this grip around the wheel with one hand and press the brake pads and arms together. In this position it should be easy to disengage the usually barrel-shaped nipple or, in the case of V-brakes, the outer cable.



In the case of **drum**, **back-pedal brakes** and **multi-speed hubs** release the torque arm supporting the drive and brake forces to the frame.

If you have **disc brakes** and dismount the wheel for the first time, check the exact position and condition of the brake pads and/or wear indicators (ear or nose-shaped metal protrusions). This will help you to verify subsequently, whether the brake pads are still in the proper position after dismounting. Open the quick-release of the wheel, as usually. Compared to all other brake systems the disc brake does not interfere with the removal of the wheel; the wheel can immediately be removed from the drop-outs. Do not activate the brake lever as long as the wheel is dismounted; this would change the position of the brake pads. This can make the brake drag along the disc after the remounting.









#### Note:

Insert the transport locks in the brake callipers of the disc brake when you have dismounted the wheel.





If you have **derailleur gears**, you should shift the chain to the medium or small chainring or to the smallest sprocket before removing the wheel. This shifts the rear derailleur right to the outside where it does not interfere with the removal of the wheel and the chain tension is not too high.

- Open the hex nut or the quick-release, as described in the chapter "Wheel
  Fastening with Quick-Releases". If you cannot remove the wheel after
  releasing the lever or nut, it is probably still being held in place by drop-out
  catches. These are either tabs at the drop-outs or metal securing devices
  reaching into a recess of the drop-out. In these cases, just release the
  quick-release adjusting nut by a few turns and slip the wheel past the catch.
- You will find it easier to remove the rear wheel, if you pull the rear derailleur rearwards a little.
- Lift the STEVENS bicycle off the ground and give the wheel a gentle tap with your hand so that it drops out.



# Danger:

Do not file off the dropout catches!



#### Danger:

Never ride a STEVENS bicycle without having checked first whether the wheels are securely fastened! A wheel that comes loose during the ride will throw you off your bicycle!



#### Caution:

Do not activate the brake lever after removing a wheel when your STEVENS bicycle has hydraulic brakes.



# Danger:

Make sure the levers of both quick-releases are always on the side opposite the chain drive. This will help you to avoid mounting the front wheel the wrong way round. In the case of disc brakes we recommend for a reliable clamping that you position the quick-release on the side of the chain drive.



#### Note:

Before removing a wheel read the chapters "Wheel Mounting" and "How to Use Quick-Releases". If you are in doubt or if you have any questions, contact your STEVENS dealer.



#### Note:

Be sure to lock the wheels fastened with quick-releases together with the frame to an immovable object when parking the STEVENS bicycle.

#### Tyre Removal

- Screw the valve cap and the fastening nut off the valve and deflate the tyre completely.
- Press the tyre over its entire circumference from the sides towards the centre
  of the rim. This will ease the removal.
- Apply the tyre lever to one bead of the tyre opposite the valve and lever the tyre
  out of the rim in this area. Hold the tyre lever tight in its position.
- Slip the second tyre lever between rim and tyre at a point about 10 centimetres beyond the first one and lever the next portion of the bead over the edge of the rim.
- After levering a part of the tyre bead over the edge of the rim you should normally be able to slip off the whole tyre on one side by moving the tyre lever around the whole circumference.
- Now you can pull out the inner tube. Take care the valve does not get caught, as this can damage the inner tube.
- Inspect the inflated tube and look for the puncture. A bucket of water may help you.
- Repair the puncture according to the operating instructions of the repair kit manufacturer.
- After having removed the tyre, you should check the rim tape. The tape should lie squarely in the base of the rim covering all spoke ends and should neither be torn nor brittle.

In the case of double wall rims the tape must cover the entire rim base, but it should not be so broad as to stand up along the inside edges of the rim trough. For this type of rim only use rim tapes made of fabric or durable plastic. In case you are in doubt about the rim tape, contact your STEVENS dealer.









#### Note:

If you have a puncture while riding, do not pull out the inner tube completely. Leave the valve sticking in the rim and first look for the hole where the air escapes. Pump up the inner tube. When you have found the hole, look for the corresponding place on the tyre and examine it. Often the foreign body sticks in the tyre.



#### Note:

If your bicycle has thru axles, observe the operating instructions of the fork manufacturer.









# **Tyre Mounting**

When mounting a tyre make sure no foreign matter such as dirt or sand gets inside the tyre and you do not damage the inner tube.

- Slip one bead of the tyre onto the rim. Using your thumbs, press the bead over
  the edge of the rim over the entire circumference. You should be able to do
  this without any tools, regardless of the type of tyre. Stick the valve of the tube
  through the hole in the rim.
- Inflate the inner tube slightly so that it becomes round and push it into the tyre all the way round. Make sure not to leave any folds in the tube.
- To finish mounting the tyre start at the point opposite the valve. Using your thumbs, press the second bead of the tyre over the edge of the rim as far as you can. Make sure the inner tube does not get pinched and squashed between tyre and rim. This is prevented by pushing the inner tube into the tyre hollow with a finger as you work along.
- Work the tyre into the rim by approaching the valve symmetrically from both sides. Towards the end you will have to pull the tyre vigorously downwards to make the already mounted portion of the tyre slip towards the deepest part of the rim base. This will ease mounting noticeably on the last centimetres.
- Check again the proper seat of the inner tube inside the tyre and press the last stretch of tyre over the edge of the rim by using the balls of your thumb. It will help you to bring the wheel to rest on your hip.
- If this does not work, you will have to use tyre levers. Make sure the blunt ends
  point towards the inner tube and the inner tube does not get damaged.

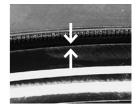


# Danger:

Before you set off again connect the brake cable and check whether the brake pads hit the braking surfaces. Make sure the wheel is properly seated and firmly fixed in the drop-outs. After mounting the wheel make sure the brake pads or the rim are free of grease or other lubricants. Be sure to do a brake test! In the case of disc brakes, make sure the rotor does not drag on the brake calliper or the brake pads! Inappropriate wheel mounting can make you loose control of your bicycle and result in an accident!

- Press the valve deep into the tyre so that the inner tube does not get caught
  between rim and tyre beads. Does the valve stand upright? If not, dismount
  one bead again and reposition the inner tube. To make sure the inner tube
  does not get pinched between rim and bead, inflate the tyre a little and then
  move it sideways back and forth between the sides of the rim. While doing so
  you can check whether the rim tape has shifted.
- Inflate the inner tube to the desired pressure. The maximum pressure is indicated on the side of the tyre.
- Check the proper seat of the tyre by means of the "witness line" on the side of
  the tyre just above the edge of the rim. Make sure the witness line is even with
  the rim edge all the way around the tyre.









#### **Mounting Wheels**

Mounting the wheel is generally done in reverse order to the removal. Make sure the wheel is properly seated in the dropouts and accurately centred between the fork legs or the seat and chainstays. Make sure the quick-release and the possibly available safety tabs are properly seated. For more information see the chapter "How to Use Quick-Releases".

If you have disc brakes, check before mounting the wheel whether the brake pads rest snugly in their seats in the brake calliper body. The gap between the brake pads and the wheel should be parallel and the wear indicators in their correct position. Make sure you slide the rotor carefully between the brake pads.

After mounting the wheel and tightening the axle nut or the quick-release and a thru axle, if available, pull the brake lever (several times, if you have disc brakes). To do so lift the bicycle off the ground and spin the wheel with your hand. With the wheel spinning the rotor should not drag along the brake calliper or the brake pads and the rim should keep off the (rim) brake pads.



#### Note:

In addition, observe the information and the operating instructions of the gear manufacturers. They are available on their websites: https://si.shimano.com www.rohloff.de/en/service

https://support.enviolo.com/hc/en-us www.pinion.eu/downloads



#### Note:

If you have any questions, contact your STEVENS dealer.





When mounting a front wheel with hub dynamo make sure the hub dynamo's connection terminal is on the right side in direction of motion. The connection terminal has to be aligned with the front wheel fork in a way that it points slightly backwards and upwards. Do not try to turn the connection terminal after having fixed the front wheel in the fork.

If your front wheel has no quick-release, you need a 15 mm open-end wrench or ring spanner or still better a torque wrench to tighten the axle nuts.

Axle nuts have to be tightened alternately on both sides. Otherwise the hub axle can twist with the lock washers and be subject to stress. The torque value is 20–25 Nm.

After you have securely fixed the wheel in the fork, re-connect the plug of the lighting cable to the connection terminal.

Finish by checking the front and rear lights on the bicycle by turning the front wheel.



#### **Caution:**

When working in the area of the rear wheel hub and its gear mechanism, be aware of the risk of crushing the fingers. Therefore, do not turn the cranks during the work or do not push the bicycle backwards.



# **Caution:**

Do not pull the (disc) brake lever with a removed wheel and make sure to mount the safety locks when removing the wheel



# Danger:

If your bicycle has hydraulic disc brakes, do not place it upside down for repair purposes, i.e. handlebars and saddle on the ground. This would render the brake ineffective.

# The Headset

The headset connects fork, stem, handlebars and front wheel to the frame, but allows them to turn freely as a unit. It must turn with virtually no resistance, if the bicycle is to run straight, stabilising itself as it travels. Shocks caused by uneven road surfaces expose the headset to considerable levels of stress. As a result it may become loose and maladjusted.

# **Checking the Bearing Play**

- Check the headset for play by placing your fingers around the upper head cup.
- Pull the front brakes with your other hand and push the STEVENS bicycle firmly back and forth with the wheel remaining on the ground.
- If there is play in the bearing, the upper head cap will move noticeably relative to the lower cup and you will feel a jerk.
- Another way to check the headset is to lift the front wheel a little off the ground and then let it drop. If there is play in the bearing, you will hear a rattling noise in this area.
- To check the bearing for ease of running, lift the frame until the front wheel no longer touches the ground. Move the handlebars from the left to the right. The front wheel should turn very easily from far left to far right and back without catching anywhere. A light tap on the handlebars should be enough to turn the wheel to the side.





# Danger:

Riding the bike with a loose headset increases the stress on fork and bearing. This can result in fork breakage with severe consequences!



# **Adjusting Conventional Headsets**

For the adjustment of conventional headsets you need two flat, open-end wrenches. Depending on the diameter of the headset the width of the open-end wrench is 32 millimetres at least.

- Hold the front wheel tight between your legs, apply the wrench and release to top counter nut.
- Turn the lower bearing cup race a little downwards. Do not tighten the bearing cup race! This could damage the bearing immediately.
- Keep the bearing cup race tight with a wrench to maintain the adjustment.
   Tighten the counter nut with the second open-end wrench against the bearing cup race.
- Check it again for play. If the fork cannot be turned without any resistance and play, the bearing is improperly adjusted. Adjust the bearing play once again.
   This procedure of adjusting can take several attempts. The important thing is that the bearing turns without any resistance and play. This is the only way to ensure a long service life.



#### **Caution:**

Adjusting the headset requires a certain amount of experience and should therefore be left to your STEVENS dealer. If you want to try it on your own, be sure to read the instructions of the headset manufacturer on our website at www.stevensbikes.de/manual before doing any adjusting.

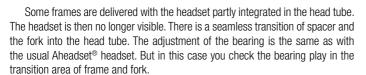


# Danger:

Check the secure seat of the stem after having adjusted the headset, by holding the front wheel between your knees and trying to turn the handlebars relative to the front wheel. Otherwise, a loose stem can cause an accident.

# Adjusting the Threadless Headset: Aheadset® Headsets

The special feature of this system is that the stem is not encased by, but rather clamped onto the steerer tube, which in this case is threadless. The stem is an important part of the headset bearings. Its clamping force secures the bearing in its set position.



- Release the clamping bolt(s) located on the side of the stem by one to two
  complete turns.
- Gently tighten a little the countersunk adjusting bolt on the top, i.e. by a quarter turn at the most, by using an Allen key.
- Realign the stem with the frame so that the handlebars are not slanted when the wheel points straight ahead.
- Retighten a little the clamping bolt(s) of the stem until the stem no longer turns relative to the fork. Do not exceed the torque values specified by the stem manufacturer, see the chapter "Recommended Torque Settings".
- Check the headset for play, as described above. Do not overtighten the headset. Risk of headset failure.







#### **Caution:**

Do not overtighten the upper bolt, it only serves the purpose of adjusting the bearing play, not of securing the stem!



### **Caution:**

In the case of full carbon forks the torque values are often clearly below the specifications of the stem manufacturers. A sufficient clamping is usually already achieved with inferior forces. Tighten carefully by approaching the prescribed maximum torque value in small steps until the stem no longer turns relative to the fork or front wheel. Too high torque values can destroy the steerer tube!



#### Danger:

Check the secure seat of the stem after having adjusted the bearings, by holding the front wheel between your knees and trying to twist the handlebars relative to the front wheel. A loose stem can throw you off your bicycle



# **Special Characteristics of Carbon**

With components made of carbon (carbon-fibre-reinforced plastics), also referred to as CRP, some characteristics have to be kept in mind.

Carbon is an extremely strong material which combines high resistance with low weight. After overstress, however, carbon components, unlike metal parts, do not necessarily show durable or visible deformation even though some of the fibres may be damaged.

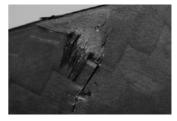




This makes it very dangerous to continue using the carbon component after an impact or undue stress, as it may fail without previous warning thereby causing an accident with unforeseeable consequences. For this reason we recommend that you have the component, or to be certain, the entire STEVENS bicycle checked by your STEVENS dealer after every incident, such as e.g. a crash.

They must be replaced at once! Prevent further use by taking appropriate measures, i.e. saw the component into pieces. Damaged carbon frames can possibly be repaired. Contact your STEVENS dealer.







# Danger:

Do not combine carbon handlebars with bar ends or and aero bar, unless they have been specifically approved. Do not shorten carbon handlebars or clamp the brake levers and shifters more in the middle than indicated or needed. Risk of breakage!



Most clamps of bicycle carrier systems are potential sources of damage to large-diameter frame tubes! As a result thereof carbon frames can fail during use without previous warning. However, there are special-purpose models which are suitable, available in the car accessory trade. Inform yourself there or ask your STEVENS dealer for advice.



# Danger:

If carbon components on your STEVENS bicycle produce any creaking or cracking noises or show any external sign of damage, such as gouges, cracks, dents, discolourations etc., do not use STEVENS bicycle any longer. Contact your STEVENS dealer immediately; they will check the component thoroughly.

Components made of carbon should under no circumstances be exposed to excessive heat. Therefore, never have a carbon component enamelled or powder-coated. The temperatures required for enamelling or powder-coating could destroy the component. Do not leave carbon fibre components near a source of heat or in your car during hot or sunny weather.

When you intend to transport your STEVENS bicycle in the boot of your car, be sure to protect the bicycle or the carbon frame and components. Blankets, foam tubes or the like are a suitable padding to protect the sensitive material from damage.

Always park your STEVENS bicycle carefully and make sure it does not topple over. Carbon frames and components may already sustain damage by simply toppling over and thereby hitting e.g. a sharp edge.



#### **Care Instructions**

Components made of carbon reinforced fibre should be cleaned with a soft rag and clear water. Add, if necessary, a little washing up liquid. Remove tough stains of oil or grease with a petroleum-based cleaning agent. Never use degreasing agents containing acetone, trichloroethylene, methyl chloride etc., solvents or non-neutral, chemical or solvent-containing cleaning agents that could attack the surface!

You can use car wax to protect the surface and make it shine. Polishing agents contain solid constituents that might attack the surface.



#### **Caution:**

Do not clamp a carbon frame or seat post in the holding jaws of a workstand! The components may sustain damage. Mount a sturdy (aluminium) seat post instead and use it to clamp the frame, or choose a work stand that holds the frame at three points inside the frame triangle or which clamps the fork and bottom bracket shell.



#### Danger:

Make sure all carbon clamping areas are absolutely free of grease and other lubricants! Grease will penetrate the surface of the carbon material, thereby reducing the coefficient of friction. This will no longer provide reliable clamping within the prescribed torque values. Once greased, carbon components may never again ensure reliable clamping! Use special carbon assembly paste instead.



#### Note:

Protect the exposed areas of your carbon frame (e.g. the underside of the down tube) against rubbing cables or stone chips with special pads. You get them from your STEVENS dealer.



#### Note:

Carbon components have, like all lightweight bicycle components, a limited service life. Therefore, have your handlebar and stem carefully checked by your STEVENS dealer. In case of doubt, it's always best to replace the component.

#### **Carbon Handlebars**

- Do not use bar ends on carbon handlebars which are not intended for bar ends.
- Do not shorten, modify or change the handlebars or the stem.
- Make sure the brake levers are always within easy reach.

#### **Mounting Carbon Handlebars**

Make sure that the stem and the handlebars always have matching clamp diameters! Stems with a 31.8 mm clamping are for example only compatible with handlebars with a clamping diameter of 31.8 mm.

Mounting non-matching parts may cause the clamping to fail and lead to a serious crash. We recommend that you always combine components of the same manufacturer, as they are designed to fit and function as an integrated system. STEVENS assumes no responsibility for problems resulting from carbon handle-bars delivered by STEVENS being used with an unsuitable stem.

In case you prefer the stem of another manufacturer, contact their sales department and get more information on the clamping diameter and combination possibility with carbon handlebars. Also observe in this case the assembly instructions and warning information of the stem manufacturer.

Before mounting check all clamping surfaces of the stem for sharp edges and burrs. Do not use such stems, but replace them instead. If you have no choice, remove these sharp edges or burrs on your own. Replace the handlebars of an existing stem, also check the handlebars after removal. Notches in the clamping area indicate defective processing of the stem in these areas. If you fit a new stem on a full carbon fork, check the steerer tube. Ask your STEVENS dealer in case you have the slightest doubt and replace, if necessary, the damaged part. Your safety should come first.

Make sure the clamping areas are absolutely free of grease, especially when the clamping surfaces are made of carbon.





# Caution:

Handlebars or brake levers/shifters can damage the frame when they are turned too far to the side. If you have a carbon frame this can lead to cracks in the top tube. This is a typical damage of many bicycles and therefore not covered by the warranty.

Slide the stem onto the fork steerer tube. It should fit snugly onto the fork. Do not fit stems which have play on the steerer tube. Use special carbon assembly paste to increase the clamping force.

Mount your new carbon handlebars and make sure it is accurately centred in the stem. The handlebars should slide easily into the stem clamp. There should be no play.

Tighten the greased bolts of the stem faceplate with your fingers by a few turns. Tighten the bolts until the clamping slots between the stem body and the faceplate are identical in width in the top and in the bottom area.

Tighten the fixing bolts alternately and in small increments to the minimum limit of the recommended torque settings by using a torque wrench. In the case of stems with four-bolt clamping, be sure to tighten the bolts in a cross pattern. Check the reliable fit as described in the operating instructions. In case the handlebars and the stem are still not tight enough, increase the torque value until you have reached the maximum torque value.

Check the reliable fit once again as described in the operating instructions. If a tight clamping of the handlebars in the stem or of the stem on the fork cannot be achieved, the handlebars and the stem or the stem and the fork are not compatible. Replace the stem by a suitable model.

Check the shift/brake levers or the brake levers for burrs and sharp edges in the clamping areas. Avoid rotatory movements during mounting in general to avoid scratches.

After you have found the correct position of the brake lever/shifter units, tighten the clamping bolts to the minimum value of the recommended torque value. In case the brake lever/shifter units are still not tight enough, increase the torque value until you have reached the maximum torque value specified by the component manufacturer.









#### Danger:

Do not exceed the maximum torque values specified by the stem, handle-bars or fork manufacturers! Check the torque values of all bolts after 100 to 300 km (60 to 180 miles) of riding and subsequently every 1,500 km (900 miles).



#### Note:

Some components have torque values printed or labelled on them. Be sure to observe these maximum values. Also observe the instructions of the component manufacturers on our website at www.stevensbikes.de/manual



#### Note:

Prior to mounting, also read the instructions of the brake lever/shifter manufacturer on our website at www.stevensbikes.de/ manual



# **Carbon Seat Posts**

Insert carbon seat posts only in frames with suitable seat post clamping. Special seat post clamps reduce the forces occurring at the clamping slot. Clamping areas with two or more clamping slots are perfect. They provide an even spreading of the clamping forces, reduce the occurring pressure and hence the risk of breakage.

# **Mounting the Seat Post**

Make sure your new seat post has the same diameter as the seat tube of your frame. You should be able to insert the seat post easily into the frame without pressing or turning. A mismatch between frame and seat post can cause failure of the seat post.

Before mounting the seat post to the frame, make sure the seat tube is absolutely free of lubricants, sharp edges and burrs. Clean and deburr the seat tube, if necessary.

Make it a rule to tighten the bolt of the seat tube clamp always very carefully. Increase the torque values bit by bit and check the fit of the component in between. Use a torque wrench and never exceed the maximum torque values! You find them on the components themselves and/or in the instructions of the component manufacturers. Use special carbon assembly paste to increase the clamping force.







Even a slight mismatch between seat post and seat tube diameter or oil and grease in the seat tube can lead to a rupture of the carbon seat post. This can result in an accident or injury to the rider. Use special carbon assembly paste to increase the clamping force.



# Danger:

The minimum insertion depth of your seat post in the frame is 100 mm. Never ride your STEVENS bicycle if the marking (MIN, MAX, STOPP, END or the like) of the seat post is visible.

# **Suspension Forks**

Most STEVENS city/trekking bikes are equipped with suspension forks. This feature gives you better control of your STEVENS bicycle when riding in the terrain or on poor road surfaces and ensures more ground contact for the tyre. It noticeably reduces the strain on you and your bicycle caused by the mechanical shocks from the terrain. Suspension forks differ in their types of spring elements and damping. The suspension is usually provided by coil springs or sealed air compartments. Damping is usually done with oil or the self-damping properties of the elastomers.

To work perfectly, the fork has to be adjusted to the weight of the rider, the sitting posture and the intended use. Be sure to have this adjustment carried out by your STEVENS dealer at the moment of delivery. For more information see the chapter "Suspension Forks" as well as the instructions of the component manufacturers.







# Danger:

Do not turn any screws in the vague hope of adjusting them somehow. You could release the fastening mechanism, thus causing a fall. All manufacturers normally mark adjustment devices with a scale or with "+" signs (for stronger damping/harder suspension) and with "-" signs.



# Danger:

Suspension forks are designed in a way to absorb shocks. If the fork is too rigid and jammed, the terrain induced shocks pass directly into the frame without any damping. This could damage the lockout itself as well as the frame. If your fork has a lockout mechanism, do not activate the lockout function when riding in rough terrain, but only when riding over smooth terrain (roads, field tracks).



# Note:

Suspension fork manufacturers normally include instructions with their deliveries. Read them carefully before changing any settings or doing any maintenance work on your suspension fork.





# Danger:

The suspension fork should be set up and adjusted in a way that it does not reach the end of its travel, i.e. bottom out. unless in extreme cases. A spring rate which is too soft (or too low an air pressure) can usually be heard or felt as a "clunk" type noise. This noise is caused by the sudden complete compression of the suspension fork as it reaches bottom out. If the suspension fork frequently reaches bottom out, it will sustain damage over time, and so will the frame.



### Note:

More information on adjusting and maintenance is available on the internet at www.srsuntour-cycling.com www.ridefox.com www.foxracingshox.de www.rockshox.com www.sportimport.de/en/home/ www.manitoumtb.com





# **Caution:**

Many simple forks do not have a sophisticated damping system and are not comparable to high-quality suspension forks in terms of the riding behaviour.

# **Functioning**

When the front wheel receives an impact, the lower part of the fork (also referred to as lower legs) are pressed upwards. The lower legs slide on thinner stanchion tubes which are firmly connected to the fork crown by bolts, press fit or glueing. The fork retracts as a spring inside is compressed. The spring allows for the fork to extend again and assume its original position. An ideal spring would instantly extend again, the bicycle would not be ridable. The fork is equipped with an oscillation damper which prevents the fork from springing back uncontrolled and provides a smooth return travel.

The telescopic forks differ in their spring elements and in the type of damping. For elasticity these forks are provided with steel or titanium springs, special types of plastic (also referred to as elastomers) or sealed air compartments or combinations of these options. The damping is usually done by oil or by the self-damping properties of the elastomers. Some models are equipped instead with friction or air damping elements.





# Note:

If you cannot mount a cable tie over your stanchion tube, you need someone to ride with you. He can observe the behaviour of the fork during the ride and give useful tips for the adjustment.

# **Adjusting Suspension Forks**

To work perfectly, the fork has to be adjusted to the weight of the rider and the intended use.

Adjusting the fork to your needs is easy, if you use a simple trick.

- Start adjusting the fork with the spring preload being completely turned off and with the lowest damping step.
- Slip a cable tie onto the stanchion tube so that it can still shift easily along the tube.
- When you sit on your bicycle, the fork should yield in general, depending on the
  suspension travel by approx. 10 to 25 % of the maximum suspension travel. If
  this is not the case, you have to change the spring preload. If you cannot mount
  a cable tie above the stanchion tube due to a bellow, ask a helper to measure
  in unloaded condition from the upper edge of the fork crown to the ground. Sit
  on your STEVENS bicycle and measure once again.
- Ride your STEVENS bicycle in terrains with different surfaces and check afterwards how much of the fork's travel was used. If the cable tie has only moved a few millimetres, your fork is in too rigid adjustment; check whether the preload of the springs has been turned off completely and have the springs replaced, if necessary.
- If the cable tie has moved along the entire travel range or if you can hear the
  fork bottom out, the spring is too flexible. Increase the spring preload first and
  increase the pressure subsequently. If the behaviour has not improved, have
  the springs replaced by an expert.

If the spring adjustment meets your wishes, start optimizing the damping.
 Approach in quarter or half turns and observe the speed, with which the fork rebounds.

If the damping is too low you feel as if the STEVENS bicycle wants to throw you off, as the return travel springs back uncontrolled. The more you close the damping, the slower the spring rebounds, the smaller is the oscillation effect. A too hard damping makes the fork compress with shocks in quick succession, as it can no longer rebound quickly enough.

The different suspension forks of different manufacturers differ a lot in parts. Make sure you have received the fork description together with the STEVENS bicycle from your STEVENS dealer. If necessary, you can also download the instructions and further information on the following websites on the internet:

www.sram.com/en/rockshox www.sportimport.de/en/home/ www.srsuntour.com www.foxracingshox.de





# Note:

Almost all fork manufacturers include well-written operating instructions with their deliveries. You find them on our website at www.stevensbikes.de/manual. Read these carefully before changing any settings or doing any maintenance on your fork.



# Note:

Adjusting a suspension fork accurately takes quite long and is a very delicate job. Be sure to read in any case the instructions of the manufacturer on our website at www.stevensbikes.de/manual. If you are in doubt, contact your STEVENS dealer.



# Danger:

A too strong damping of the fork can result in a sluggish rebound movement with a suspension fork that will not recover when exposed to a quick series of impacts. Risk of accident!



# **Caution:**

Do not ride your bicycle, if the suspension fork often bottoms out. This could damage the fork itself as well as the frame.



# **Blocking the Suspension Forks (Lockout)**

Some suspension forks have a system to block suspension (lockout), which is activated by a button or a lever. Depending on the manufacturer the operation differs slightly.

With the lockout function activated, the stanchion tube does not move into the lower leg. This function is recommended when riding uphill or out-of-the-saddle, as the locking of the suspension avoids bobbing.

Some STEVENS bicycles have a remote lockout function. The lockout function is activated easily with a button or a lever on the handlebars.

Make sure the cable of the control unit on the handlebars is properly adjusted. The cable tension is adjusted by turning the adjusting bolt at the control unit on the handlebars. Turn the adjusting bolt anticlockwise to increase the cable tension and clockwise to reduce the cable tension. For more information see the instructions of the component manufacturers on our website at www.stevensbikes.de manual

Always check a modified adjustment during a test ride.



# **Caution:**

Do not actuate the lockout function when riding over rough terrain, but only when riding over smooth terrain (roads, field tracks).



# **Caution:**

Do not ride with the lockout function activated in challenging terrain or when riding downhill. Your suspension fork could sustain damage.

# Maintenance

Suspension forks are comparatively sophisticated components and require a considerable amount of maintenance and care. This has led almost all suspension fork manufacturers to establish service centres where customers can have their forks thoroughly checked and overhauled at regular intervals. The following routines are essential for suspension fork maintenance.

- Whatever type of fork you have, make sure the sliding surfaces of the upper fork tubes are absolutely clean. Clean the fork with water and a soft sponge after every ride. Apply a thin layer of suspension fork or hydraulic oil on the lower legs after cleaning.
- Make it a rule to check all bolted connections of your fork at regular intervals with a torque wrench.
- If your fork has an elastomer filling, you should regularly clean and lubricate
  the synthetic springs. Use non-corrosive resin-free grease only. Some fork
  manufacturers provide special greases for fork maintenance. Observe the
  manufacturer's recommendations.
- Suspension forks with air springs have to be checked regularly for air pressure, as the air escapes over time.

Use a suitable torque wrench and observe the manufacturer's torque settings when checking the bolted connections on your suspension fork!



# Danger:

Do not turn any screws in the vague hope of adjusting them somehow. You could release the fastening mechanism, thus causing a fall. All manufacturers normally mark adjustment devices with a scale or "+" and "-" signs.



# Note:

Check the functioning of the fork at regular intervals. Stand over your STEVENS bicycle and press the fork downwards in jerks with your body weight. The suspension fork must not bottom out. Observe the amount of time it takes for the fork to rebound. It should take less time than the compression. If you are in doubt about the proper functioning of your fork, contact your STEVENS dealer.





# Danger:

Before and after the adjustment check the tight fit of the bolted connection in the centre in the top area of the stanchion tubes. The adjusting mechanism of almost all forks runs through this bolt. It could come loose during adjustment!



# Danger:

Suspension forks are of sophisticated design. The maintenance routines and above all the disassembly of the fork are jobs best left to your STEVENS dealer.





# Caution:

An incomplete or inoperative lighting set is not only against the law, it is also a hazard to your life. Cyclists riding in the dark without a light are liable to be overlooked and at risk of getting involved in serious accidents!



Switch on and off a bottle dynamo only while standing and make sure it does not get in contact with the spokes! Caution: In wet conditions, it has to be assumed that the friction roller slips resulting in the dynamo becoming less effective

# Lighting

For riding on public roads a functioning lighting set is obligatory (see the chapter "Legal Requirements for Riding on Public Roads"). You should be familiar with the assembly of the lighting set so that you can repair possible failures yourself.

Rear light and front lamp are powered by the generator (also referred to as dynamo). They are connected with two cables each to the generator. In some cases the front lamp and the rear light are wired with only one cable each the frame being in this case the return line.

# **Rear Light**

In general, LEDs beam through a (red) diffusion disc rearwards and are visible at best even from the side. Rear lights provide a stand light function that are powered by a condensator or a battery when the bicycle stops, e.g. in front of traffic lights.

# **Front Lamp**

Illuminants are either halogen lamps or one or several LEDs, i.e. light emitting diodes, emitting white light by means of a reflector and/or a diffusion disc on the lane. Some models are equipped with a sensor that automatically switches on the front lamp when it gets dark; the dynamo must, however be activated. Additional features of particularly high quality front lamps are a stand light function, daytime running lights or full beam.

# **Bottle Dynamo**

The bottle dynamo should be mounted with its drive shaft vertical to the wheel axle and with its roller in full contact to the tyre. The bottle dynamo can be mounted to the front or rear wheel. When switched on it tilts with its roller against the tyre side. To switch off the dynamo it is tilted back in its initial position where it locks in place.



# Note:

Carefully read the supplied operating instructions of the lighting and dynamo manufacturers and observe the instructions. In case you need more information on your lighting system, contact your bicycle STEVENS dealer.

# **Hub Dynamo**

Hub dynamos are located in the front wheel hub. They are virtually non-wearing and extremely effective. Some models are switched on electronically, some others mechanically. Hub dynamos are either switched on by a lever on the handlebar or directly on the front lamp. Other models offer the comfort of being switched on and off automatically by means of a sensor.



# **Battery-Powered Lighting**

Check the usage of battery-powered front lamps and rear lights on the basis of the road traffic licensing regulations in your country. Reference is also made to the chapter "Legal Requirements for Riding on Public Roads".



# **Troubleshooting**

- Check the halogen lamp or the LED in the front lamp and rear light as a first step.
- Check the connections and the socket in the front lamp. Do they show white
  or green discolourations and thus corrosion? Carefully remove the corrosion
  layer, if necessary, by using a pocket knife, a screw driver, sand cloth or steel
  wool until the connections are bright.
- Follow the cable and check it for defects. Check all contact points. Often the connectors are corroded by salt or rain. Disconnect and reconnect the connections.
- If you still have problems, you should feed power with a battery (4.5 volt flat battery) into the circuit. If the lamp/light functions now, the dynamo may be defective. If the lamp/light doesn't function, you should approach the battery in steps closer to the lamp/light and check in between whether there is power.
- If you have a modern, longer-lasting diode lighting, the defect of the diode can
  only be found and repaired by a specialist. To exclude a defect of the cables,
  proceed as above described, follow the cable and use a battery for checking.





# Things Worth Knowing about Bicycles Cycling Helmets, Glasses and Clothing

Cycling helmets are highly recommended. Your STEVENS dealer has a variety of styles and sizes.

Cycling helmets are only approved for use during cycling. Observe the manufacturer's instructions

Apart from a cycling helmet and suitable clothing, cycling glasses are absolutely essential when you set off on your bicycle. They do not only protect your eyes from the sun and the wind, but also keep out flies and other impurities that may impede your vision when they fly into your eyes. Risk of accident!

Your STEVENS dealer has a wide range of different glasses and will be pleased to advise you.



# Danger:

Never ride without a helmet and glasses! But remember that even the safest helmet is useless unless it fits properly and is correctly adjusted and fastened.



# Danger:

Never ride with wide-cut trousers or skirts that might get caught in the spokes, chain or chainrings. To avoid any such mishap, use suitable clips or straps, if necessary.



# Danger:

For increased visibility to other road users be sure to wear bright-coloured clothing!



# **Shoes**

Cycling shoes should be made of solid material to provide firm support for your feet. In addition, they should have a stiff sole so that the pedal cannot press through. The sole should not be too wide; otherwise you will not be able to assume a natural foot position.

Specific cycling shoes are required, when your STEVENS city/trekking bike is equipped with clipless or step-in pedals. With these shoes small cleats are fixed to the sole. They give you a firm connection between shoe and pedal and allow an acceptable walking position. Also read the chapter "The Pedal Systems".

# **Transporting Luggage**

There are various ways of carrying luggage on a bicycle. Your choice will primarily depend on the weight and volume of the luggage and on the bicycle you want to use. Mountain bikers or road racers prefer taking their luggage in a backpack. This influences the additional load of the riding characteristics less. There are however several ways of transporting luggage directly on the STEVENS bicycle.

Some STEVENS bicycles can be equipped with a racktime system carrier. These are designed for a maximum additional load of 25 kg:

Bicycles with racktime carriers provide a fast and secure fastening for bags, baskets and further accessories by means of the Snapit-system. We recommend nevertheless that you carry luggage in stable pannier bags with a very low centre of gravity. For more information on the racktime system carrier, see the operating instructions of the manufacturer on our website at www.stevensbikes.de/manual as well as at www.racktime.com

When buying pannier bags, make sure they are watertight so that your belongings are protected and you will not have any unpleasant surprises after the first rain shower.

Another possibility of transporting luggage are handlebar bags. They often have snap buckles for quick mounting and removal. Handlebar bags are particularly suitable to carry valuable objects and photographic equipment with you.

Lowrider bags fitted at the front of the bicycle are mounted to the fork by means of special holders. They are an additional option for a long trip. Heavy luggage should be transported in these bags, where the effects on the riding behaviour are less important.





# Danger:

Adjust the suspension fork and the tyre pressure to the additional load



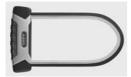
# Danger:

Luggage generally changes the riding characteristics of your STEVENS bicycle and increases your stopping distance! Therefore, practise riding a loaded bicycle in a place free of traffic.



## Caution:

Do not overload your STEVENS bicycle and observe the maximum load capacity of your pannier rack.







Improper accessories may change the
characteristics of
your STEVENS bicycle
and even cause an
accident. Therefore,
before mounting any
accessories contact
your STEVENS dealer
and strictly observe
the instructions on the
intended use of your
bicycle.



Retrofitted accessories, such as mudguards, pannier racks etc. can impair the functioning of your STEVENS bicycle. Always ask your STEVENS dealer for advice before mounting any kind of accessories to your bicycle.

# **Accessories**

There are lots of accessories on the market which are intended to provide more fun for cycling. Cycle computers are on top of the list. They measure riding and average speed, daily and annual mileage and riding time. Most models also indicate the highest speed reached, differences in altitude, pedalling cadence and many other things.

The most important accessories for a successful cycle tour are a tyre pump and a small tool kit. The tool kit should include two tyre levers, the most commonly used Allen keys, a spare tube, a tyre repair kit, your mobile phone, if necessary, and a little cash. In this way you will be well prepared in the event of a puncture or some other mishap.

Before buying any additional bells, horns or lighting accessories, inform yourself thoroughly whether they are permitted and tested and accordingly approved for use on public roads.

Additional battery/accumulator-operated lights have to be marked with the wavy line and the letter "K" (see the chapter "Legal Requirements for Riding on Public Roads"). A rear view mirror provides better view to the rear. Make sure the fastening is non-vibrating, when buying a rear view mirror. Keep in mind to take a lock with you, as bicycles are very often stolen. Your STEVENS dealer will be pleased to inform you about the different security levels of locks

# **Bicycle Locks**

Do not forget to take a high quality D-, folding - or chain lock with you on your ride. The only way to effectively protect your STEVENS bicycle against theft is to lock it to an immovable object.

# **Puncture Kit**

The most important accessories for a successful cycle tour are a tyre pump and a small tool kit. The tool kit should include two plastic tyre levers, the common Allen keys, a spare tube, a tyre repair kit, your mobile phone, if necessary, and a little cash. In this way you will be well prepared in the event of a puncture or some other mishap.



# Note:

Before buying any additional bells, horns or lighting accessories, inform yourself thoroughly whether they are permitted and tested and accordingly approved for use on public roads. Make sure additional battery/accumulator-powered lamps are marked with the wavy line and the letter "K".

# **Transport of the STEVENS Bicycle**

# By Car

Nearly every car accessory dealer and car company offers carrier systems that allow the transport of a bicycle without disassembly.

The usual design involves rails fixed to the roof of the car onto which the bicycles are fixed with clamps gripping the down tubes. This can result in irreparable damage to the frame. High-end, very thin-walled aluminium or carbon frames are particularly susceptible to such kind of damage. Due to the material properties of carbon, you may not see a severe damage at first sight. This can result in an unforeseeable severe accident at a later date. There are, however, specific suitable models available in the car accessory trade.

Rear carriers are becoming more and more popular. Their big advantage over roof carriers is that you do not have to lift up the bicycle so high to attach it. Make sure the clamps do not cause any damage to the fork or frame. Risk of breakage!







# Danger:

Make sure to remove all parts of your bicycle (tools, pannier bags, child seats etc.) which might come loose during transport. Risk of accident!



# **Danger:**

Do not buy a carrier system on which the STEVENS bicycle has to be mounted upside down, i.e. with the handlebars and saddle fixed face down to the carrier. This kind of fastening exposes the handlebars, the stem, the saddle and the seat post to extreme stress during transport. Do not choose a carrier system with crank arm fit. Risk of breakage!



# Danger:

Make sure the lighting and the number plate of your car are not covered. For some carriers, a second exterior rear view mirror is required by the road traffic regulations.



# Danger:

Pull the brake lever and secure it with a strong elastic band when transporting a STEVENS bicycle with hydraulic disc brakes horizontally or hanging.



# Danger:

Check whether your STEVENS bicycle is properly fastened before and at regular intervals during the ride. A bicycle that detaches from the carrier system may endanger other road users.



# Danger:

Do not place the STEVENS bicycle or parts of it into the car without securing them. Parts shifting around can endanger your safety. Whatever system you opt for, make sure it complies with the relevant safety standards of your country.

Read the operating instructions of the bicycle carrier and observe the permissible payload and the recommended or prescribed maximum speed. Observe the required bearing load of the drawbar, if available.







# **Caution:**

Most clamps are potential sources of damage to large-diameter frame tubes that are not designed to be fixed in such clamps. Risk of crushing! Do not use such systems with carbon frames.



# **Caution:**

If your bicycle has disc brakes, be sure to mount the safety locks before transporting the STEVENS bicycle with the wheels removed.



# **Caution:**

Secure the bicycles on the bicycle carrier with an additional lock when you take a break for example.

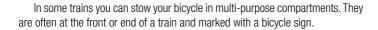


# **Caution:**

Bear in mind that your car has a greater overall height with the bicycle on it. Measure the overall height and place a sign stating the height somewhere in the cockpit or on the steering wheel so that it can be easily seen.

# By Train / By Public Transport

In cities the regulations for taking bicycles by public transport differ. There are e.g. some places where you are only allowed to travel with your bicycle during off-peak hours and with an additional bicycle ticket. Inform yourself in time about the regulations of carrying the bicycle before you start the trip!







# **Caution:**

Remove, if necessary, heavy or bulky pannier bags and luggage for an easier boarding and disembarking of the train.



# Note:

Before you start your trip inform yourself in time about the conditions of carriage and also observe the regulations and rules about bicycle transport in the countries through which you intend to travel.



# <u></u> \$

# Danger:

Remove the staples from the opened flaps of the cardboard carton. Otherwise you may hurt yourself or damage the STEVENS bicycle. Strip off old address labels, as well. Fill the bottom with pieces of carton to prevent bulges or dents in case moisture will affect the cardboard.



# Danger:

In case you do not provide the brake with the transport locks, the brake may fail after the travel.



# **Caution:**

If you pack your STEVENS bicycle with the wheels removed without spacers, the frame is at risk of being severely damaged.

# Bicycle Transport in a Bicycle Case or in a Sturdy Bicycle Cardboard Carton

To bring your STEVENS bicycle safely to its destination when you travel by plane, you either need a case from a specialist supplier or a bicycle cardboard carton which you can obtain from your STEVENS dealer. Keep in mind that wider cardboard cartons are usually more suitable than narrow and high ones. The STEVENS bag is another option for a safe and comfortable bicycle transport.

What you need in any case are spacers which have to be inserted in the dropouts in place of the wheels. You can get them from your bicycle dealer.

The following tips apply to bicycle cases as well as to cardboard cartons.

Unscrew the pedals. Note that the left pedal has a left-handed thread that has to be released clockwise. Pedals come off suddenly; therefore, use an offset wrench and position the tool in a way that the hand moves away from the pointed teeth when you start to unscrew the pedal.





Shift to the large chainring and the smallest sprocket. Open the quick-releases and remove the front wheel. Insert the spacers into the drop-outs of the fork. Slide the special transport lock between the brake pads in the brake calliper. Pull the brake levers and secure them with a rubber band. This prevents the entry of air into the system.

Remove the rear wheel and make sure to slide a spacer between the axle mounts (drop-outs) of the rear frame. After having mounted the spacers the chain should be tensioned. Fix this holder with cable ties or copper wire to the chain-stays. Slide the special transport lock between the brake pads in the brake calliper. Pull the brake levers and secure them with a rubber band. This prevents the entry of air into the system.





Turn the crank in parallel to the chainstay and fix the pedal eye with wire to the chainstay. Fix the chain where it runs on the chainring and where it leaves it. This prevents the chain from coming off and causing damage. The sharp-edged chainring is padded.

Take hold of the rear derailleur with one hand so that it doesn't come off uncontrolled due to the spring tension. Release the bolt and dismount it. Protect the chainstay with air-cushion foil or foam tubes, e.g. from warm water tubes. Fix the rear derailleur about in the centre to the protected stay.







Fabricate a sturdy holder for the bottom bracket case from cardboard carton or hard foam to protect the chainring or ask your bicycle dealer for help. You can also use two supports for the fork and the drop-outs.

Release the clamping bolts of the handlebars and the steerer tube on the stem by two to three turns.

Turn the now movable stem by 90° relative to the fork so that the handlebars are in parallel to the direction of travel. Turn the handlebars, if necessary, downwards until its width is reduced to the minimum. Retighten the bolts slightly.





Protect the entire frame with air-cushion foil or foam tubes. Lift the frame carefully into the cardboard carton and place the bottom bracket on the support.

If the STEVENS bicycle does not fit into the cardboard carton, you have to dismount the seat post, if necessary. Mark it with a pen. This will help you to find the proper height and alignment right away on the spot. Prepare a cardboard padding for the seat tube. It should fix the position of the frame and fill the space to the cover.

Slide a piece of sturdy cardboard over the long side into the bicycle cardboard carton to create a second compartment for the wheels. Remove the quick-releases from the hubs and pack the wheel with air-cushion foil. A rag over the cassette sprockets keeps the packaging clean and can be used for bicycle care at a later date. Slide the wheels into the carton. The cassette sprockets should show to the inside and be positioned in the area of the frame triangle, where they cannot cause any damage.

Pack the quick-releases, the pedals, the necessary tool, rags, chain oil and penetrating lubricant and a pocket knife and adhesive straps for re-closing into a cardboard box. Close the box and insert it into the bicycle cardboard carton in a way that it provides stiffness.





Additional rags or air cushion foil provide additional padding for the STEVENS bicycle.

Finish by marking "This side up" on the cardboard carton. Further options are markings, such as "Caution bicycle!" and "caution bike inside", in big letters on the cardboard carton.

# **Taking Children with You**

The only possible or permissible way of transporting children is in special child seats or trailers. To mount a child seat you need a suitable adapter.

A child seat can be fastened to several bicycles, if they are equipped with a child seat adapter. Be sure to purchase BSEN/GS tested child seats only. Make sure the seat belts are fastened and the feet are fixed in special holders. Cover the springs of your saddle, if available, to make sure that your child will not have the fingers pinched. Make sure the child you are taking with you always wears a helmet, the seat belt should also be fastened!

Child seats have a strong influence on the riding characteristics of the STEVENS bicycle. The weight of both the seat and the child makes the STEVENS bicycle somewhat unstable, i.e. it tends to wobble. Practise getting on your bicycle and riding! A critical moment is when you have just placed the child in the seat because this is when the danger of the STEVENS bicycle tipping over is greatest. Mounting a twin leg kickstand to keep the STEVENS bicycle stable while standing is therefore advantageous.

For more information see the chapters "Use of Trailers" and "Use of Child Seats" as well as the instructions of the system carrier.









# Danger:

It is important to tell children when they practise braking that in wet conditions the brake performance is less effective and the tyre grip reduced and that they should therefore ride more slowly and brake more carefully.



# **Danger:**

Children should not ride near precipices, staircases or swimming pools as well as on paths used by automotive mobiles.



# Danger:

Take care your child is wearing the helmet while cycling only. For example, wearing the helmet at a park or playground can be hazardous; the helmet can get caught on features or obstacles and result in strangulation by helmet straps.

# Kids' and Junior Bicycles

# **Useful Information for Parents**

Children are among the most vulnerable road user groups, not only because of their lack of experience and practice, but also for the simple reason that they are smaller and may therefore have difficulties overseeing things and be easily overlooked by other road users.

If you want your child to use his/her bicycle on the road, you should be willing to invest time in road safety instruction and help him/her improve his/her riding skills. Children are not as observant as adults, and you should therefore get into the routine of checking the kids' bicycle and performing adjustments and maintenance as necessary. If you are in doubt or if you have any questions, contact your STEVENS dealer.

Bear in mind that it is your responsibility to supervise your child on his/her first rides and do not overchallenge your child! Inform yourself about the traffic rules in your country. They vary from country to country. In the UK cycling on a pavement alongside a road is forbidden by law, unless it has been marked as a cycle track. Children aged under 10 are, however, below the age of criminal responsibility.

Therefore, they can neither be prosecuted for a criminal offence.

What is important is that your child has good control of his/her bicycle before riding on public roads. As a first step in this direction we recommend that you give your child a scooter or a balance bike so that he/she can train his/her sense of balance.

This being accomplished you will need to make your child familiar with the functioning of the brakes and gears before you let him/her sit on the bicycle. Find a place away from the road, ideally a backyard or park, where you can practise braking and shifting gears with your child under your supervision.

Once your child has progressed to a point where he/she can ride in traffic, teach him/her how to cross kerbs and railway tracks, i.e. to cross these obstacles, if possible, at right angle. Before that, they have to make sure that there is no danger from behind or in front.

Set a good example when it comes to wearing a cycling helmet and to riding on cycle lanes. It is also advisable to let your child take part in road safety lessons offered at schools or by local clubs and associations.

# **Adjustment**

Adjusting the STEVENS bicycle to the bodily proportions of a child is even more important than in the case of an adult. When determining the saddle height you should find a compromise that allows the child to reach the ground with both feet when sitting in the saddle while at the same time giving them enough space for pedalling. A safe standing (when stopping) takes absolute priority!

Handlebars that are too far away from the saddle or adjusted in a too high/ low position can also lead to the fact that the child is less confident and relaxed during cycling. Normally, children's bicycles allow adjustments of the saddle tilt and sometimes the tilt of the handlebar can be adjusted, as well.

Special attention should be paid to the adjustment of the control elements, such as brake levers. Easy reach and operation should be ensured for the child.

For more information on how to adjust the STEVENS kids' bicycle to the proportions and needs of your child, read the chapter "Adjusting the STEVENS Bicycle to the Rider". If you are in doubt or if you have any questions, contact your STEVENS dealer.

Get into the habit of doing the checks as described in the chapter "Before Every Ride" together with your child.

In this way, your child will learn to handle the bicycle properly and you will be able to detect any defects that have developed during use. Encourage your child to tell you when something on the STEVENS bicycle is malfunctioning. Rectify the fault immediately or take the STEVENS bicycle to your STEVENS dealer for repair.





# **Caution:**

With children and adolescents check the saddle height every three months at least!



# Danger:

Children can be vain.
Therefore, buy a cycling helmet that the child feels happy with. Take your child with you to make sure you buy one which is comfortable and fits correctly. This will increase the chances that the helmet is actually worn, which one day might be a life-saver. Make sure the helmet is always fastened!



# Danger:

Make sure the child always wears a properly fitting cycling helmet and well visible, i.e. bright, clothing. It is also advisable to wear reflector stripes to increase visibility.



### Note:

Make sure the cycling helmet complies with the BSEN 1078 standards.



# Danger:

When you buy the helmet, have yourself explained how to adjust the straps of the helmet to the head. Only a properly fitted helmet can provide full protection in case of an accident!







# Warranty

Your STEVENS bicycle was manufactured with care. Normally it is fully assembled when handed over by the STEVENS dealer. As direct purchaser you have full warranty rights within the first two years after purchase. Contact your STEVENS dealer in the event of defects. To ensure a smooth handling of your claim, it is necessary to present your receipt, your bike card, the handover report and the stamped service reports. Therefore, keep these documents in a safe place.

To ensure a long service life and good durability of your STEVENS bicycle, use it only for its intended purpose (see the chapter "Before Your First Ride"). Also observe the permissible load specifications as specified there and in the bike card. Be sure to strictly follow the mounting instructions of the manufacturers (above all the tightening torques of the bolts) as well as the prescribed maintenance schedule. Observe the checks and routines that are listed in the present user manual and the manuals supplied or the replacement of safety-relevant components, such as handlebars, brakes etc, if necessary.

# A Note on Wear

Some components of your STEVENS bicycle are subject to wear due to their function. The rate of wear will depend on care and maintenance and the way you use your bicycle (mileage, riding in the rain, dirt, salt etc.). Bicycles that are often left standing in the open may also be subject to increased wear through weathering.



# Note:

The law referring to full warranty rights is only valid in the countries where the law has been ratified according to the renewed European regulations. Inform yourself about the situation in your country.



# Note:

If you use your STEVENS bike for riding on public roads, it has to be equipped according to the regulations of your country. Pay particular attention to your bike being equipped with the prescribed lighting set, reflectors and bell. Not all STEVENS bikes are supplied together with all necessary add-on parts.



# Note:

The coating/paint of frames and forks is subject to particular consideration, i.e. the coating is, by nature, exposed to stress during use and can wear down or be affected by minor damage. This type of wear or damage as a result of mechanical stress (e.g. scratches due to rough contact with other objects) is not covered by the terms of warranty.

These components require regular care and maintenance. Nevertheless, sooner or later they will reach the end of their service life, depending on condition and intensity of use. These components must be replaced once they have reached their limit of wear:

- a. Drive chain
- b. Brake pads
- c. Brake fluid (DOT)
- d. Rotors
- e. Brake cables and housings
- f. Seals of suspension elements
- g. Grip coverings or bar tape
- h. Chainrings
- i. Tyres and inner tubes
- j. Sprockets
- k. Saddle covering
- Bowden cables
- m. Pullevs
- n. Gear housings
- o. Lubricants

The pads of rim brakes are subject to wear due to their function. If you use your bike for competitive cycling or in hilly terrain, the brake pads may have to be replaced quite frequently. Check your brake pads regularly and have them replaced by your STEVENS dealer, if necessary.

# p. The rims in the case of rim brakes

Braking causes wear not only to the brake pads, but also to the rims. Therefore, check your rims regularly, e.g. when inflating the tyres. Rims with wear indicators have rings or a gap that come into view when the rim reaches its limit of wear. There are some models where the wear indicators disappear, when the rim thickness has reached a critical point. Observe the specifications marked on the rim. Ask your STEVENS dealer to examine the remaining thickness of the rims at the latest when you are through your second set of brake pads. Rim walls that become deformed or show hair cracks when the tyre pressure is increased have reached the end of their service life. The rim must be repaired.

## g. Lighting and reflectors

The lighting is essential for your safety on the road, especially at night. Check the function and condition of the reflectors before every ride. Light bulbs are subject to wear due to their function. Always have a set of spare bulbs with you so that you can replace them, if necessary.









# Danger:

Ask your STEVENS dealer to check your STEVENS bike after a fall. If you are in doubt, replace at least handlebars and stem to be on the safe side.



# Danger:

Tyres of other dimensions can impair the safety of your STEVENS bicycle. Therefore, only replace tyres by tyres of identical type and size. In case a component needs to be replaced, only use original spare parts, if possible.

Contact your STEVENS dealer.



# Danger:

If a component needs to be replaced, make it a rule to only use original spare parts. Wearing parts of other manufacturers, e.g. brake pads or chains, can make your STEVENS bicycle unsafe. Risk of accident!



# **Caution:**

Do not clean your STEVENS bicycle with a high-pressure cleaner or a water jet and if you do, be sure to keep it at a distance. Do not aim at the bearings.

# **General Notes on Care and Servicing**

# **Maintenance and Servicing**

When you collect your STEVENS bicycle from the STEVENS dealer he will have assembled it ready for use. Nevertheless, your STEVENS bicycle needs regular servicing. Have your local STEVENS dealer do the scheduled maintenance work. This is the only way to ensure that all components function according to their constructive design.

The bicycle will be due for its first service after 100 to 300 kilometres (60 to 180 miles), 5 to 15 hours of initial use or four to six weeks. The STEVENS bicycle needs to be serviced, because during the break-in period of the STEVENS bicycle the spokes slightly lose tension or the gears require re-adjustment. This break-in process is unavoidable. Therefore, remember to make an appointment with your STEVENS dealer for the first service of your new STEVENS bicycle. The first service is very important for both functioning and durability of your STEVENS bicycle.

Regular servicing and the replacement of worn out parts in time, e.g. chains, brake pads or Bowden and brake cables, are part of the intended use of the STEVENS bicycle and therefore have an influence on the warranty and the guarantee, as well. You should have your STEVENS bicycle serviced regularly by your STEVENS dealer after the break-in period. If you ride a great deal on poor road surfaces or cross-country, it will require correspondingly shorter service intervals. For more information see the chapter "Service and Maintenance Schedule".



# Danger:

Servicing and repairs are jobs best left to your STEVENS dealer. If you have your bicycle serviced by anyone else than an expert, you run the risk that parts of STEVENS bicycle will fail. Risk of accident! When working on your STEVENS bicycle restrict yourself to jobs for which you have the suitable tools, e.g. a torque wrench, and the necessary knowledge.

# **Cleaning and Caring for your STEVENS Bicycle**

Dried sweat, dirt and salt from riding during the winter harm your STEVENS bicycle. You should therefore make it a habit of cleaning all components at regular intervals.

Avoid cleaning your bicycle with a high-pressure cleaner. The high-pressure water ejected in a narrowly focused jet may pass through seals and penetrate bearings. This leads to the dilution of lubricants and consequently to greater friction. This destroys and impairs the functioning of the bearing races in the long term. Pressurised water also tends to abrade frame stickers.

A much more gentle way of cleaning your bicycle is with a low pressure water jet or a bucket of water and a sponge or a large brush. Cleaning your bicycle by hand has another positive side-effect: you may discover defects in the paint as well as worn or defective components at an early stage. Inspect the chain after you have finished cleaning and oil it, if necessary (see the chapter "Chain Maintenance"). Apply a coat of standard hard wax on painted, metal and carbon surfaces (except from brake surfaces). Polish the waxed surfaces after drying to give them a nice shine.





# Danger:

Keep cleaning agents and chain oil clear of the brake pads, rotors and rim sides (brake surfaces). This could render the brake ineffective (see the chapter "The Brake System" as well as the instructions of the brake manufacturer). Never grease or lubricate the clamping areas of a frame made of carbon, e.g. handlebars, stem, seat post and seat tube. Once greased, carbon components may never again ensure reliable clamping!

# Safekeeping and Storing your STEVENS Bicycle

If you regularly look after your STEVENS bicycle during the season, you will not need to take any special measures when storing it for a short time, apart from securing it against theft. Store your bicycle in a dry, well aerated place. If you want to store your STEVENS bicycle for a longer period of time, e.g. over the winter months, observe the following things: Inflated inner tubes tend to gradually lose air when the bike is not used for a long time. If your STEVENS bicycle is left standing on flat tyres for a long time, the tyre structure can suffer from damage. It is therefore better to hang the wheels or the entire STEVENS bicycle or to check the tyre pressure regularly. Clean your STEVENS bicycle and protect it against corrosion. Your STEVENS dealer has special cleaning agents, e.g. spray wax.

Remove the seat post and allow for any moisture that may have entered to dry away. Spray a little finely atomized oil into the metal seat tube. However, do not apply oil in a carbon seat tube. Shift the gear to the smallest chainring and the smallest sprocket. This relaxes the cables and the springs.



# Note:

There is usually hardly any waiting time at your STEVENS dealer during the winter months. In addition, many STEVENS dealers offer annual checks at a special price. Use the off-season to take your STEVENS bicycle to your bicycle dealer for inspection!



# Danger:

While cleaning, watch out for cracks, scratches, dents as well as deformed or discoloured material. Have defective components replaced immediately and touch up paint defects. If you are in doubt or if you have any questions, contact your STEVENS dealer.



# **Caution:**

Only use petroleum based solvents for cleaning tough oil or grease stains from paint and carbon surfaces. Never use degreasing agents containing acetone, methyl chloride or the like, or solvent-containing, non-neutral or chemical cleaning agents. They could attack the surface!

# **Service and Maintenance Schedule**

You should have your STEVENS bicycle serviced regularly after the initial "break-in" period of use. The schedule given in the table is a rough guide for cyclists who ride their bicycle between 1,000 and 2,000 km (600 to 1,200 miles) or 50 to 100 hours of use a year.

If you consistently ride more or if you ride a great deal on poor road surfaces, the service intervals will shorten accordingly.

Component	What to do	Before every Ride	Monthly	Annually	Others
Rechargeable battery (e.g. Di2)	Check and charge, if necessary	×			
Lighting	Check function	×			
Tyres	Check pressure	×			
	Check tread and side walls		×		
Brakes (rim brakes)	Check lever travel, thickness of brake pads and position relative to rim, brake test in standing	×			
Brakes (drum/roller)	Lever travel, test brakes in standing	×			
Brakes, brake pads (rim brakes)	Clean		×		
Brake cables, pads hoses	Visual inspection		×		
Brakes (disc brakes)	Check lever travel, wear of brake pads, check seals, test brakes in stationary	×			
	Replace brake liquid (DOT-liquids)			•	
Suspension fork	Check and retighten bolts, if necessary			•	
	All-inclusive service (change oil)			•	
Rims (of rim brakes)	Check thickness, replace if necessary				after 2nd set of brake pads at the latest
Fork (rigid)	Check, replace, if necessary				at least every     years
Bottom bracket	Check for bearing play		×		
	Dismount and regrease (cups)			•	



# Note:

If the rechargeable batteries of the Di2, the odometer, the cycle computer or the GPS device have reached the end of their service life, they must not be disposed of with standard household waste. Bring the rechargeable battery instead to the dealer, where you buy your new one. Ask your STEVENS dealer for advice.



Component	What to do	Before every ride	Monthly	Annually	Others
Chain	Check and grease, if necessary	×			
	Check wear, replace, if necessary derailleur gears				• after 1,000 km (600 miles) or 50 hours of use
Telescopic seat post	Service			×	
Crank	Check and retighten, if necessary		×		
Painted/anodised/carbon surfaces	Polish				★ at least every 6 months
Wheels/spokes	Check for trueness and tension		×		
	True or retighten				if necessary
Handlebars and stem (made of aluminium and carbon)	Check and replace, if necessary				every 2 years at the latest
Headset	Check for bearing play		×		
	Regrease			•	
Metal surfaces	Polish (except: rim sides of rim brakes, rotors)				x at least every 6 months
Hubs	Check for bearing play		×		
	Regrease			•	
Pedals (all)	Check for bearing play		×		
Pedals (clipless)	Clean and grease locking mechanism		×		
Seat post/stem	Check bolts		×		
	Disassemble and regrease Carbon: new assembly paste (no grease!)			•	
Front/rear derailleur	Clean and grease		×		
Quick-releases/ thru axles	Check seat	×			
Bolts and nuts (multi-speed hubs, mudguards etc.)	Check and retighten, if necessary		×		
Software	Update				if offered by the manufacturer
Valves	Check seat	×			
Cables gears/brakes	Dismount and regrease			•	

If you have a certain degree of mechanical skills, experience and suitable tools, such as a torque wrench, you should be able to do the checks marked **x** by yourself. If you will come across any defects, take appropriate measures without delay. If you are in doubt or if you have any questions, contact your STEVENS dealer.

Jobs marked • are best left to your STEVENS dealer.



# Note:

For your own safety, bring your STEVENS bicycle to the STEVENS dealer for its first service after 100 to 300 kilometres (60 to 180 miles), 5 to 15 hours of use or three to six weeks, at the very latest, however, after three months.

# **Recommended Torque Settings**

All bolted connections of the bicycle components have to be tightened carefully and checked regularly to ensure the safe and reliable operation of your STEVENS bicycle. This is best done with a torque wrench that disengages at the desired torque value or a click-type torque wrench. Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Do not exceed the maximum torque value indicated by the manufacturer!

Where no maximum torque value is given start with 2 Nm. Observe the indicated values and observe the values on the components themselves and/or in the instructions of the component manufacturers.

Component	Bolted connections	Shimano <sup>1</sup> (Nm)	SRAM/Avid <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)	TRP <sup>4</sup> (Nm)
Rear derail-	Mount (on frame/derailleur hanger)	8–10	8–10		
leur	Cable clamp	5–7	4-5		
	Pulley wheels	3-4			
Front derail-	Mount on frame	5–7	5–7		
leur	Cable clamp	5–7	5		
Shifter	Mount on handlebars	5	2.5-4		
	Hole covering	0.3-0.5			
Brake lever	Mount on handlebars	6-8	5–7	6-8	
unit	Time trial brake lever			5–7	
Hub	Quick-release lever	5-7.5			
	Locknut for bearing adjustment of quick-release hubs	10-25			
	Sprocket cluster lock ring	29-49	40		
Internal gear hub	Axle nut	30-45			
Crank	Crank mount (grease-free square-head)	35-50			
	Crank mount (Shimano Octalink)	35-50			
	Crank mount (Shimano Hollowtech II)	12-15			
	Crank mount (Isis)		31–34		
	Chainring mount	8–11	12–14 (steel) 8–9 (alu)		
Sealed	Shell (square-head)	49-69			
cartridge bearing	Shell (Shimano Hollowtech II, SRAM Gigapipe)	35-50	34–41		
	Octalink	50-70			
Pedal	Pedal axle	35			
Shoe	Cleat	5-6			
	Spike	4			
Brake	Cable clamp	6-8	6-8	6-8	6-8
(V-brake)	Brake shoe mount	6-8	6-8	6-8	6-8
	Brake pad fixing	1–2			
	Brake boss frame/fork			8-10	

<sup>&</sup>lt;sup>1</sup> https://si.shimano.com <sup>2</sup> www.sram.com <sup>3</sup> www.tektro.com <sup>4</sup> https://trpbrakes.com

# **Recommended Torque Settings for Disc Brakes and Hydraulic Rim Brakes**

Component	Shimano <sup>1</sup> (Nm)	Avid <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)	TRP <sup>4</sup> (Nm)	Magura HS <sup>5</sup> (Nm)
Brake calliper mount on frame/fork	6-8	9-10 (IS-Adapter)	6-8	6-8	6
		8-10 (brake calliper)			
Brake lever unit on handlebar	6–8		5–7		4
<ul><li>Single-bolt clamp</li><li>Two-bolt clamp</li></ul>		7 (carbon)			
Union screws of hose at grip and normal hose at brake calliper	5–7	5			4
Brake hose connector at brake calliper (disc tube hose)	5–7				
Expansion tank cap	0.3-0.5				
Bleeding device brake calliper	4-6		4-6		
Bleeding device brake lever			2-4		
Brake rotor fixing (6-holes)	4	6.2	4-6	6-8	
Brake rotor fixing (Centerlock)	40				
Hose (union nut) direct connection	5–7		5–7		
Slave cylinder (bleeder screw)	4-6		4-6		
Hose (union nut) direct connection					4
Slave cylinder (bleeder screw)					4
Brake pad retainer at brake calliper			3-5		
Cable clamp at brake calliper				4-6	

<sup>&</sup>lt;sup>1</sup> https://si.shimano.com <sup>2</sup> www.sram.com <sup>3</sup> www.tektro.com <sup>4</sup> https://trpbrakes.com <sup>5</sup> www.magura.com

These values are reference values of the above-mentioned component manufacturers. Observe the values in the instructions of the component manufacturers.

These values do not apply to the components of other manufacturers.



# Note:

Due to the unmanageable number of components on the market, STEVENS is not in a position to foresee every product that will be replaced or newly assembled by third parties. Therefore STEVENS denies any liability for such kind of additions or modifications with regard to compatibility, torque values etc. Whoever assembles or modifies the STEVENS bicycle shall ensure that the STEVENS bicycle is assembled according to the state-of-the-art in science and technology.



# Note:

Some components have the maximum permissible torque values printed on them. Use a torque wrench and never exceed the maximum torque values! If you are in doubt or if you have any questions, contact your STEVENS dealer.

# **Maximum Torque Settings of Standard Bolts**

Limit values of the torque settings in newton metres (Nm) for setscrews with metric threads and head contact in accordance with DIN 912, 931, 934. The bolts are greased (friction coefficient = 0.125):

	Bolt quality (imprinted on the head)		
Dimension	8.8	10.2	12.9
M4	2.7	3.8	4.6
M5	5.5	8	9.5
M6	9.5	13	16
M8	23	32	39
M10	46	64	77

Source: VDI guideline 2230

Observe the minimum screw-in depth. In the case of solid (hard) aluminium alloys this depth is at least 1.4 fold the bolt diameter. In general, the weak point is not the bolt, but the component!

# Conversion factors of old torque values into internationally valid SI units:

 $\begin{array}{ll} 1 \; \text{kgfcm} = 0.0981 \; \text{Nm} & 1 \; \text{Nm} = 10.1931 \; \text{kgfcm} \\ 1 \; \text{in} \; \text{lbs} = 0.112 \; \text{Nm} & 1 \; \text{Nm} = 8.928 \; \text{in} \; \text{lbs} \\ \end{array}$ 



# Danger:

Keep in mind that the torque values given in the chapters "Recommended Torque Settings" and "Recommended Torque Settings for Disc Brakes and Hydraulic Rim Brakes" override any other torque values.



# **Caution:**

Be sure to use stainless steel bolts only for mounting mudguards and accessory parts.

# **Service Schedule**

# 1st Service - After 400 kilometres (250 miles) or three months from date of purchase

Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:
2nd Service – After 2,000 kilometres (1,200 miles	s) or one year
Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:
3rd Service - After 4,000 kilometres (2,500 miles	) or two years
Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:

4th Service - After 6,000 kilometres (3,500 miles)	or three years
Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:
5th Service – After 8,000 kilometres (5,000 miles)	or four years
Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:
6th Service - After 10,000 kilometres (6,000 miles	s) or five years
Order no.:	Date:
Replaced or repaired parts:	Stamp and signature of the STEVENS dealer:



Rike Card

DIKE Gala					
Model/Size:				!	
Frame no.:					
<b>Suspension fork:</b> Manufacturer:				!	
Model:				!	
Serial number:				!	
Intended Use					
Use according to	□ category 0 □ cat	egory	<i>y</i> 1	□ category 4	☐ category 5
Permissible overall load of t	the STEVENS bicycle:			kg	
Permissible load of pannier	rack:	25	kg		
Trailer permitted:			yes	□ no	
If yes – permitted trailer loa	nd:			kg	
Child seat permitted:			yes	□ no	
Wheel / Tyre size:					
Colour:					
Extras:					
Brake levers Brake lever assignment:	Right lever  front wheel brake rear wheel brake			heel brake neel brake	
Danger:  Read at least the chapter  "Before Your First Pide"			Registe	Note: er your STEVENS I	pike at

Hint to the STEVENS dealer: Copy this bike card and keep one copy in your customer file. Send another copy to STEVENS Vertriebs GmbH directly after the sale of the STEVENS bicycle

technical upgrades, if necessary.

"Before Every Ride".



# **Handover Report**

The above-described STEVENS bicycle was handed over to the customer ready for use, i.e. after its final assembly, inspection and functional check as described below (additionally required routines in parentheses):

<ul> <li>□ Lighting</li> <li>□ Brakes front and rear</li> <li>□ Suspension fork (adjusted to suit customer)</li> <li>□ Chain riveting checked</li> <li>□ Wheels (true running/spoke tension/air pressure)</li> <li>□ Handlebars/stem (position/screws checked with torque wrench)</li> <li>□ Pedals (release force adjusted)</li> <li>□ Saddle/seat post (saddle height and position adjusted to suit customer)</li> </ul>	☐ Gears (limit stops) ☐ Bolted connections of add-on parts (checked) Other routines performed:
Dealer name	Phone
City	Fax
Street	E-mail
Handover date, stamp, signature	
The customer confirms with his signature that he has recei the accompanying documents specified below and that he bicycle.	
☐ Supplementary instructions of the component manufa	cturers received
Customer name	
First name	Phone
City	Fax
Street	E-mail

# STEVENSBIKES.DE YOUR STEVENS DEALER