GENERAL
HANDBOOK CUBE

MODEL YEAR 2022

MOUNTAIN, CROSS AND FITNESS BIKE
TREKKING AND CITY BIKE, ROAD BIKE

ENGLISH

Company details

Status: august 2021

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CUBE Chapter A

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Sticker frame serial number (attached to top tube)

In the following images, you will find bikes showing all the necessary parts which are listed in the manual. As there are many different types of bike with different features on the market, we have shown a specific bike model for each category.

01	**chain rings**	**14**	**seat clamp**
02	**crankset**	**15**	**frame**
03	**pedals**	**15 a**	**chain stay**
04	**front derailleur**	**15 b**	**seat tube**
05	**chain**	**15 c**	**linkage**
06	**rear derailleur**	**16**	**fork**
07	**sprocket cluster**	**17**	**rear shock**
08	**brake lever**	**18**	**wheels**
09	**shifter**	**19**	**bar**
10	**brakes**	**20**	**stem**
10 a	**brake disc**	**21**	**head set**
10 b	**brake caliper**	**22**	**rear carrier**
11	**quick-release axles**	**23**	**light system**
12	**hubs**	**24**	**mud guard**
13	**seat post**	**25**	**X12 through axle**


STEREO
CUBE
C-60
SCHWALBE
ROCK RAZOR
HANS DAMPF
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10a
10b
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15a
15b
15c
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CUBE SLT
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15a
15b
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Content

Dear Customer

We would like to thank you for choosing a bike from our company and thank you for placing your trust in us. With this purchase, you have acquired a high-quality, environmentally-friendly means of travel which will give you a lot of pleasure and improve your health at the same time. Your cycle dealer will also be very important to you following the advice and final assembly stages.
He is your point of contact for servicing, inspections, modifications and all types of repairs. Should you have any questions regarding our product, please contact your cycle dealer.

1 About this Owner's Manual

1.1 Conventions

1.1.1 Symbol

Note!
Draws your attention to items requiring your particular attention.

Warning!
Makes you aware of the possibility of slight personal injury and possible material damage.

Danger!
Makes you aware of the possibility of grave personal injury which may even lead to death.

Risk of burns!
Temperature exceeds 45°C (temperature at which egg white sets) and can result in human burns.

1.1.2 Location indications

If this Owner's Manual states "right", "left", "front" or "back", this always means as seen from the "in the direction of travel" position.

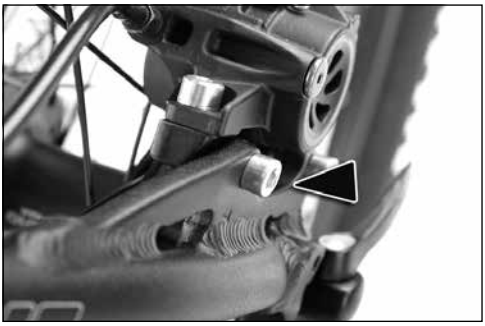
1.1.3 List of abbreviations

1.1.4 Definition of Terms

Run-out	A radial deviation on the rim is colloquially known as a "run-out".
Bar	conventional unit for air pressure.
Torque	Also called tightening torque. Indicates how "tight" a screw has been tightened.
DIN EN ISO	German Institute for Standardization. European standard
Specialist dealer / specialist workshop	In Germany: In this Owner's Manual, the term "specialist dealer" and/or "specialist workshop" indicates businesses which are authorised by the responsible authority in the region in question to denote themselves as such and to sell and repair bicycles. Specialist dealers we have authorised: our company only allows selected specialist dealers to sell and repair our products.
Handforce	The force an average adult human can exert with his hand using low to medium effort.
IHK	In Germany: Chamber of Industry and Commerce
MTB	Mountainbike
Nm	Newton meter; unit for torque
Pedelec	Pedal Electric Cycle
psi	pounds per square inch; American unit for pressure; 1 psi = 0.06897 bar
StVO	German Highway Code
StVZO	German Road Traffic Licensing Regulations

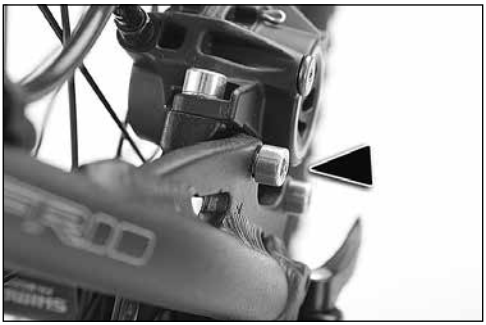
Correct tightening

The term "correct tightening" indicates the state in which screw heads fit tightly to the component over their entire surface.



Incorrect tightening

A loose screw can often be recognised by a projecting screw head.



! You find the used technical terms for bicycle parts in the plate in the cuff sheets or at the individual pictures

Laws:

! StVO (German Road Traffic Act) and StVZO (German Road Licensing Regulation) are laws that are only applicable in Germany.

! Before using your bicycle for the first time, please inform yourself about the laws applying to the use of your bicycle in your home country. Contact the relevant authorities and your specialist dealer on this matter.

1.2 Owner's Manual

Risk of Personal Injury and Material Damage!

This user manual is not intended to teach someone how to ride a bike. Failure to observe the instructions contained in this Owner's Manual may result in dangerous riding situations, falls, accidents and material damage.

Read through these instructions carefully before using your bicycle for the first time.

- Read through these instructions carefully before using your bicycle for the first time.
- Please make sure that all fields in chapter 15 have been filled out completely.
- Please note that this Owner's Manual must contain separate parts instructions in your national language regarding specific components of your bike. These are explicitly listed in chapter 16, delivery certificate.
- All the bicycle parts are illustrated in the diagrams.
- The parts in this Owner's Manual are exemplary for all CUBE bicycles with the exception of pedelecs.
- Keep this Owner's Manual and pass it on with the bicycle if you ever sell it or give it as a present.
- It is your responsibility to check your bicycle and to have any necessary work done to it.
- If you do not understand some of the sections of this Owner's Manual, consult your cycle dealer.

Risk of Personal Injury and Material Damage!

Owner's Manual for children and teenagers. This Owner's Manual is meant for the parents or legal guardians of the children and juveniles using this bicycle.

If your children or the juveniles you are responsible for do not observe the instructions set out in this Owner's Manual,

this may result in dangerous situations, falls, accidents and property damage.

- If you encounter phrases such as "...have all ...", "... have your bicycle ..." or the like, please note that they always address and refer to the child or the juvenile and his/her bicycle.
- Go through this Owner's Manual together and explain all chapters to your child, especially regarding the hazard warnings.
- As legal guardian, it is your responsibility to ensure the safety of this bicycle and its safe use.

1.2.1 Scope of Application

This Owner's Manual applies exclusively to bicycles from our company as of model year 2017 and their specific category and series as mentioned in Chapter 4.

This operating manual is only valid if it was with the bicycle at the time of purchase.• Please observe separate information, if available.

Risk of Personal Injury and Material Damage!

Please take information specific to your bicycle from the Owner's Manual for your bicycle model.

- This Owner's Manual is not suitable for learning to ride a bicycle.
- This Owner's Manual is not suitable for learning riding techniques.

1.2.2 Accompanying documentation

Risk of Personal Injury and Material Damage! Parts Instructions.

Risk of Personal Injury and Material Damage!

Due to the large number of existing bicycle parts, it is impossible to provide a totally exhaustive set of instructions valid for all.

For our Pedelec/E-bikes it's very important to read the additional separate instruction manual for the Cube EPO Pedelec as well as this general Cube instruction manual.

- It is possible that components mounted on this bicycle have not been described in this operating manual.
- Please therefore always observe the accompanying parts instructions from the respective manufacturer.
- Their instructions basically take precedence over any contrary instructions in the following text.
- Please consult your specialist retailer.
- For more information, please consult your specialist retailer.

1.2.3 Pictures

! The pictures related to the descriptions can be found right before or after the respective texts.

2 For your safety

2.1 Use your bicycle as intended

2.1.1 Who may use your bicycle?

Risk of Personal Injury and Material Damage!

- The rider must be able to ride a bicycle, i.e. he must possess a basic knowledge of the use of a bicycle and have the necessary sense of balance required to control and steer a bicycle.
- The rider must have be of the correct physical size for this bicycle (please consult your dealer).
- Children and teenagers must be able to operate the bicycle confidently.
  The operating equipments (e.g. brake levers) must be suitable for a child's hands

! Driving technique courses for mountain biking are offered by different facilities or coaches. They help to improve your driving technique and how you operate your bicycle.

2.1.2 How may you ride your bicycle?

Risk of Personal Injury and Material Damage!

- Sit on the saddle or ride out of the saddle, i.e. pedalling in a standing position.
- Hold the left handlebar grip with your left hand and the right hand handlebar grip with your right hand. Place your left foot on the left pedal and your right foot on the right pedal.
- Place your left foot on the left pedal and your right foot on the right pedal.
- Only use the bicycle as a means of travel.

2.1.3 Where may you ride your bicycle?

All bicycles manufactured by our company are classified into categories. Your bicycle's category is entered by your dealer end of this Owner's Manual. (Last Page). You can find a detailed explanation of bicycle category on pages 10-12. Please note also the corresponding chapter 4.

Risk of Personal Injury and Material Damage!

Your safety on these roads and tracks depends on your speed.

In the case of jumps and cycling at high speed, or if you are riding in the bike-park or downhill, there is basically a risk of falling.

The faster you ride, the bigger the risk you take!

Please note that all roads and paths may be damaged and/or have obstacles.

- In such areas, you should cycle particularly slowly and carefully. Push or carry your bicycle over such difficult areas if necessary.
- Only jump and ride at high speed, when you have firmly mastered this riding technique and you are able to control your bicycle in every situation.
- When riding your bicycle at high speed, with a sporty riding style (e.g. riding fast over edges, speed reduction ramps, bumps, etc.), or in the bike park, there is always an increased risk of falls.
- Adjust the use of your bicycle to your riding skills and use the appropriate protective equipment.

category 0	description	models
CHILDREN'S BICYCLES WHEEL SIZE 12"-26" (AUCH ALS HYBRID) 	Kids bikes for paved ways like: - tarmac roads not used by motor driven vehicles and bicycle routes - ways paved by gravel, sand or similar materials (e.g. fire road, dirt road) not used by motor driven vehicles In doing so the wheels have constant contact to the ground (-> no jumps, no riding on one wheel neither front nor rear, no braking that causes the rear wheel to lift up) Parents/guardian responsibility: The intended use (correct use of the bicycle), the instruction how to use, the control and the proper functioning of the bicycle are the parent/guardian responsibility.	**CUBIE 120** **CUBIE 160** **CUBIE 180** **ACID 200/240** **ACID 200/240 ALLROAD** **ACID 200/240 STREET** **ELLA 200/240** **REACTION 200/240** **ACID 240 HYBRID** **ACID 260** **ACID 260 ALLROAD**
category 1	**description**	**models**
ROAD RACING BIKES TRIATHLON- AND TIME TRIAL BIKES RECREATIONAL AND URBAN BIKES (ALSO AS HYBRID) 	Meant for riding on paved ways like: - tarmac roads and bicycle routes In doing so the wheels have constant contact to the ground (-> no jumps, no riding on one wheel neither front nor rear, no braking that causes the rear wheel to lift up)	**ATTAIN** **AGREE** **LITENING** **AERIUM** **SL ROAD** **EDITOR** **HYDE** **AXIAL**
category 2	**description**	**models**
CROSS AND TREKKING BIKES (ALSO AS HYBRID) CYCLE CROSS BIKES 	Meant for rides on paved ways like: - tarmac roads and bicycle routes - ways paved by gravel, sand or similar materials (e.g. fire road, dirt road) - paved hiking trails with only few roots, thresholds, rocks and drops In doing so the wheels have constant contact to the ground or lose contact for a split of a moment due to small asperities like roots (-> no jumps, no riding on one wheel neither front nor rear, no braking that causes a lift up of the rear wheel)	**AIM ALLROAD** **CROSS RACE** **NUROAD / WS** **NATURE** **TOURING** **ELLA** **TRAVEL** **SL ROAD PRO - SLT** **ACCESS ALLROAD** **STEREO HYBRID 120 ALLROAD** **NURIDE HYBRID ALLROAD** **REACTION HYBRID ALLROAD** **TOURING HYBRID** **KATHMANDU HYBRID** **ELLA HYBRID** **SUPREME HYBRID** **CARGO HYBRID** **COMPACT HYBRID** **FOLD HYBRID**

category 3	description	models
MOUNTAINBIKE WITH SUSPENSION FORK 100 mm (ALSO AS HYBRID) 	Meant for riding on ways like: - tarmac roads and bicycle routes - ways paved by gravel, sand or similar materials (e.g. fire road, dirt road) - paved and non paved hiking trails where roots, thresholds, rocks and drops are more often In doing so the wheels have constant contact to the ground or lose contact for a split of a moment due to small uneven terrain like roots (-> no jumps, no riding on one wheel neither front or rear, no braking that causes the rear wheel to lift up)	**AIM** **ANALOG** **ATTENTION** **ACID** **RACE ONE** **REACTION** **ELITE** **ACCESS** **REACTION HYBRID** **REACTION HYBRID** **ROOKIE**
category 4	**description**	**models**
FULL SUSPENSION MOUNTAINBIKE WITH MAX 160 mm TRAVEL (ALSO AS HYBRID) MOUNTAINBIKE HARDTAIL WITH MAX 130 mm TRAVEL 	Meant for riding on: - tarmac roads and bicycle routes - ways paved by gravel, sand or similar materials (e.g. fire road, dirt road) - paved and non paved hiking trails where roots, thresholds, rocks and drops are more often - more rough unpaved terrain with intermittent jumps/ drops with a height up to 0,5m In doing so the wheels have constant contact to the ground or lose contact for a split of a moment due to small uneven terrain like roots (-> no riding on one wheel neither front or rear, no braking that causes the rear wheel to lift up)	**AMS ZERO99 / ONE11** **STEREO 120** **STEREO 140** **STEREO 150** **REACTION TM** **STEREO 240** **STEREO 120 ROOKIE** **STEREO 140 HPC ROOKIE** **STEREO HYBRID 120** **STEREO HYBRID 140** **STEREO HYBRID 160**
category 5	**description**	**models**
FULL SUSPENSION MOUNTAINBIKE WITH 170/190 mm TRAVEL 	Like category 4 Plus riding on/in - on very rough and rocky terrain with intermittent jumps with a height up to 1m - in named sport and bike parks (occasional) Bikes of that category shall intensely be checked for damages after every ride due to the higher forces exerted.	**STEREO ONE77**
category 6	**description**	**models**
DIRTBIKE/FULL SUSPENSION/FULL SUSPENSIONMOUNTAINBIKE WITH ≥ 200 mm TRAVEL 	Like category 5 Plus rides on/in officially laid out marked /signed DH tracks and sport, trail and bike parks Bikes of that category shall intensely be checked for damages after every ride due to the higher forces exerted.	**TWO15** **FLYING CIRCUS**

! Important: Please note that when using kickstands, mudguards, luggage carriers, as well as bicycle trailers the application area of the model always changes to classification category 2.

2.1.4 In what condition must your bike be in when you ride it?

! Your new bike is an item of sports equipment and may not be used on public roads unless equipped to StVZO specification. In order to meet current StVZO requirements, your bike must have the following equipment listed here in extract form fitted.

! Please take the full wording of the regulations for trips in Germany from the StVZO or consult your dealer.

! You will find the exact legal guidelines with detailed information online at the following address: http://www.gesetze-im-internet.de/stvzo/

! When using outside Germany, please observe the traffic regulations prevailing in your country. For this, please consult your dealer or the competent authority.

- Two independently operating brakes
- A bell
- Dynamo or battery (battery light according to StVZO) powered lighting for front (white light) and rear (red light)

! Racing bikes under 11 kg are exempt from the dynamo regulation.

! Racing bikes exempt from the dynamo regulation must carry battery-powered lighting in the daytime.

! Racing bikes are exempt from this regulation for the duration of any races you may be participating in.

- White front reflector (often integrated into the front headlight) and a red reflector at the rear
- Two yellow reflectors each for the front and rear wheels; alternatively tyres with reflective stripes on both sides
- Two yellow reflectors for both right and left pedals

! All lighting components and reflectors must be officially approved.

! Approval can be recognised by a "K" marking, a wavy line and a multi-digit number.

! For regulation fitting of these parts, please consult your dealer.

2.1.5 Accessories and modifications

Risk of Personal Injury and Material Damage!

Many cyclists like to modify their bikes and customise them to their particular wishes. Forks, saddles, handlebars, pedals, brakes, tyres and suspension elements - there are many possibilities for changing your bike subsequently.

Working on bikes, including work which is assumed to be very simple, requires sound training, sound knowledge and a great deal of experience.

Unprofessional work on your bike can lead to dangerous riding situations, falling, accidents and material damage.

- Only use accessories that have been certified according to ISO standards. Bike computers and bottle holders are an exception, provided they are selected and fitted by a specialist dealer.
- Consult your specialist dealer when choosing accessories for your bicycle.
- Our company prohibits replacing the front fork for modification purposes. If replacing the fork becomes necessary during repairs, only a fork may be used that is identical in construction and has been approved by our company for your bicycle model.
  Consult our authorised specialist dealer.
- The expansion of electrical drives to any of our bicycles is **not allowed**.
- You may not change the condition of any part of your bicycle.

- Have all fitting of parts, modifications, servicing and any other work carried out solely by your specialist workshop.
- Please note that the person who modifies the bicycle is also liable for them.

2.1.6 Transport of children, baggage, bicycle trailers

Risk of Personal Injury and Material Damage!

The transport of children and luggageis associated with certain risks. Many bicycle frames are not suitable for fitting of bicycle racks and child seats.

Only transport your luggagein/on suitable carrying systems. These can be bicycle backpacks or bicycle racks that have been approved by the manufacturer. Please consult your specialist dealer on this matter.

Bicycle racks may only be fitted to mounting elements intended for this purpose (see picture below) from the following series/models.

- Cross
- Trekking/City
- MTB with mounting option intended for this purpose

- Child seats may only be fitted to suitable bicycle racks. Please consult your specialist dealer on this matter.
- The maximum additional load amounts to 25 kg.

WARNING:

Some bicycle racks have only been approved for lower loads.
Please refer to the specifications provided by the manufacturer of the bicycle rack.

- Find where this section is and following lines: Admissible total weight even with your children and/or luggage(see chart in chapter 3.2).
- Ensure a safe loading. No item of the luggagemay come in touch with the moving bicycle parts (road wheel, drive, chain, brakes) or may interfere with the functions or the handling of your bicycle.
- Do not exceed the admissible total weight, see chapter 3.2.
- Determine the admissible total weight by lifting your bicycle up, including the entire additional load (not including your children) and the weight of y Make sure that you do not reach the our bicycle clothing, and by standing on an officially calibrated scale while lifting your bicycle up.
- Please determine the weight of the children by using bathroom scales and add their weights to the total weight.
- Additional loads will affect the bicycle's riding behaviour.
- Additional loads will result in a longer braking distance.
- Adjust your riding style accordingly!
- The fitting and use of bicycle trailers on our bicycles is not allowed, provided they have not been specifically approved for the respective bicycle model.

2.1.7 Roller training

Risk of Personal Injury and Material Damage!

Roller training:
The use of roller trainers that are fixed tightly to the frame, the handlebar or the fork can damage your bicycle.

The use of roller trainers which are fixed tightly to the bicycle's fork, handlebar or frame is not allowed.

Carbon frames are generally only suitable for use on a free roller trainer (no fixing).

2.2 Other hazards

2.2.1 Hazards caused by faulty final assembly

Risk of Personal Injury and Material Damage!

Failure to observe the instructions contained in this Owner's Manual may result in dangerous riding situations, falling, accidents and material damage.

Have correct final assembly and adjustment of the right seat position for you confirmed by your dealer. Use the printed form in this Owner's manual on.

2.2.2 Hazards caused by improper use

Risk of Personal Injury and Material Damage!

Failure to observe the instructions contained in this Owner's Manual may result in dangerous riding situations, falling, accidents and material damage.

- Please observe the instructions set out in chapter 2.1.3
- Always check if your bicycle meets the requirements for its intended use (see chapters 2.1, 4.1.

2.2.3 Risk of burns

Risk of Personal Injury and Material Damage!

Risk of burns!

After long descents, the bicycle rims and brake disks can get very hot.

- Do not touch the rims or brake disks immediately after a descent.
- Let the rims and brake disks cool down before you touch them.
- In order to check the temperature, touch the rims and brake disks very briefly with your bare finger. If they are hot, wait a few minutes and repeat the test until the rims and brake disks have cooled down.

2.2.4 Other hazards and safety notes

Risk of Personal Injury and Material Damage!

Failure to observe the instructions contained in this Owner's Manual may result in dangerous riding situations, falls, accidents and material damage.

- Comply with the applicable traffic regulations of your country.
- Wear a helmet when cycling.
- Look out for any possible dangers when cycling, be alert and bear your own safety in mind.
- Do not cycle under the influence of alcohol.
- Cycle in a manner that ensures you have control of the bicycle at all times and that you will not get into difficulty in sudden dangerous situations.
- When cycling make sure that you wear suitable clothing that does not restrict the operation of the bicycle or impair your vision.
- Wetness can affect the efficiency of the brakes. The braking distance is increased.
- Only cycle wearing tight-fitting leg wear. Baggy clothing can get caught in the bicycle and lead to serious accidents.
- Do not exceed the admissible total weight, see chapter 3.2.
- Please refer to the care and maintenance information in sections 12 and 13.

Risk of Personal Injury and Material Damage!

Spinning wheels can injure your hands and other body parts.

- Keep your hands and other body parts away from spinning wheels!
- Keep your hands and other body parts away from moving parts (e.g. suspension, steering lever, brakes, etc.)!
- Make sure that children sitting on any child seats which may have been fitted can not touch any spinning wheels or moving parts.

2.3 Disposal

! Dispose of your bike properly at the end of its life.

! Ask your dealer or contact a recycling centre

3 Scope of Supply, Technical Data

3.1 Scope of supply

- **Complete bicycle, partially without pedals or**
- **Frame set**
  including the Owner's Manual and delivery certificate as well as all other relevant instructions of manufacturers whose parts were used for the bicycle.

  In case of carbon frames or pedelecs, please observe the instructions set out in the additional Owner's Manual.

3.2 Technical data

! Admissible total weight
=
Bicycle including entire additional load and attachment parts
+
Body weight incl. clothing and luggage(e.g. backpack or laguage bag)

Permissible total weight	
Road racing / Triathlon / Time trial /Cyclocross (incl. Hybrid)	115 kg
Mountainbike (MTB)	115 kg
Mountainbike Hybrid	125 kg
Trekking / Crossbike / Fitness-bike / Urbanbike (incl. Hybrid)	115 kg + 25 kg (on carrier)
Child's bike 12" (120) *	30 kg
Child's bike 16" (160) *	30 kg
Child's bike 18" (180) *	40 kg
Child's bike 20" (200) *	40 kg + 10 kg (on carrier)
Child's bike 24" (240) * (incl. Hybrid	80 kg + 10 kg (on carrier)
Child's bike 26" (260) *	90 kg + 10 kg (on carrier)

! (*): 12"/16"/18"/20"/24" or 26" indicates the wheel size. This is indicated on the tyre. Please consult your dealer.

! Please note that the use of light-weight components, e.g. special wheels, will reduce the load carrying capacity of the whole bicycle.

! For further information, please refer to the parts instructions provided by the respective manufacturer.

Example 1:
Wheel sets for a racing bike with an admissible total weight of 90 kg will decrease the admissible total weight of the racing bike from 115 kg to 90 kg.

Example 2:
Bicycle racks with an admissible total weight of 20 kg will decrease the admissible weight of the trekking bike from 140 kg to 135 kg.

Risk of Personal Injury and Material Damage!

New technical findings can result in changes to the models, their technical data and even in entirely new models.

- Please observe the separate instructions, if available.
- Please consult your specialist dealer regarding the currentness of this technical data.

3.3 Torques, screw connections

Part	Manufacturer	Model/Type	Connection	Type of connection	Tightening torque (Nm)
Seat post	CUBE	Performance Post	Clamping Saddle	2 screws	7
		Performance Motion Post		2 screws	7
		ProLight		1 screw + 1 handwheel	8-10
		AERO ProLight		2 screws	8-10
		Dropper Post		2 screws	8-10
	RFR	Suspension Seatpost		2 screws	7-9
	Level 9	Seatpost		2 screws	7
	Ritchey	WCS Carbon Single Bolt		1 screw	12
	Syntace	P6 Carbon		2 screws	8-10
	Rock Shoxs	Reverb Stealth		2 screws	10
	CUBE	AERIUM C:62	Clamping standard saddle	1 screw	6
			Clamping Monolink saddle	2 screws	8
	Carbon seat post		Clamping seat post on frame	1 screw	max. 6 (Apply torque gradually!) Consider torque information on seat post or inside seat post manual!
	Aluminium frame			1 screw	5-8
	AERIUM HPA (aluminium frame)			2 screws	4-5
	Carbon frame			1 screw	max. 6 (Apply torque gradually!)
	AERIUM C:62 / C:68 (Carbon)			1 screw	6
Bottle cage assembly				2 screws	3
Cable guide assembly				1 screw	1,5
Carrier assembly				per screw	6

4 Assembly and function

4.1 Categories / Model Overview

We divide our bicycles into the following categories. Within these categories, there are different series.

! You will find the category and model as well as further information relating to your bicycle in the delivery certificate at the end of this Owner's Manual.

! When you make the purchase, please check if everything has been filled out completely and correctly with the help of your bicycle dealer.

0 BIKE CATEGORY

4.1.1 Children's Bikes / Category 0

Children's bicycles are mountain bikes with front suspension whose range of application is defined by the spring travel and equipment. heels with rim diameter of 12", 16", 18", 20", 24" and 26" inches the range of application (see chapter 2.1.3) must be defined with your specialist dealer.

1 BIKE CATEGORY

4.1.2 Racing bike / Triathlon and time trial bikes / Category 1

Not equipped in accordance with StVZO, derailleur gear, rim breaks, road wheels with rimdiameter of 28 inches (622 mm)

Additional features:

- tyre with 21 mm to 28 mm
- rim or disc brakes

4.1.3 Fitness bike/ Urban bike/ Category 1

Not equipped in accordance with StVZO, derailleur or hub gear, wheels with rim diameter of 28 inches (622 mm).

Additional features:

- straight handlebar or handlebar similar to mountain bike
- tyre with 25 mm to 42 mm
- rim or disc brakes

2
BIKE CATEGORY

4.1.4 Cross bike / Category 2

Has the same equipment characteristics as mountain bikes, wheels with a rim diameter of 28 inches (622 mm) and a tyre width of up to 50 mm.

4.1.5 Trekking bike/ Trekking bike HYBRID/ Category 2

Equipment in accordance with StVZO, equipped with derailleur or hub gear, rim brakes, backpedal brakes or disk brakes, bicycle rack, splashguard ("mudguards"),wheels with rim diameter of 28 inches (622mm).

Additional features:

– tyre width of up to 55 mm
– lighting equipment, reflectors and bell

4.1.6 Cyclocross/ Category 2

Not equipped in accordance with StVZO, derailleur gear, road wheels with rim diameter of 28 inches (662mm).

Additional features:
- lug tyres
- disc brakes

3
BIKE CATEGORY

4.1.7 Hardtail/ Hardtail HYBRID/ MTB with suspension forkl/ Category 3

Hardtails are mountain bikes with front suspension whose range of application is defined by the spring travel and equipment. The range of application (see chapter 2.1.3) must be defined with your specialist dealer.

4
BIKE CATEGORY

4.1.8 Fully/ Fully HYBRID (Full suspension mountainbike with max. 160 mm travel) Category 4

Fullys are mountain bikes with front and rear wheel suspension whose range of application is defined by he spring travel and the equipment. The range of application (see chapter 2.1.3) must be defined together with your specialist dealer.

4.1.9 Fully MTB (Full suspension mountainbike with max. 170/190 mm travel) / Category 5

Fullys are mountain bikes with front and rear wheel suspension whose range of application is defined by the spring travel and the equipment. The range of application (see chapter 2.1.3) must be defined together with your specialist dealer.

4.1.10 Dirtbike/ Downhillbike (Full suspension mountainbike with max. 215 mm travel)/ Category 6

Dirtbikes bikes are mountain bikes with front wheel suspension/ Downhill bikes are mountain bikes with front and rear wheel suspension whose range of application is defined by the spring travel and the equipment. The range of application (see chapter 2.1.3) must be defined together with your specialist dealer.

4.2 General information

4.2.1 Brakes

Your bicycle is equipped with one or two independently-operated rim or disk brakes (see chapter 4.1.1 - 4.1.10).

Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to dangerous riding conditions, falls, accidents and material damage.

- Familiarise yourself with the operation of the brakes.
- Determine which brake lever operates the front brake and which one operates the back brake.
- Operate the respective brake lever several times in the static position. You can observe an opening and closing action of the brake blocks or brake calipers on the respective disk or rim.

4.2.2 Gear shift

Your bicycle is equipped with

- a derailleur gear and a crank set with one, two or three chainwheels. This gear shift will provide you with the optimal gear for every speed speed and will, for example, enable you to ride uphill more easily.
- This is how you can determine the number of gears: Derailleur gear: Multiply the number of the front chainwheels with the number of sprocket wheels in the back, e. g. 2 chainwheels x 10 sprocket wheels = 20 gears.
- Hub gear: Please take the indication on the hub shell or on the gearshift lever into account.

4.2.3 Frame and fork

Bicycle frames are available in the following versions:

- without suspension: rigid fork and rigid frame, available for the following series
  - Children's bike 120/160/180 SL/200/ 200 SL/240 SL
  - Racing bike
  - Cyclo-cross
  - Fitness/Urban/SUV
  - Trekking (not all models)
- semi-suspended ("hardtail"): with suspension fork and rigid frame, available for the following series
  - Mountain bike
  - Children's bike 240/260
  - Cross
  - Trekking (not all models)
- fully-suspended ("Fully" or "Full Suspension"): with suspension fork and rear wheel suspension.

There are different suspension systems with different numbers of joints for bicycles with full suspension.

four-joint frame

You can easily count the number of joints. The support for the spring element is not considered a join.

4.3 Frame material / information on carbon material

Modern bicycle frames consist of aluminium alloys, carbon, steel or titanium.

You can find your frame material under point 16, in the handover certificate, or by consulting your specialist retailer.

Risk of Personal Injury and Material Damage!

Carbon is a modern material used in bicycle and vehicle construction. However, carbon components are highly sensitive. Errors in its assembly or use could lead to breakages and therefore dangerous driving conditions, falls, accidents and material damage.

- It is imperative that you observe all of the following information regarding the use of carbon parts.
- Should you have any questions relating to the use of carbon parts, please consult your specialist retailer. Risk of personal injury and material damage!

Risk of Personal Injury and Material Damage!

Shock and impact loads which may occur as a result of unintended use (see chapters 2.1.3 and 4.1) or stone-chipping, may lead to inconspicuous damage in the carbon fibres and/or delamination (= a dissolution of the bonded carbon layers).

Such damage, combined with the forces arising from the operation of the bicycle can suddenly break carbon parts and therefore lead to dangerous driving conditions, falls, accidents and material damage

- Your bicycle must be used solely for the intended purpose (see chapters 2.1.3 and 4.1)
- After falls or other major mechanical stresses which are not prescribed under normal biking operations, carbon frames and components should no longer be used.
- Please consult your authorised specialist retailer immediately after a fall.

Carbon is a more commonly used term for carbon-fibre reinforced plastic. This describes a fibre-plastic composite material in which the carbon fibres are embedded in several layers in a plastic matrix.

4.3.1 Information on frame construction

These high-end products are produced by hand.

Deviations in finish may therefore occur, however, this does not represent grounds for complaint.

4.3.2 How to use your carbon parts correctly

1. **Do not, under any circumstances, mount brackets, screws, clamps or other elements which exert mechanical pressure on the carbon tube.**
2. **Clamping onto bike stands or other wall brackets:**
   - Never clamp your bicycle to a carbon tube or carbon seat post in the clamping jaws of a bike stand.
3. **Please take care when using shackle locks! These may, under certain circumstances, damage your frame.**
   - When using shackle locks, please ensure that these only touch the respective carbon tube at very the most, and are not exerting pressure.
4. **Saddle clamp / seatpost:**
   - The prescribed tightening torque of the saddle clamp bolt is max. 6 Nm.
   - The seat tube must not be scoured or mechanically processed in any other way.
   - Please consult your authorised specialist retailer immediately after a fall.
   - The seatposts and seat tubes must not be lubricated. Only a carbon assembly paste may be used.
   - Aluminium seatposts may only be mounted using a carbon assembly paste.
   - The seat clamp may not be closed if the seat post has been removed.
5. **Bottle holder:**
   - The thread sets are provided for attaching standard bottle holders. The maximum tightening torque of the screws for attaching the bottle holder to the frame is 3 Nm.

6. Bicycle rollers

- The use of bicycle rollers with fixed clamps is not permitted. By firmly restricting the drop-outs and quick-release hub axles, mechanical stresses occur which strongly exceed those permitted for normal cycling operations. This may result in damage to the bicycle frame.

7. Transport:

- Due care must be taken when transporting wheels with carbon frames.
- The frame should particularly be protected against contact with other parts using a cover for example.
- No carrier or other such systems which use clamping elements for fixing and mounting may be used. These clamping forces may lead to damage of the tubes or dropouts.
- Do not place any objects on the frame.
- Please ensure that the bicycle is in a fixed and stable position during transport.

5 Bicycle frame / Bicycle frame set

Risk of Personal Injury and Material Damage!

Incorrect mounting of the frame may result in severe falls!

You can purchase some of our bicycle frames separately and can have them assembled according to your individual wishes. Please make sure you consider the following important notes.

- The assembly of our frames may only be carried out by specialist dealers that have been authorised by us.
- The person building the frame into a complete bicycle is considered to be the manufacturer and is liable for any possible assembly faults and defects.
- This Owner's Manual is not an assembly instruction for your bicycle frame.
- Only use trademarked equipment that has been certified according to ISO standards and is suitable for this frame for the assembly. You can recognize the right equipment in the supplied documentation if the following information is present:

  - manufacturer information with complete address.
  - information regarding conducted inspections and inspection guidelines with ISO number.
  - detailed and clear product information and assembly notes in your national language.

- If you have questions regarding suitable accessories, please consult your specialist dealer.
- Please consider the information regarding front forks in chapter 2.1.5

Risk of Personal Injury and Material Damage!

- Racing bike, all models
- Fitness / urban, all models
- Cyclo-cross, all models
- Trekking with rigid fork geometry, all models
- KID 120/160/180 SL/200/ 200SL/200 Ella/240 SL/240 Ella

6 Before using for the first time

Risk of Personal Injury and Material Damage!

An unroadworthy bike can lead to dangerous riding conditions, falling, accidents and material damage. This same danger exists if you are not yet familiar with your new bike and its controls.

- Check your bike in accordance with point 7.
- Familiarise yourself with this bicycle before you first ride it. In particular, check which brake lever operates the front brake and which the rear – see Section 4.2.1
- Modern brakes have a very powerful braking effect. Excessive pressure on the brake levers can cause the respective wheel to lock and can therefore cause you to fall.
  Familiarise yourself slowly with the braking effect on your bike in a safe area of land.
- In a safe location, slowly test and become accustomed to your bicycle's braking response
- With new rim brakes and after replacing brake blocks, the full braking effect only develops after a certain run-in period. Please therefore note that your braking distances will initially be longer.
- Disk brakes need to be initially run in.
  Full braking efficiency only develops after the running-in process. Please note the enclosed brake manufacturer's running-in instructions.
- If your bike is fitted with optional click-in pedals, which firmly connect the shoe with the pedal, practise using them by mounting and dismounting. Click-in pedals are not safety pedals.
- If after purchasing you remove the saddle support and front and/or rear wheel for transportation, please follow the appropriate instructions in Chapter 11.

1. **Have your dealer confirm that the final assembly of your bike has been carried out correctly and that your bike is roadworthy. Have your dealer adjust the correct saddle position.**

! You can make fine adjustments and minor changes yourself as described in Chapter 8.2 and 8.3.

2. **Only use this bike when your dealer has familiarised you with your bike's technical features in a briefing.**
3. **Seal you bike with aerosol wax polish, see Chapter 11.**
4. **Before riding your bike for the first time, please also read Chapter 8.**

7 Before every trip

Risk of Personal Injury and Material Damage!

An unroadworthy bike can lead to dangerous riding situations, falling, accidents and material damage

Also consider the possibility that your bike may have fallen over when unattended or that someone might have tampered with it.

- Check that your bike is roadworthy before every trip.
- Memorise your bike's actual condition when new so that you will later be able to recognise deviations from the actual condition (photos you take yourself can be a valuable aid).
- Contact your specialist dealer immediately if you discover that the actual state of the bicycle deviates from its specified condition.
- Only ride your bicycle again if it has been properly repaired by the specialist dealer.

! The parts described in the next subchapters are not built into all bicycles. Some parts may also have been retrofitted.

! Determine the equipment of your bike with the help of the information in chapter 4 and the following pictures. Carry out the corresponding inspections.

! If you are unsure or if you have questions, please consult your specialist dealer. Only ride the bike again after it has been properly readjusted by the dealer.

1. **Visually inspect the whole bike:**

- Check all fixing screws for correct tightness (see Chapter 3.3)
- Check the entire bike for dents, ruptures, deep scratches and other forms of mechanical damage.

2. **Contact your dealer if visual inspections show defects of any description.**

7.1 Check the road wheels

! Front and rear wheels are both called road wheels.

A road wheel consists of :

- the hub
- On the rear wheel hub only sprocket or sprocket cassette
- Brake disk, if fitted,
- Spokes
- Rim and the tyre equipment, which in turn consists of

  - Tyre casings
  - Tube
  - Rim tape insert

! Currently, there are three different types of tyre:

Wired-on tyres or folding tyres: This most common type of tyre consists of the following components:

- tyre

  - If there are any loose parts:

  - rim tape (only for rims with spoke holes)

  Inside the tyre, there is a wire or a pad that attaches itself to the rim flange when the tyre is inflated.

  Field of application: All categories.

- Tubeless tyres:

  Special rims (with or without hermetically sealed spoke holes) and tyres form an airtight seal and make the use of a tube unnecessary. However, a tube can still be fitted in the event of a breakdown.

  Field of application:
  Mountain bikes, cross bikes, racing bike/ street.

- Tubed tyres:

  The tube is sewed into the tyre. During assembly, the tyre including the tube is glued to a rim specifically designed for this purpose. The assembly instructions of the tyre, glue and rim manufacturers must be observed in this context. Please also consider the notes in chapter 7.1.3.

  Field of application: Racing bike/street

  Information on the type of tyre and the tyre size is provided in chapter 16, in the delivery certificate, or can be obtained by consulting your specialist dealer on this matter.

Bicycles which are equipped according to StVZO may be fitted with rim reflectors.

7.1.1 Check fitting

1. **Shake both road wheels vigorously at right angles to the direction of travel.**

- The road wheels must not move in the forks.
- The quick release must be closed (see Chapter 8.8).
- There must be no audible creaking or rattling sounds.

2. **Contact your dealer if this check shows defects of any description**

7.1.2 Check the rims

Risk of Personal Injury and Material Damage!

Worn rims and/or substantial warping or run-outs may lead to dangerous riding conditions, falling, accidents and material damage.

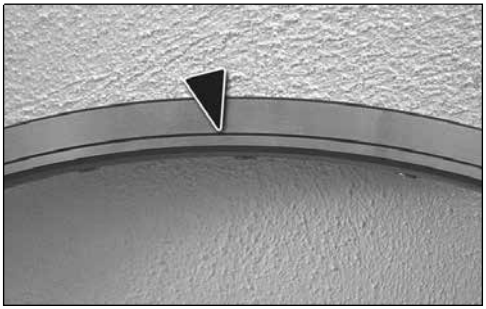
- Worn rims must be replaced and warping or run-outs repaired!

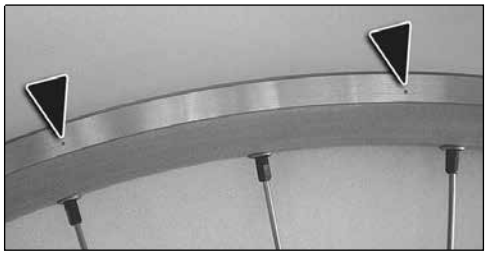
Risk of Personal Injury and Material Damage!

With rim brakes: Dirty rims may reduce braking efficiency.

- Dirty rims must be cleaned immediately.

1. **Check rims for wear:**
Rims with wear indicators:
Visual check





Wear indicator

Rims without wear indicators:

Visual check

- Fingernail check: Run your fingernail across the rim shoulder. No scoring should be felt.
- If the wear indicator is no longer visible or if the rim has discernible scoring, the rim must be replaced.

2. **Check rims for run-out:**

- Lift the bike up and spin first the front and then the rear wheel.
- Note the distance between the rim and the brake shoes and on disk brakes the distance between the rim and the frame strut or fork leg. The maximum permissible deviation per rotation amounts to 2 mm.

3. **Check your rims for dirt, especially oil and grease.**
Dirty rims must be cleaned immediately (see Chapter 12).

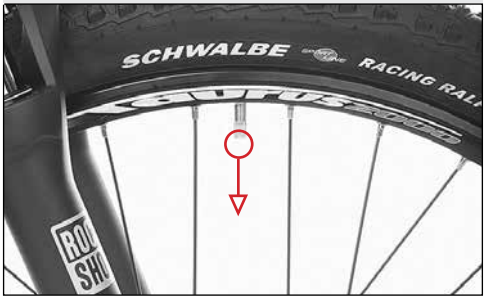
7.1.3 Check tyres

Risk of Personal Injury and Material Damage!

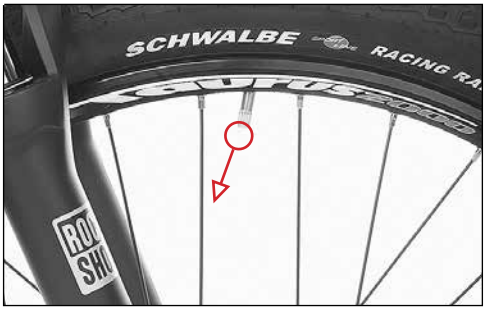
Does not apply to tubeless tyres.

If the valve is angled, the base of the valve can rip off when riding which causes sudden loss of tyre pressure.
This can lead to dangerous riding conditions, falling, accidents and material damage.

- Have the tyre seating corrected by a specialist workshop.
  You can undertake this job yourself if you are familiar with fitting and removing the road wheels (see Chapter 11.1) and replacing the tyre and tube.
- Remove the valve nut.
- Check the valve position:
  The valves must point directly towards the centre axis of the road wheel.



The valves must point directly towards the centre axis of the road wheel.



The valve does <u>not</u> point to the traversing wheel centre

Check the tyre pressure:

1. Determine your tyre type

Mountain bikes can be fitted with racing bike type tyres and racing bikes with trekking tyres.

<u>Rule of thumb:</u>

Mountain bike tyres:
Tyre width greater than 40 mm
Trekking / cross-country and fitness bike tires:
Tyre width from 25 mm – 42 mm
Racing bike style tyres:
Tyre width from 21mm - 28 mm
Consult your dealer to determine your tyre type.

<u>Pressures:</u>

- **Mountain bike tyres: 2.5 – 3.5 bar**
- **FAT bike tyres: 0.7 – 2.0 bar**
- **Trekking and city bike tyres: 3.5 - 5.0 bar**
- **Racing bike tyre: 6.0 - 10.0 bar**
- **For the correct air pressure for categories not listed here, please refer to the infor mation on the tire or consult your dealer.**

Risk of Personal Injury and Material Damage!

Too low a tyre pressure leads to increased likelihood of punctures but mostly dangerous handling.

The tyre can come off the rim on bends and cause the tyre to become detached from the rim.

This can lead to dangerous riding conditions, falling, accidents and material damage.

- Inflate your tyres to the correct pressure.

Many tyre pressures are given in "psi". Convert the pressure using the following table.

psi	30	40	50	60	70	80	90	100	110	120	130	140
bar	2.1	2.8	3.5	4.1	4.8	5.5	6.2	6.9	7.6	8.3	9.0	9.7

The actual permissible tyre pressure can be found in the tyre and rim manufacturer's instructions. The permissible tyre pressure is mostly embossed on the tyre wall. Please consult your dealer.

! **The higher your body weight, the higher the tyre pressure needs to be.**

Check the tyre pressure with a tyre pressure gauge. Simple gauges are often included with bicycle tubes and higher quality gauges are available from your dealer.
How to use them is detailed either in the instructions for use or you can have your dealer demonstrate this.

- If pressure is too low: Increase the pressure by inflating with a suitable pump.

- If pressure is too high: Release sufficient air via the valve and check the pressure again afterwards with a gauge.

! **Using a bicycle pump with a pressure gauge, you can check the pressure whilst inflating the tyre.**
Let some air out of the tyre first and then increase the pressure to the desired level.

! **There are various types of valve. All valves can be fitted with a dust cap. After removing the cap, you can place the pump head directly on the valve in either a Schrader (Auto) valve or what is known as a express valve (Dunlop). In the case of a Sclaverand (French) valve, you first have to loosen the small lock nut on the valve as far as it will go, then tighten it again completely after inflating the tyre.**

- Get your dealer to demonstrate operation of the valves to you.

2. Check your tyres for external damage and wear:

- The tyre rubber must have the same pattern as the original over its entire surface.
- The tyre canvas beneath the layer of rubber must not be visible.
- There must be no bulges or tears.

3. Check the fit of your tyres:

- Lift the front or rear road wheel and turn it by hand.
- The tyre must rotate through 360 degrees. There must be no highs or lows.

7.1.4 Other checks

1. Check your road wheels for loose items such as, for example, pieces of branches, residues, loose spoke reflectors etc.

If there are loose parts:

- Remove these if this is possible without applying any great force.
- Check if your road wheels have been damaged by these loose items.
- Tighten loose bicycle parts such as spoke reflectors, for example. If you find this is not possible, contact your dealer immediately.
- Please note that all reflectors are present in accordance with StVZO (see Chapter 2.1.4), correctly secured and not obscured or dirty.

7.2 Check saddle and seat post

Risk of Personal Injury and Material Damage!

If the seat post is not inserted far enough, the seat post can come loose.

This can lead to dangerous riding conditions, falling, accidents and material damage.

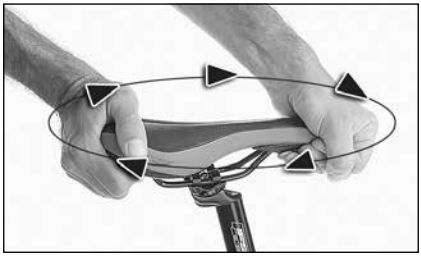
- Note the correct seat post insertion distance. Please read Chapter 8.3 for information.

! If you have the requisite technical knowledge, you can tighten this yourself.

- Please read Chapters 8.2, 8.3 and 11.2 for information.

1. **Check the saddle and seat post for tightness:**

Try to twist the saddle and seat post by hand. It should not be possible to twist the saddle and/or seat post.



Try to move the saddle in its clamp with alternate up and down movements.
It should not be possible to move the saddle.

If either the saddle and/or the seat post can be moved, tighten them (see Chapters 8.2, 8.3, and 11.2.

7.3 Check handlebars and stem

Risk of Personal Injury and Material Damage!

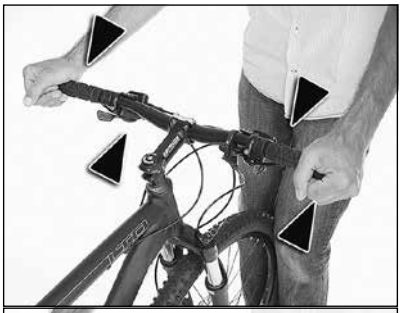
The handlebars and stem are very important components in terms of your riding safety.

Damage to them and mistakes during assembly can lead to very severe falls.

- If you discover any faults with these parts or have doubts about them, you must under no circumstances continue to use your bike.
- Contact a specialist workshop immediately.

1. **Check the handlebar and stem assembly.**

- The stem must be parallel to the front wheel rim
- and the handlebars must be at right angles to it.
- In the case of a shaft stem, the "Max" „or Stop" or similar marking must not be visible.
- Grip the front wheel betwween your legs.
- Grip the handlebars at both ends.
- Try to twist the handlebars in either direction by hand.
- Try to twist the handlebars in the stem by hand.

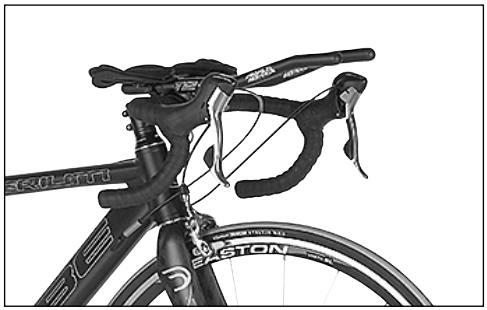


- It must not be possible to twist or slide any of the parts.
- There must be no audible creaking or rattling sounds.

7.4 Check handlebar-mounted parts

1. Check the gearshift/brake levers, grips (straight handlebars only) and triathlon rest (triathlon bikes only) for correct fit:

- Grip the front wheel between your legs or keep the handlebars steady with your hand.



- Try to twist the brake levers with your other hand.

Triathlon attachment

- Grip the front wheel between your legs.
- Try to twist the gear levers using your other hand.
- Try to pull the handgrips and the bar ends from the handlebars.
- It must not be possible to twist or slide any of the parts.
- There must be no audible creaking or rattling sounds.
- In case a bell has been fitted to the handlebar, it must be possible to reach it easily with a finger or a thumb and it must not be possible to move it.

7.5 Check the forks bearing

! The forks bearing is the forks bearing in the fork stem.

1. Check your forks bearing. The front wheel must swivel easily in both directions with no play:

- Stand beside your bike and hold the handlebar grips with both hands.
- Pull the front brake lever and keep the brake applied.
- Push your bike forward and backward in short, jerky movements.

- There should be no play in the forks bearing: no clicking should be heard or felt. You should not hear creaking noises either.
- Lift the whole bike up so that the rear wheel is higher than the front wheel.

- Move the front wheel by steering to the side and let it go again.

- The front wheel must automatically return to its original position.
- The front wheel must not lock in any position.

7.6 Check suspension forks

1. Check your suspension forks:

- Pull the front brake lever and keep the brake applied.
- Press down on the handlebars with your body weight so that the suspension forks deflect.
- The forks must spring easily up and down.
- There must be no audible creaking or rattling sounds.
- Stick the front wheel between your legs and try to pull the bicycle up using the handlebars.
- The standpipes mustn´t break loose from the diving pipes or from the fork bridge.
- Please regard the instructions for your fork in the separate instruction manual.

7.7 Check the rear wheel suspension

1. Check your rear wheel suspension:

- Sit on your bike and activate the suspension in a standing position using vigorous up and down movements.
- The rear of the bike must spring up and down easily.
- There must be no audible creaking or rattling sounds.

7.8 Check the brakes

Risk of Personal Injury and Material Damage!

If the brakes malfunction, there is the risk of loss of life.

- Check your brake system particularly carefully.

! When touring for several days, the brake disk, brake blocks and brake pads can sustain a great deal of wear.

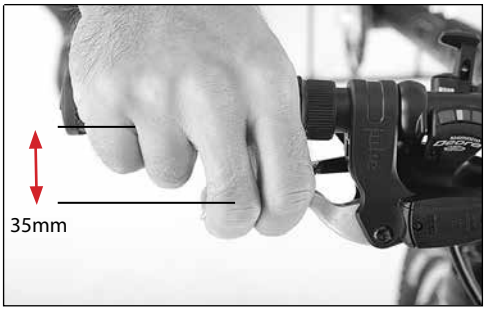
! When touring like this, carry spare brake blocks and replacement pads with you.

! Only replace them yourself if you are familiar with this task. Please consult your dealer.

! If you cannot replace them yourself, have this done by a trained specialist.

1. **Checking the function of your brake system:**

- In a static position operate both brake levers until the brakes make firm contact.
- Please note that in this position the minimum distance between the brake lever and the handlebar grip must be at least 35 mm.



- Try to push the bike with the brakes applied in this way.
  Both wheels must remain locked.

7.8.1 Check rim brakes with cable (racing bike version).

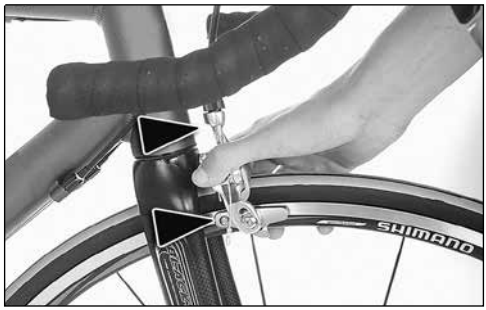
1. **Check the brake cables and their clips:**

Racing bike rimbrake

- The brake cables must not be damaged or corroded.
- On cable brakes, the brake cables must be securely clipped along their entire length.

2. **Check that the entire brake system has been secured and screwed in correctly:**

- Try to pull the brakes from the forks (front) and from the frame (rear) by hand.
- It must not be possible to pull the brakes off and there must be no play in the fixing bolts.



3. **Check the position of the brake shoes.**

- With the brake applied, the brake shoes must be in contact with the rim shoulder along their entire length.
- Under no circumstances must the brake shoes touch the tyre even when the brake is not applied.

4. **Check the brake block wear.**

- The brake blocks must not be worn down beyond the wear indicator.

5. **Check centring of the brake shoes.**

- The brake shoes must be equidistant from the rim on both sides.

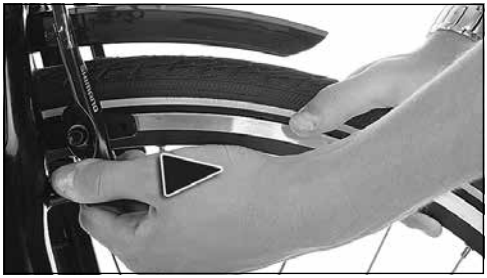
7.8.2 Check rim brakes and cable (mountain bike version).

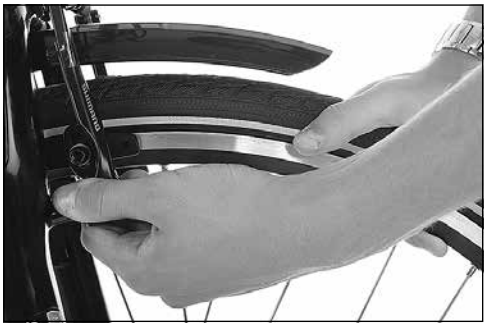
1. **Check the brake cables and their clips:**

- The brake cables must not be damaged or corroded.
- On cable brakes, the brake cables must be securely clipped along their entire length.

2. **Check that the entire brake system is secured and screwed in correctly:**

- Try to pull the brakes out of the sockets by hand.





- It should not be possible to loosen the brakes from the sockets by hand. A small amount of play is normal.

3. **Check operation of the brake shoes.**

- With the brake applied, the brake shoes must be in contact with the rim shoulder along their entire length.

4. **Check the brake block wear.**

- Under no circumstances, must the brake shoes touch the tyre even when the brake is not applied. Unhinge the brakes (see Chapter 11.1)
- The brake pads must not be worn down in excess of the degree shown by the wear indicator.

5. **Check centring of the brake shoes.**

- The brake shoes must be equidistant from the rim on both sides.

7.8.3 Check hydraulic rim brakes

1. **Check that the entire brake system is secured and screwed in correctly:**

- Try to pull the brakes out of the sockets by hand.
- It should not be possible to loosen the brakes from the sockets by hand.
  A small amount of play is normal.

2. **Check your brake system seals:**

- Operate each brake lever in a static position and hold the brake lever in that position.
- Check the brake system from the brake lever along the wires to the brakes.
- There must be no egress of hydraulic fluid at any point

3. **Check the position of the brake shoes:**

- With the brake applied, the brake shoes must be in contact with the rim shoulder along their entire length.
- The brake shoe must never touch the tyre – even if the brake is not applied.

4. **Check the brake block wear.**

- The brake blocks must not be worn down in excess of the degree shown by the wear indicator.

7.8.4 Check hydraulic disk brakes

Risk of Personal Injury and Material Damage!

Dirty brake disks may reduce braking efficiency.

Dirty brake disks may reduce braking efficiency.

1. **Pull the brake caliper alternately in all directions.**

- It should not be possible to move the caliper.

2. **Check your brake system seals:**

- Operate each brake lever in a static position and hold it.
- Check the brake system from the brake lever along the wires to the brakes.
- There must be no egress of hydraulic fluid at any point.

3. **Check brake disk for damage:**

- There must be no grooves, ruptures, deep scratches or other mechanical damage.

4. **Lift the front or rear road wheel and turn it by hand:**

- The brake disk must only have a slight axial run-out.

5. **Have the degree of wear to the brake pad and brake disk checked at a specialist workshop (see also Chapter 11):**

- The brake pads must not be worn down in excess of the degree shown by the wear indicator.
- The brake disk must not be less than the minimum thickness.
- The minimum thickness is specified in the accompanying parts instructions.

6. **Check your brake disks for dirt, especially oil and grease.**

- Dirty brake disks must be cleaned immediately (see Chapter 11)

! When touring for several days, the brake disk, brake blocks and brake pads can sustain a great deal of wear.

! When touring like this, carry spare brake blocks and replacement pads with you.

! Only replace them yourself if you are familiar with this task. Please consult your dealer.

! If you cannot replace them yourself, have this done by a trained specialist.

7.8.5 Check back pedal brake

1. **Ride your bike at walking pace.**
2. **Step "backwards" against the direction of drive.**
3. **This makes the rear wheel brake sharply.**

7.9 Check drive train and chain

1. **Turn the right-hand crank counter anti-clockwise and from above examine the chain rings and the pinion cassette.**

- The chain rings and pinions must have no axial run-out.
- There must be no debris present. Remove the latter if this is easy to do.

2. **Press the left crank in the position shown against the chain stay.**

- You should feel no internal play.
- There must be no audible creaking or rattling sounds.

3. **Check the chain for damage.**

- At no point on the chain should there be, for example, any damaged chain side bars, protruding rivet pins or fixed and immobile chain links.

4. **In a static position, turn the right crank against the direction of the drive and observe the running of the chain at the gear change rollers on the change mechanism.**
5. **The chain must run smoothly over the change rollers and must not jump.**

7.10 Check lighting set

Risk of Personal Injury and Material Damage!

Failure of the front headlight and the rear light can lead to dangerous road conditions in darkness and/or bad visibility.

- Only use your bike in such conditions if your lighting system is fully functional.

1. **Check your lighting system:**

- Please observe the on/off switch on the headlamp if there is one.
- Raise the front wheel.
- Turn the front wheel vigorously by hand.
- The front headlight and rear light must function properly.
- Please check that the rear light is functioning correctly if there is one.

7.11 Check carrier

Risk of Personal Injury and Material Damage!

Loose or untightened carrier parts can block the wheel and result in serious falls.

- Only use your bike again when the carrier has been attached by a specialist workshop.

1. **Shake the carrier from side to side by hand. The carrier fixings must not come loose.**
   The carrier must not touch the tyre.

- If there is one, check the sidelight behind to ensure it is functioning.

7.12 Check splash guards (mudguards)

Risk of Personal Injury and Material Damage!

Loose or untightened splash guard parts can block the wheel and result in serious falls.

- Only use your bike again when the splash guard has been attached by a specialist workshop.

1. **Check your "mudguard" fixings.**

- The mudguard and its fixing struts must not be broken or damaged.
- In a static position, move the front wheel vigorously from side to side using the handlebars.
- Tilt the whole bike from side to side a few times.
- The fixing struts must not loosen.
- No part of the mudguards must touch the wheels.

7.13 Other checks

Risk of Personal Injury and Material Damage!

A side stand which has popped out during a ride can result in serious falls. Always retract the side stand before riding.

- Always retract the side stand before riding.

1. **Check your side stand, if fitted.**

- Visually check screws and bolt fixture. Always retract the side stand before riding. The side stand must be securely fixed to the frame.
- Always fold the side stand upwards before riding. The stand must also remain in this position if the bike jolts.

Risk of Personal Injury and Material Damage!

A side stand that is bent, too short or too long does not provide a secure stand for your bicycle.

Your bicycle could fall over and injure you or other people.

In addition, your bicycle and surrounding objects such as other bicycles, cars, etc. may get damaged.

- Have bent side stands repaired or replaced by a specialist workshop.
- As for side stands with adjustable lengths: have the correct length adjusted by a specialist workshop.

1. **Check your side stand, if there is one.**

- Visually inspect the screw connection. The side stand must be mounted securely on the frame.
- Fold the side stand up before every ride. The side stand must not unfold by itself.

- As for side stands with adjustable lengths: check if the extendable part can be moved by exerting hand force.

2. Check the secure stand of your bicycle.

- Lean or place your bicycle on the unfolded side stand.
- Your bicycle must stand by itself.
- When pushed slightly in any direction, your bicycle must remain standing and not fall over.

Risk of Personal Injury and Material Damage!

Accessories that have not been fitted correctly or that have become loose can jeopardise your safety when riding.

- Check any accessory that is explicitly listed herein to ensure that it has been secured properly.
- Immediately contact a specialist workshop in case one of the following requirements is not met.

3. Check any accessories that have been retrofitted.

- Visually inspect the screw connections.
- Try to twist or move the accessories out of position by exerting hand force .
- Tilt the whole bicycle against the direction of travel and move it back and forth a few times.
- Lift your bicycle up (one or two centimetres) and put it down again.
- The accessories must not be loose, move or twist.
- No part of the accessories should touch the wheels.
- If fitted, a bicycle stand should not be unfolded.
- There should be no noticeable noise.

Risk of Personal Injury and Material Damage!

- **Damaged bicycle parts can have sharp edges and injure you.**
- Check all the bike parts that you may come into contact with while riding your bike.
- Have damaged parts repaired or replaced immediately by an authorised repair shop.

8 Adjusting and servicing your bike

You can modify your bike yourself.

Only make these adjustments yourself if you have the appropriate technical knowledge and experience and the right tools for the job.

8.1 Adjusting the adjustable stem (optional)

- Many bikes are fitted with an adjustable stem, the height and angle of which can be adjusted. Only have the adjustment made in a specialist workshop!

8.2 Adjust saddle position

Your saddle will be secured with one or two clamping bolts.
To adjust it, you need a hexagonal socket of the right size and a torque wrench.

1. To adjust the horizontal position or inclination of your saddle:

- Loosen the clamping bolt(s) a few turns until the saddle can be turned easily and/or the inclination angle adjusted.

- Move the saddle to the desired position.
- For seat clamps with only one fixing screw: always tighten the seat clamp with the correct, prescribed torque. Make sure that all loosened parts join together with the correct alignment (see Chapter 3.3.).
- For seat clamps with two fixing screws: tighten one screw just for a quarter or a half turn then continue with the other screw in the same way. Do this as long as you´ve reached the right torque (see Chapter 3.3.).
- Please observe the specified tightening torques in table 3.3.

8.3 Adjust saddle height

Risk of Personal Injury and Material Damage!

A saddle set too high for children who are not yet able to cycle safely without assistance, could result in dangerous driving conditions, falls, accidents, and/or property damage.

- Adjust the seat height in such a way that the child's feet can touch the ground when in a sitting position.
- On a gripper clamp with bolt, you need a hexagonal socket and a torque wrench of the correct size. For a quick-release clamp, please see Chapter 8.8.

1. **Loosen the clamp as described in Chapter 11.2.**
2. **Move the saddle and saddle stem to the desired position. Please note the instructions regarding saddle stem insertion distance in Chapter 11.2.**
3. **Clamp the saddle stem as described in Chapter 11.2.**

8.4 Adjust suspension forks

1. **Please read the instructions for adjusting your suspension forks in the suspension fork manufacturer's parts instructions.**

2. **If your forks have a fixed adjustment mechanism as shown in the illustration, please read the related instructions in the suspension fork manufacturer's parts instructions.**

Suspension forks with elastomers and/ or steel springs are only suitable for one overall weight range (= weight of rider + any baggage). This weight range is usually within 20 kg.

Only the forks pre-tensioning can be adjusted by compressing the springs by means of an adjuster screw. This merely changes the initial breakaway torque of the forks.
That is, with greater pre-tensioning, the forks only deflect at higher operating forces.

If the forks are pre-tensioned too much, suspension travel is accordingly less.

The weight range for which the suspension elements in your forks are suited can be found in the fork manufacturer's instructions and/or you can consult your dealer.

If your total weight is outside this range, have your dealer fit suspension elements matching your weight.

8.5 Adjust rear suspension

(on full suspension bikes)

1. **Please read the instructions for adjusting your suspension/damper elements in the suspension fork manufacturer's parts instructions. Please consult your dealer.**

2. **Adjust your suspension/damper element so that the bike when carrying the rider's weight deflects equally at the front and rear wheels.**

8.6 Service the gears

Risk of Personal Injury and Material Damage!

Incorrect operation of the gear shift levers can damage your gears.

- Never operate both levers or both gear shift switches at the same time!
- Please note that for the crank set (left-hand lever) and hub gears: never shift if there is a load!

1. **Please determine which gear shift system your bike has on the basis of the illustrations,. If you are not sure which one it is please consult your dealer.**

2. **If your gear shift lever is not shown in the illustrations, please refer to the accompanying gear shift lever manufacturer's instructions and/or consult your dealer.**

Shimano Rapidfire 2-Way-Release_Deore

Shimano Rapidfire 2-Way-Release_XT

Twist Grip Shift

Shimano EZ Fire

Shimano Rapidfire

Sram Force / Rival / Red

Shimano STI

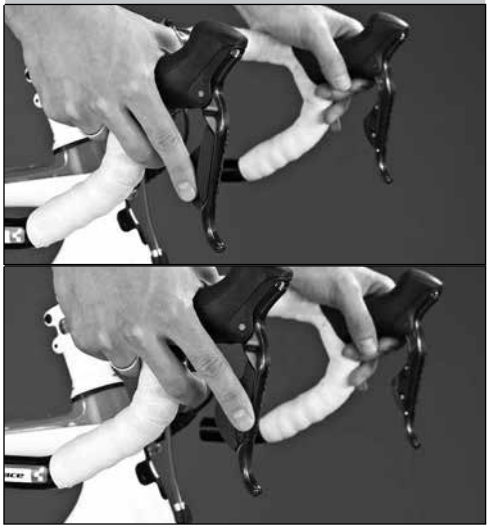
! The STI connection is mechanical.

! The left-hand lever operates the chain ring derailleur and the right-hand lever operates the gear shift.

! When using an electronic derailleur gear (called Di2 by Shimano), the shifting is done by pressing buttons.

! The Di2 connection is analog.

! For further information, please refer to the specific operating instructions provided by the manufacturer.



Shimano Di2

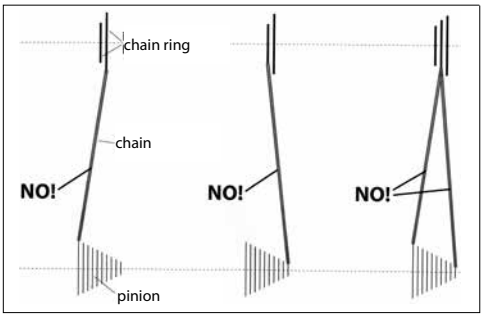
! On derailleur systems, the gear is shifted by switching the chain to another sprocket.

! On the crank set, these sprockets are called "chain rings" and on the rear sprocket cassette they are called "pinions".

3. Please observe the chain position prescribed as shown above.

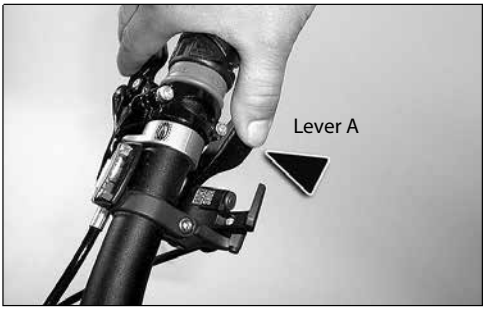
To be avoided:

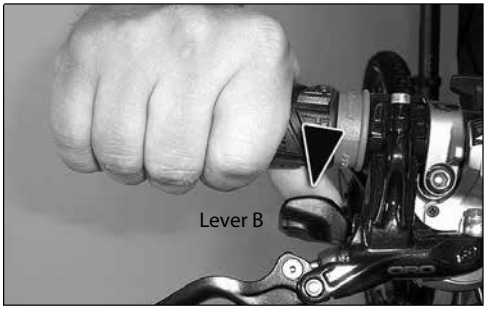
- largest chain ring + largest pinion.
- Smallest chain ring + smallest pinion.



8.6.1 Shimano Rapidfire/ Shimano Rapidfire 2-Way-Release/ Shimano EZ Fire

On your gear-shift there are two levers. Lever A is for shifting to a larger chain ring or sprocket and Lever B for shifting to a smaller one.





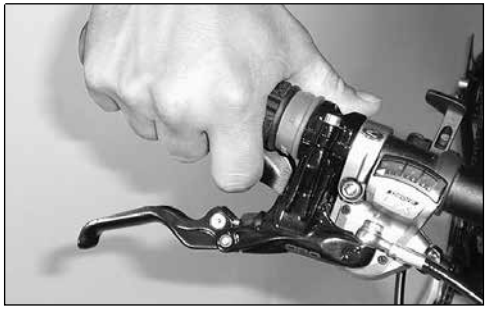
1. Here is how you shift to a larger sprocket:

- In order to shift, you must be pedalling.
- Press the lever down with your thumb beyond the first stop and keep it depressed until the desired gear is selected.

- For rapid shifting through several sprockets, press the lever right down and keep it depressed until the desired gear is selected.

2. Here is how you shift to a smaller sprocket:

- In order to shift you must be pedalling.
- Depress (2-Way-Release only) or pull Lever B until you feel it engage and then release it again straight away.

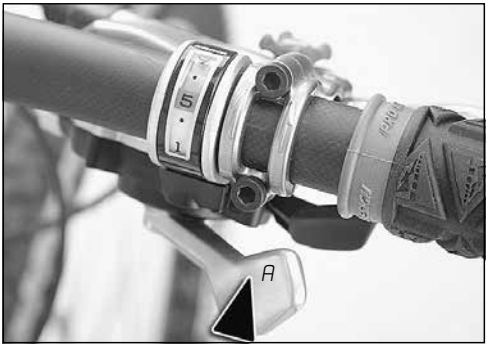


8.6.2 SRAM gear shift

On your gear-shift there are two levers. Lever A is for shifting to a larger chain ring or sprocket and Lever B for shifting to a smaller one.

1. Here is how you shift to a larger sprocket:

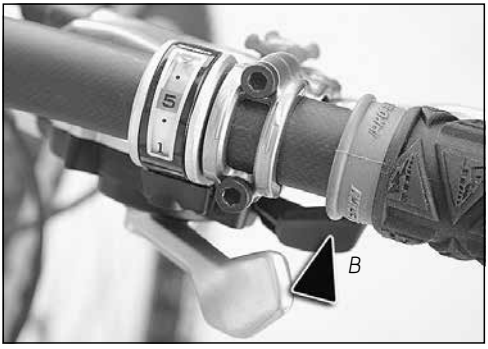
- in order to shift you must be pedalling.
- Press the lever down with your thumb beyond the first stop and keep it depressed until the desired gear is selected.



- For rapid shifting through several sprockets, press the lever right down and keep it depressed until the desired gear is selected.

2. Here is how you shift to a smaller sprocket:

- in order to shift you must be pedalling.
- Depress Lever B until you feel it engage and then let it go again straight away.



8.6.3 Twist grip shift

On your shift grip, there is a ring which can be rotated in either direction. By turning this ring you shift into the next gear.

Depending on the manufacturer, you shift into a higher or lower gear in one direction of rotation. Details of the precise functioning can be found in the accompanying parts instructions and/or consult your dealer.

1. Here is how you shift with hub gears:

- pedalling in order to shift.
- Turn the rotating ring in the desired direction until the gear is selected.

2. Here is how you shift with derailleur gears: to a larger sprocket

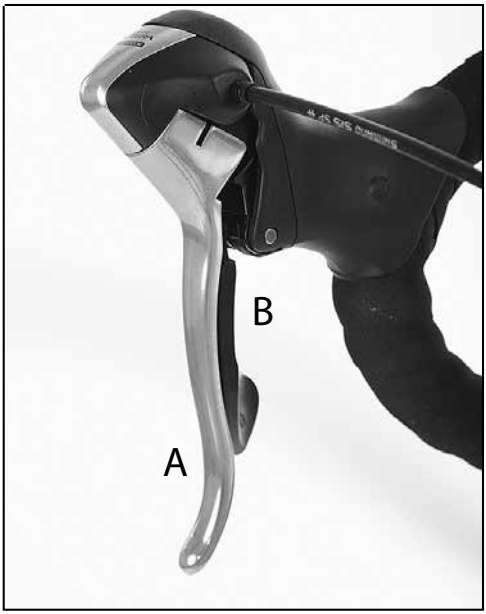
- in order to shift you must be pedalling.
- Turn the rotating ring until the desired gear is selected.
- For rapid shifting over several sprockets, turn the rotating ring until the desired gear is selected.

3. Here is how you shift to a smaller sprocket:

- in order to shift you must be pedalling.
- Turn the rotating ring until the desired gear is selected.
- For rapid shifting over several sprockets, turn the rotating ring until the desired gear is selected.

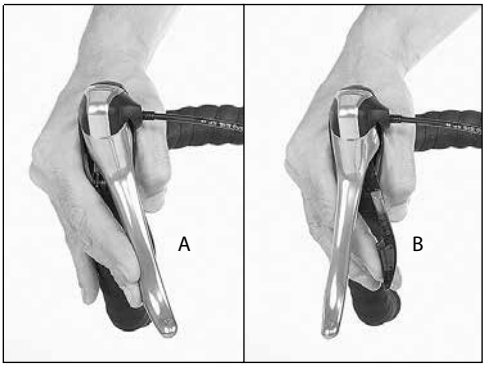
8.6.4 Shimano STI

On your gear-shift there are two levers. Lever A – this is also the brake lever - is for shifting to a larger chain ring or sprocket and Lever B is for shifting to a smaller one.



1. **Here is how you shift to a larger sprocket:**

- In order to shift you must be pedalling.
- Press Lever A down with your thumb beyond the first stop and keep it depressed until the desired gear is engaged.
- For rapid shifting through several sprockets, press Lever A right down and keep it depressed until the desired gear is engaged.



2. **Here is how you shift to a smaller sprocket:**

- In order to shift you must be pedalling.
- Depress Lever B until you feel it engage and then let it go again straight away.

8.6.5 Sram Force / Rival / Red

On your gear shifter/brake lever, you will find a lever which can be used to switch to both a lower and higher gear.

1. **In order to switch to a higher gear, please do the following:**

- To switch gears, you must pedal.
- Press the gear shifter inwards and hold down until the desired gear has been selected.
- To switch through several gears, press the lever down fully and hold down until the desired gear has been selected.

2. **In order to switch to a lower gear, please do the following:**

- to switch gears, you must pedal.
- Press the lever until you feel it coming to a stop and then let it go again.

8.7 Service the brakes

Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to dangerous riding conditions, falling, accidents and material damage.

- Familiarise yourself with the operation of the brakes.
- Ascertain which brake lever operates the front and which one operates the back brake.
- Operate the respective brake lever several times in the static position.

! You can observe an opening and closing action of the brake blocks or brake calipers on the respective disk or rim.

1. **To operate the brake, pull the lever in the direction of the handlebars.**

! You will obtain the best braking effect if you operate both brake levers in a coordinated and balanced manner.

8.8 Operate the quick-release action

Risk of Personal Injury and Material Damage!

Incorrect mounting of the road wheels on a quick-release hub axle may result in dangerous riding conditions, falls, accidents and material damage.

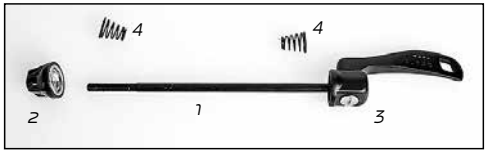
- Read the following description regarding the handling of your quick-release hub axle and follow the instructions accordingly.
- Familiarise yourself with the handling of the quick-release hub axle.
- Repeatedly practise mounting and demounting your road wheels to and from the quick-release hub axle.
- Check the road wheel every time after it has been mounted to the axle following the instructions in Chapter 7.1.1.
- In case you are unsure if your road wheels have been mounted correctly, do not ride your bicycle and consult your specialist dealer.

Risk of burns!

! Quick-release levers on disk brakes can become hot during riding.

- Touch the quick-release lever very briefly with your finger.
  If it feels hot, let it cool down.

Our bike hubs and possibly also your saddle stem may have quick-release fittings (often also referred to as "quick-release clamps" or simply "quick releases").



Legend:

1:	Axle	3:	Lever
2:	Nut	4:	Spring

These quick-release fittings make it possible to disassemble and assemble these components quickly without any tools.

Construction and function.

- Long-threaded axis with a nut on one side and an excentrically-mounted lever on the other
- There is a little spring between the nut and hub and between the hub and the lever.

- The ends of the springs with the smaller diameter always face the hub.
- On saddle stem locking quick-releases, instead of the nut there is a bolt head with an Allen key hexagon insert head.

Special types:
Some road wheels are fixed with floating axles or a combination of floating axle and quick-release lever or are equipped with other axle clamping systems. Please refer to the accompanying instructions on the handling of these parts provided by the suspension fork manufacturer and/or consult your specialist dealer.

To open the quick release:

1. **Push the excentric lever away from the hub. It can now be rotated 180° around its axis.**

2. **Turn the nut counter-clockwise until the wheel can be removed from the frame or front forks without any great effort. Should the nut come right off the screw, please ensure that the little springs do not get lost.**

3. **On saddle stem quick release levers: To loosen, instead of the nut, turn the bolt with the Allen key head itself counter-clockwise.**

Tightening: Reverse the procedure

1. **If the quick release lever was completely removed then push it from the left (in the direction of travel) through the hub.**

2. **Place the springs and the nuts on the bolt. Turn the right end now protruding from the hub and the nut clockwise.**

3. **On saddle stem quick release levers: instead of the nut, turn the bolt with the Allen key head itself clockwise.**

4. **Tilt the excentric lever so that it approximately forms the extension of the hub axis Hold the lever in this position.**

5. **Now turn the nut or the Allen key bolt head until the excentric lever, when turned around its bearing more than 90° to meet slight resistance (it now forms an approximately straight line extension of the hub axis.**

6. **Now press the lever through a further 90° until it reaches its end stop.**

Risk of Personal Injury and Material Damage!

Incorrect operation of the brakes can lead to dangerous riding conditions, falling, accidents and material damage.

If the lever is pressed into its stop position, the wheel is not secured tightly enough and can become displaced during riding or loosen.

There is a danger of falling.

- Open the lever again and turn the nut counter-clockwise again as necessary.
- Check that the wheels are seated firmly as described in Chapter 7.1

8.8.1 Operate the thru axle

8.8.2 General information

Thru axles are used on both the frame and the fork of CUBE models. All CUBE models use the advanced and reliable 12 mm thru axle system on the frame (MTB + ROAD + TOUR + URBAN) and the fork (ROAD + TOUR + URBAN). Manufacturer-specific 15 mm or 20 mm quick-release thru axles are used on the suspension forks of our MTB models. Further information about 15 mm and 20 mm thru axle systems can be found in the manual for the forks, or on the respective manufacturer website.

Standard thru axle X12

8.8.3 Before installation

Please check the clamping surface and the thread of the thru axle, frame and/or fork for any soiling before installing the thru axle. Dirt and soiling may impair the safety of the axle system. Lightly greasing the axle thread is recommended.

Risk of personal injury and material damage!

Important information about the handling and use of thru axles

Always use the tools recommended by the manufacturer when installing the axle. Always use a torque wrench.

Never exceed the maximum torque, as specified by the manufacturer!

Always read the operating manual of the suspension forks and the wheel manufacturer before replacing or operating a fork/ wheel combination with a thru axle system.

Risk of material damage!

Check the correct fit of the thru axle before every use.

Incorrectly installed wheels and thru axles may cause severe falls and accidents! Please consult your CUBE dealer on how to safely handle the installed thru axle type.

8.8.4 Assembling / disassembling the thru axle

1. **Insert the wheel into the fork or frame, and insert the brake disc into the brake calliper.**

Make sure the thru axle is inserted straight, to prevent damage to the thread. To prevent damage to the thread and other components, the thru axle must not be tilted or stiff to turn while inserted/screwed in.

2. **Secure the thru axle hand-tight with an Allen key.**

3. **Then adjust the torque to the manufacturer-specified value using a torque wrench, but never exceeding 16 Nm.**

4. **To remove the thru axle, it must be unscrewed using an Allen key.**

8.8.5 Assembling / disassembling a quick-release thru axle

Risk of personal injury and material damage!

Always observe the operating manual of the fork manufacturer

Risk of material damage!

A folding cam lever is often used on suspension forks to clamp the axle. After screwing in the axle, this lever must be folded and secured hand-tight. Failure to do so may result in the lever working itself loose, at the risk of causing an accident!

8.8.6 Assembling / disassembling a quick-release thru axle on the rear wheel

Risk of personal injury and material damage!

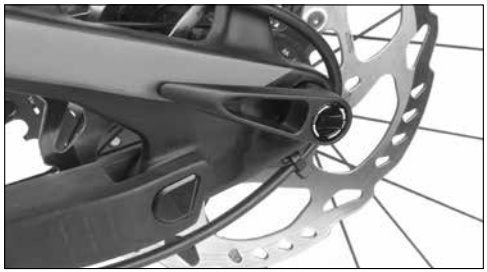
Always observe the operating manual of the thru axle manufacturer.

Risk of material damage!

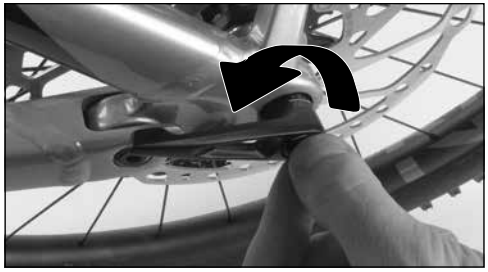
Check the correct fit of the thru axle before every use.

1. **Insert the wheel into the frame at the same time as attaching the chain and inserting the brake disc into the brake calliper. Make sure the thru axle is inserted straight, to prevent damage to the thread. To prevent damage to the thread and other components, the thru axle must not be tilted or stiff to turn while inserted/screwed in.**

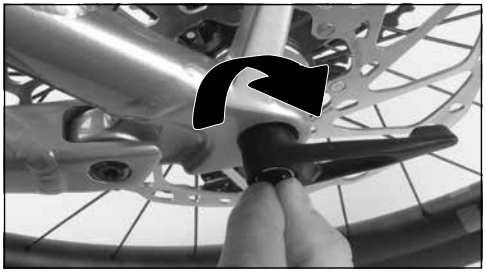
2. **Tighten the axle to achieve a secure fit by using the lever and applying manual force. Do not exceed a tightening torque of 16 Nm.**
3. **If the lever is in a difficult position to apply manual force onto, loosen the lever fastening mechanism on the axle using two fingers. This can be loosened by turning it 180° anticlockwise with two fingers.**



The lever can now be pulled slightly away from the axle and turned into any position you choose. To retighten the axle, reposition the lever on the axle in a comfortable position and tighten the torque again.



4. **Once you have tightened the axle enough, position the lever so that it points towards the front-end of the bike and slide the lever onto the axle. Now turn the fixing screw 180° clockwise to secure the lever against working itself loose.**



5. **To release the axle, turn the lever anticlockwise. If you cannot apply enough force to the lever in the current position, follow steps 1 to 4 in reverse. Then you can adjust the position of the lever to make it easier to loosen.**

8.8.7 Fork end

Please ensure that the locking screw on the fork ends dropout of the frame (MTB + ROAD + TOUR + URBAN) and the fork (ROAD + TOUR + URBAN) is tightened correctly. The screw is only used to fix the threaded insert in place when the wheel-set is removed, and therefore only needs to be fastened "hand-tight".

8.9 Using click-in pedals (optional)

Risk of Personal Injury and Material Damage!

Click-in pedals are not safety pedals. If an excessive release force is set, it is possible that you will not be able to get your shoes out of the pedal quick enough in an emergency situation.

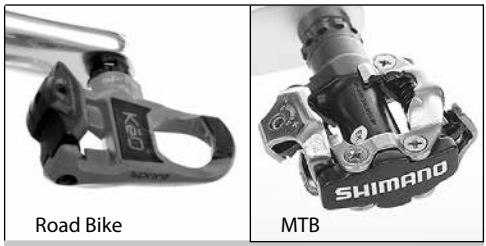
If too soft a release force is set, the shoe may possibly become disengaged from the pedal unintentionally when you are riding.

In either case, there is an increased danger of falling and injury.

- Familiarise yourself with the click-in pedals and how to use them.
- Practise mounting onto and dismounting from the pedals when not moving.
  Sit on the saddle and hold onto a stable object with one hand.
  Click both shoes alternately in and out.
  Please consult your dealer.
- Familiarise yourself with the release on careful practice rides.
- Discover for yourself the optimum tightness setting.
- Practise mounting and dismounting at various release settings.
- You can find details on how to adjust the release setting in the accompanying parts instructions and/or consult your dealer.

! In unpredictable traffic situations and on difficult terrain, it is often necessary to "click out" with one or even both shoes.

- Practise this with both feet alternately.
- When pedalling, place your shoe centrally on the pedal so that you don't click in.
  If need be, you can then support yourself with one or both legs on the ground.



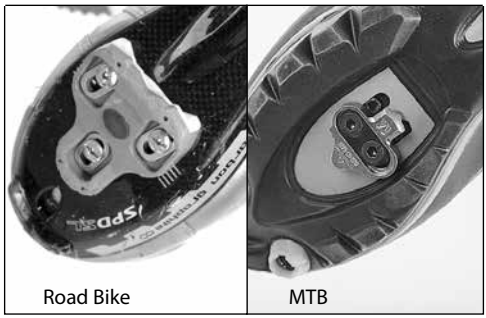
Road Bike MTB

! With click-in pedals, the shoe and pedal are firmly connected in a vertical direction. When pedalling, you can not only push the pedal down but also pull it upwards.

! To be able to use a click-in pedal to the full, you need shoes specially designed for the pedal system concerned and to which the pedal hooks supplied with the pedal can be affixed.

! The following description is intended purely as an example.

! Please refer to the instructions for your pedal/shoe combination provided by the manufacturer and/or consult your specialist dealer in order to ensure that your click-in pedal system is correctly assembled and you use it correctly.



Road Bike MTB

1. **Have this fitting work done by your dealer.**

2. **To position your foot correctly on the pedal:**

   a) Bring the pedal down to its lowest position.

   b) With the toe of your shoe pointing downwards, position the hook nose of the shoe in the front pedal insertion point.

   c) When the hook nose is positioned correctly in the pedal, push the whole surface of the foot sharply downwards until the clamping mechanism clearly and audibly engages.

- The shoe is now firmly vertically connected with the pedal.
- Depending on the pedal system, the shoe has sideward freedom of movement.

3. **To loosen your shoe from the pedal:**

- Twist your heel sharply away from the bike.

8.10 Loading the carrier

Risk of Personal Injury and Material Damage!

A carrier is not intended for transportation of bulky items or persons.

Misuse of the carrier can lead to dangerous riding conditions, falls, accidents and material damage.

Only carry compact items of luggage with a maximum total weight of 25 kg and use a suitable restraint system. Consider max. weight information on carrier!

- Place your items of luggage in the middle of your carrier.
- If using panniers, please also ensure that these are suitable for your carrier.
  Fit them in accordance with this Owner's manual.
  Please observe the relevant Instructions for use and/or consult your dealer.
- Attach your luggage item using a tension clip or specially suited elasticated bungee cords.
- "Shake" your bike to and fro after loading it.
- The luggage or your panniers or parts thereof must not work loose.
- Your luggage or your panniers or parts thereof must not hinder your freedom of movement when riding.
- Neither your luggage nor your panniers nor parts thereof must touch the wheels.
- Neither your luggage nor your panniers nor parts thereof must cover your lights or reflectors.

9 During riding

(Troubleshooting)

Risk of Personal Injury and Material Damage!

If you carry out maintenance procedures you are not authorised to perform, this may result in dangerous riding conditions, falls, accidents and material damage.

Have all problems not listed in the table below checked immediately by your dealer and if necessary rectified.

Risk of Personal Injury and Material Damage!

If you notice any unusual handling, unusual noises or faults not listed in this Chapter, this can result in dangerous riding conditions, falls, accidents and material damage.

- Have anything you notice which is not listed in the following table checked immediately by your dealer and if necessary rectified.
- If the measures listed herein do not provide a remedy, please consult your specialist dealer immediately.

9.1 Gears and drive train

Problem	Possible causes	Corrective action
Gear does not shift or not cleanly	Shift lever not operated correctly	Operate again
	Gear out of adjustment	Adjust in specialist workshop
	On steep incline, too great a pressure on the pedal and/or pedalling too slowly	Repeat gear shift on flat terrain; Shift when static: Lift rear wheel, turn crank in direction of travel until the required gear is engaged.
Drive train blocked after or during shifting	Chain jammed	Stop, operate gear shift in reverse, lift rear wheel and turn crank against direction of drive. If crank cannot be moved, under no circumstances use force. Contact a specialist workshop immediately.
Unusual noises such as clicking or cracking noises, loud grinding and/or knocking	Damaged drive train/gear components.	Contact a specialist workshop immediately.
Uneven resistance when pedalling	Damaged drive train/gear components.	Contact a specialist workshop immediately.
Chain off	Incorrect shift operation (see Chapter 8.6) Gear out of adjustment or damaged Possible under unfavourable conditions	Stop, lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the direction of drive (only if possible with ease). If repair is not possible in this way contact a specialist workshop immediately.
Chain comes off after or during shifting	Incorrect shift operation (see Chapter 8.6) Gear out of adjustment or damaged Possible under unfavourable conditions	Stop, operate the shift lever in the opposite direction, lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the direction of drive (only if possible with ease). If repair is not possible in this way, contact a specialist workshop immediately.
Chain jumps off permanently.	Permanent incorrect operation of gear shift Gear out of adjustment or damaged.	Only operate the gear shift as per instructions in Chapter 8.6 If operation is correct, contact a specialist workshop immediately.

9.2 Brake

Risk of Personal Injury and Material Damage!

The brakes on your bike are amongst the most important parts when it comes to your safety. Incorrectly functioning brakes can lead to dangerous riding conditions, falling, accidents and material damage.

- At the slightest problem and if the braking effect deteriorates, contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action
Brakes do not function	Brake not correctly assembled	Correct assembly as per Chapter 11.1
	Brake damaged	Contact a specialist workshop immediately.
Reduced braking effect, brake levers have to be pulled too far.	Worn brake blocks or brake pads	Have brake blocks or brake pads replaced immediately in a specialist workshop.
	Brake cable stretched, worn or clamp/s damaged	Contact a specialist workshop immediately.
	On hydraulic brakes, brake system leaking	Contact a specialist workshop immediately.

9.3 Frame and suspension

Risk of Personal Injury and Material Damage!

Frame and suspension faults may lead to dangerous riding conditions, falling, accidents and material damage.

- At the slightest malfunction, contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action
Noises: Creaking, knocking, grinding or other.	Frame and/or suspension damaged	Contact a specialist workshop immediately.
The seat post slips into the frame or twists out of position.	Tightening torque too low	Check and correct the tightening torque (see chapter 3.3).
	In the case of frames and/or seat posts made of carbon	Contact a specialist workshop immediately.

Problem	Possible causes	Corrective action
The seat post slips into the frame or twists out of position.	Incorrect assembly	Dismantle and assemble correctly according to point 11.2
	The diameter of the seatpost is too small	Assemble a seatpost with the correct diameter
Poor suspension response	Suspension has been set incorrectly	Adjustment according to the accompanying parts manual
Poor suspension response despite being adjusted correctly	Suspension damaged	Contact a specialist workshop immediately.

9.4 Splash guard, carrier and lighting system

Risk of Personal Injury and Material Damage!

Splash guard, carrier and lighting system faults may lead to dangerous riding conditions, falling, accidents and material damage.

- At the slightest malfunction, contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action
Noises: Creaking, knocking, grinding or other.	Splash guard or carrier parts loose	Contact a specialist workshop immediately.
Lighting system partly or totally dysfunctional	Lighting elements (bulbs, LEDS) burnt out	Replace lighting elements. Please consult your dealer.
	Wiring damaged	Contact a specialist workshop immediately.
	Dynamo defective	

9.5 Road wheels and tyres

Risk of Personal Injury and Material Damage!

Damage to road wheels and tyres may lead to dangerous riding situations, falling, accidents and material damage.

- At the slightest malfunction, contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

Problem	Possible causes	Corrective action
Road wheels "hopping" up and down	Tyre damage Defective spokes	Contact a specialist workshop immediately.
Noises: Creaking, knocking, grinding or other.	Debris caught in wheel	Remove debris. Afterwards ride your bike with particular care. Have your bike checked by a specialist workshop for any consequential damage.
	Damage to road wheel	Contact a specialist workshop immediately.
Spongy handling	Air pressure too low	Increase air pressure (see Chapter 7.1.3). If the same handling occurs again shortly after there is a slow puncture (see next line)
Increasingly spongy handling Very unusual rolling characteristics (you can feel every stone)	Flat tyre	Replace tube and if necessary tyre and tape on tubeless systems Replacing tyres Contact a specialist workshop (*) immediately. The bike must not be used until then. (*): Changing the tube, tyre and rim tape can only be undertaken given the required experience. Have your dealer demonstrate this procedure to you and practise this job until you are familiar with it. For removing and refitting road wheels, see Chapters 8.8 and 11.1.

10 After falls or accidents

Risk of Personal Injury and Material Damage!

Damage after a fall or accident may lead to dangerous riding situations, falling, accidents and material damage.

- After a fall or accident, contact your dealer immediately.
- Only ride the bike again after it has been properly readjusted by the dealer.

After a fall basically you must renew all damaged bike components such as

- Handlebars
- Triathlon / time trial attachment
- Bar ends
- Handlebar stem
- Seat post (if made of carbon)
- Saddle (if saddle framework is made of carbon)
- Rims (if made of carbon)
- Crank.

All other bike parts must be checked by your dealer and, if necessary, replaced.

Risk of Personal Injury and Material Damage!

More and more bikes are fitted with carbon fibre components

Carbon fibre components are very sensitive and if incorrectly fitted and if slightly damaged can lead to dangerous riding situations, falling, accidents and material damage.

- Please note all instructions regarding assembly, care, maintenance and checking these parts in accordance with the accompanying parts instructions.
- Only have assembly work done on or of carbon fibre parts carried out in a specialist workshop.
- After damage and falls. you must consult your dealer.
- Only use your bike again after he has replaced the damaged parts or assured you that you can continue to use the bike without any worries.
- Please also refer to the information provided in chapter 4.8

11 Transporting your bike

Risk of Personal Injury and Material Damage!

An unsuitable transportation system may damage parts of your bike which are important for safety and lead to dangerous riding situations, falls, accidents and material damage.

- Only transport this bicycle inside your car.
- Objects or items may not be placed on this bicycle or its frame.
- Any bike carrier (e.g. roof, rear end) that requires the frame or bicycle to be mounted or clamped is not suitable for this bicycle.

This bike may only be transported inside a vehicle. Please note during transportation that the bike is secured and is not damaged by other packaging items, for example.

For transportation you may remove the front and rear wheels and the saddle stem with saddle if these are fitted with quick releases. Only undertake this disassembly if you are sure that you can reassemble these parts correctly.
See Chapters 8.3, 8.8

If your road wheels are bolted to the frame (e.g. in the case of hub gears), consult your dealer

Danger of material damage!

If your bike is inside a vehicle, solar radiation can cause the tyres to burst or come away from the rim.

- Let the air out of the tyres prior to transportation and fill them again after transportation (see Chapter 7.1.3)

11.1 Fit and remove road wheels

Risk of Personal Injury and Material Damage!

Incorrectly fitted road wheels can lead to dangerous riding situations, falling, accidents and material damage.

- You must have your dealer demonstrate fitting and removing your road wheels.
- Practise this job at least once under his supervision and control.
- Only remove and fit the seat post and saddle if you are sure you have mastered this job.

Risk of burns!

After long descents, the bicycle rims and brake disks can get very hot.

- Do not touch the rims or brake disks immediately after a descent.
- Let the rims and brake disks cool down before you touch them.
- In order to check the temperature, touch the rims and brake disks very briefly with your finger. If they are hot, wait a few minutes and repeat the test until the rims and brake disks have cooled down.

Danger of material damage!

- Hydraulic brakes must under no circumstances be operated after removing the road wheel!
- If your bike has a disk brake, use the mandatory transportation wedges supplied for that purpose for transportation following removal of the road wheel.
- Remove these immediately prior to refitting the road wheels.
  Please comply with the accompanying parts instructions here.

Risk of Personal Injury and Material Damage!

Rim brakes only:
when fitting and removing, the brake blocks can get twisted.

- When fitting the road wheels, please note that the brake blocks are correctly positioned (see Chapter 7.8).
- If these are not correctly positioned, please contact a specialist workshop.

! For transportation you may remove and later replace the road wheels on your bike if these are fitted with quick releases.

! If your bike has rim brakes please be careful that you do not change the position of the brake blocks with the tyre. This could happen especially in the case of large-volume tyres. If the tyre does not pass easily between the brake caliper blocks, let a sufficient amount of air out of them.

! Then inflate the tyres afterwards to the correct pressure.

11.1.1 All categories/series except the category racing bike/triathlon

1. **Remove the front wheel first (continue with 3).**
2. **Switch to the smallest pinion of the rear wheel's sprocket cassette (see chapter 8.6).**

Risk of Personal Injury and Material Damage!

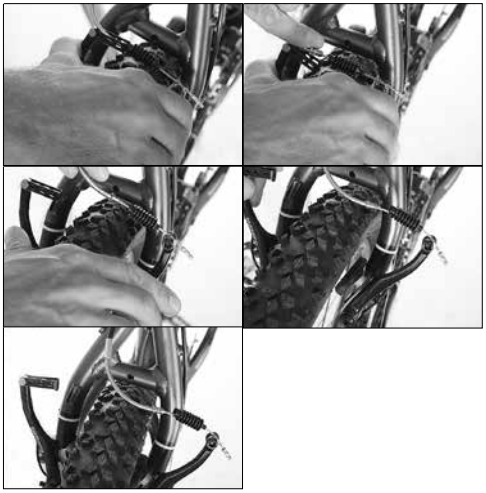
Spinning road wheels can cause injuries to your hands.

- Never put your hand near a spinning road wheel.
- Come to a complete standstill before carrying out works on, or around, the wheels.
- In order to do this, lift the rear of the bicycle up, actuate the corresponding shift lever and turn the crank by hand in the riding direction until the chain is placed on the smallest pinion.
- Brake the road wheel until it comes to a complete standstill (see chapter 8.7).

3. Open the brake (only applies to rim brakes, not to disk brakes)

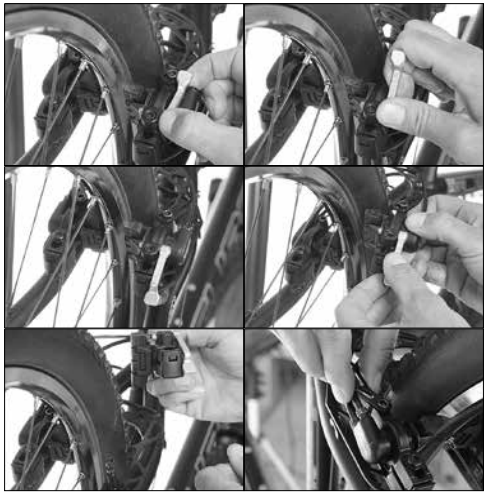
a) As for rim brakes with cable control (e.g. from Shimano):

- Press the brake shoes together with one hand and remove the cable guide from the yoke.



b) On Magura: hydraulic rim brakes:

- Move the fixing lever over and remove the entire brake assembly including brake booster from the brake sockets.
- Please make sure you do not lose any distance washers that may come loose.



4. On front wheel with hub dynamo (if fitted):

- Remove the push-fit connector between the dynamo and cable.

5. Loosen the wheel hubs.

- Open the quick release on your road wheel (see also Chapter 8.8 Quick Releases)
- Raise the rear of the bike, operate the shift lever concerned and turn the crank in the drive direction until the chain lies correctly on the smallest sprocket.
- Turn the locknut enough to allow sufficient room on the axle.
  With other types of clamping.
- Loosen the clamp as per the accompanying parts instructions

6. Remove the road wheels from the frame and forks.

- Front wheel: Lift the bike up by the handlebars and withdraw the road wheel from the front fork dropouts.
- Rear wheel: lift the bike up slightly at the back and press the gear mechanism backwards. In this position, push the rear wheel gently in the direction of the dropout openings.

7. After removing, place the bike carefully on its left hand side.

Danger of material damage!

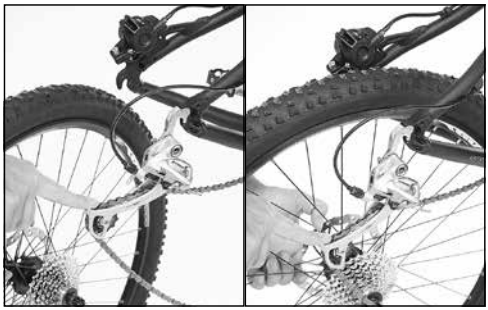
With no rear wheel, the frame and/or the gear mechanism can become damaged.

- After removing the rear wheel lie the bike on its left side or use a suitable assembly stand.

To fit your road wheels. Fit the rear wheel first.

1. a) Inserting the rear wheel

- Lift up the rear of the bike, placing the rear wheel under it so that the chain is over the smallest sprocket.
- Disk brakes: insert the road wheel so that the brake disk can be easily pushed between the brake pads.



- Carefully lower the rear of the bike until the axle is at the dropout stop on the right and left sides.

1. **b) Inserting the front wheel:**

- Lift up the bike by the handlebars.
- Place the front wheel under the front forks dropouts
- For disc brakes: Attach the wheel in such a way that the disc brakes are able to move freely between the brake pads.
- Carefully lower the forks until the axle is flush at the dropout stops on the right and left sides.

2. **Tighten the wheel hubs.**

- When tightening with quick releases: see Chapter 8.8.
- With other types of clamping: tighten the hubs as per the accompanying parts instructions.

3. **a) Close rim brakes**

on cable brakes:

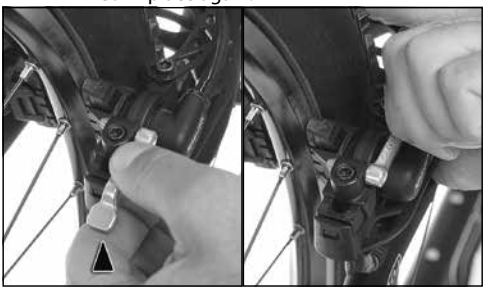
- Press the brake shoes together.

- Insert the cable in the yoke.

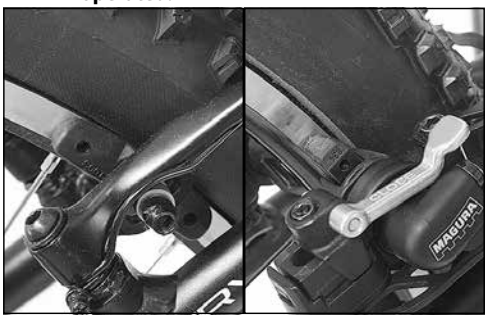
3. **b) Hydraulic rim brakes: fitting is as removal only in reverse sequence.**

- Place the brake booster on the lead screws
- Insert any distance washers in the correct position and place the brake on the brake bosses.

- Swivel the locking lever so that the brake is fixed in place again.



4. **Please ensure that the brake blocks correctly cover the rim shoulder when operated.**



5. **On front wheel with hub dynamo (if fitted):**

- Refit the push connector between the hub dynamo and the cable.

6. **Check installation:**

- Operate the brakes.
- If the brake block or brake touches the rim or the brake disks, this can indicate incorrect seating of the hub in the dropouts.
- In that case release the quick release, check and correct the hub seat and close the quick release again.
- The brake (on rim brakes) must not be opened during this procedure. If there is no improvement after this, please contact your dealer immediately.
- Check that the lighting (if fitted) is working.
- Ensure that the road wheels do not come into contact with either mudguards or carrier (if fitted).

11.1.2 Race/Triathlon

1. **Remove the front wheel first (continue with 3.)**
2. **Switch to the smallest pinion of the rear wheel's sprocket cassette (see chapter 8.6)**

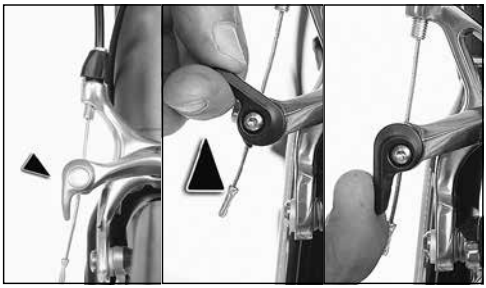
Risk of Personal Injury and Material Damage!

Spinning road wheels can injure your hands.

- Never put your hand near a spinning road wheel.
- Brake the spinning road wheel by using the corresponding brake lever until it comes to a complete standstill before performing any work near the road wheel.
- In order to do this, lift the bicycle rear up, actuate the corresponding shift lever and turn the crank by hand in the riding direction until the chain is placed on the smallest pinion.
- Brake the road wheel until it comes to a complete standstill (see chapter 8.7).

3. **Open rim brake.**

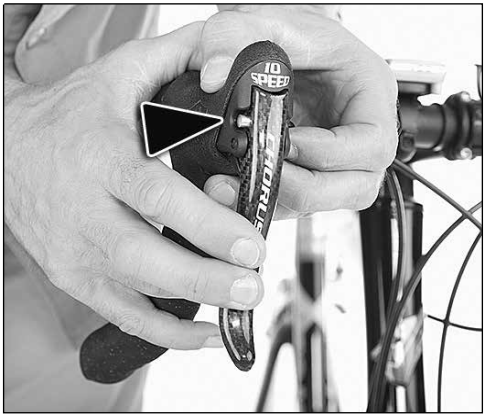
- a) On racing bike brakes:
  Shimano und Sram:
- Move the lever upwards.



b) Campagnolo:

- There is no lever on the brake:
- to release press the pin on the brake lever from inwards to outwards.
  At the same time pull on the brake lever slightly.

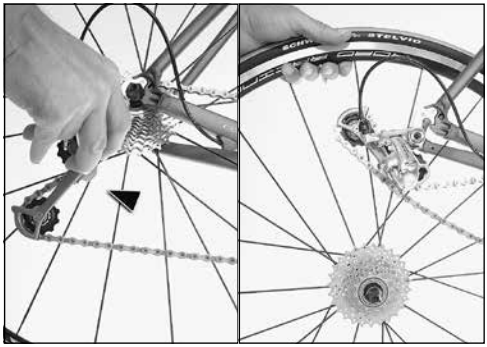
4. **Loosen the wheel hubs.**



- Open the quick release on your road wheel (see also Chapter 8.8 Quick Releases)
- Turn the locknut enough to allow sufficient room on the axle. With other types of clamping.

5. **Remove the road wheels from the frame and forks.**

- Front wheel: Lift the bike up by the handlebars and withdraw the road wheel from the front fork dropouts.
- Rear wheel: Lift the bike up slightly at the back and press the gear mechanism backwards. In this position push the rear wheel gently in the direction of the dropout openings.



6. **After removing, place the bike carefully on its left-hand side.**

Danger of material damage!

With no rear wheel, the frame and/or the gear mechanism can become damaged.

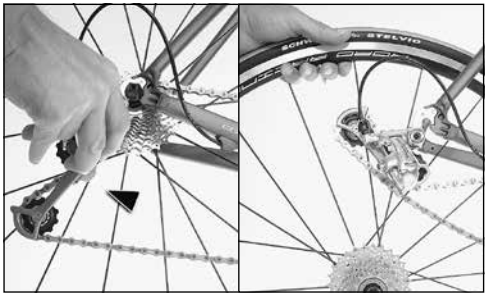
- After removing the rear wheel, lie the bike on its left side or use a suitable assembly stand.

To fit your road wheels.
Fit the rear wheel first.

1. **a) Inserting the rear wheel**

- Lift up the rear of the bike.

- placing the rear wheel under it so that the chain is over the smallest sprocket



- Carefully lower the rear of the bike until the axle is at the dropout stop on the right and left sides.

b) To assemble the front wheel

- Lift up the bike by the handlebars,
- placing the front wheel under the front forks dropouts and
- carefully lower the forks until the axle is flush at the dropout stops on the right and left sides.

2. Tighten the wheel hubs.

- When tightening with quick releases: see Chapter 8.8

3. Close rim brakes

a) On racing bike brakes: Shimano und Sram:

- Move the lever downwards.

b) Campagnolo:

- There is no lever on the brake:
- Follow the reverse procedure to opening and press the pin on the brake lever from outwards to inwards.
- At the same time, pull the brake lever.

4. **Check installation:**

- Operate the brakes.
- If the brake block or brake touches the rim or the brake disks, this can indicate that the hub has not been correctly seated in the dropouts.
- In that case release the quick release, check and correct the hub seat and close the quick release again.
- The brake (on rim brakes) must not be opened during this procedure. If there is no improvement after this, please contact your dealer immediately.

11.2 Remove and replace seat post and saddle

Risk of Personal Injury and Material Damage!

An incorrectly fitted seat post can lead to dangerous riding situations, falling, accidents and material damage.

- You must have your dealer demonstrate fitting and removing your seat post.
- Practise this job at least once under his supervision and control.
- Only remove and fit the seat post and saddle if you are sure you have mastered this job.

For transportation, you can remove your bike's seat post complete with saddle and replace it again afterwards.

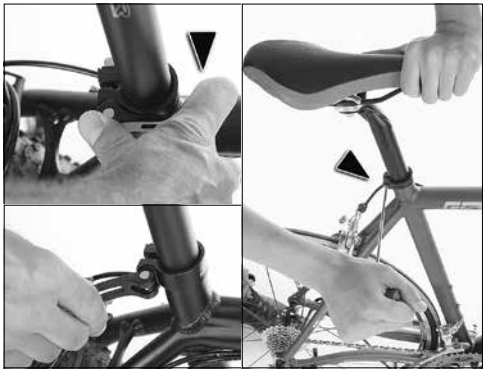
The seat post is held with a clamp in the frame seat tube and is tightened with either a quick release or a hexagon socket.

On carbon fibre seat posts, special types may be fitted with two screws.

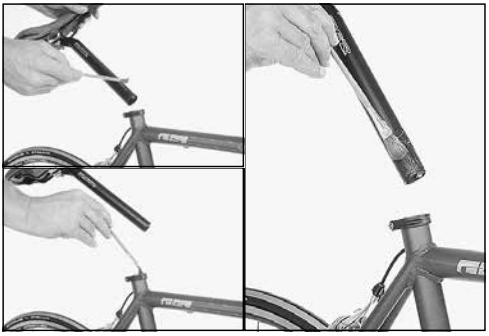
For clamping without a quick release, a hexagon socket and a torque wrench of the appropriate size are required. Please also consult your dealer.

To remove your seat post:

1. **Release the saddle clamp at the quick release as per Chapter 8.8 or by loosening the Allen screw with an Allen key.**
2. **Withdraw the saddle with seat post from the frame.**



To replace your seat post:



1. **On carbon seat post and/or saddle**

- Apply assembly paste to the seat post and to the inside of the seat tube and only use assembly paste for carbon parts for this procedure.
- Seat post and seat tube must not be greased. Only carbon assembly paste may be used.
- Seat posts made of aluminium may only be fitted using a carbon assembly paste.

2. **Push the saddle with seat post into the seat tube until the desired saddle height is obtained. In this position the lower end of the seat post (length (x)) must be at least (y) mm below the top edge of the seat tube (see definition below).**

! **Do not rely on the marking on the seat post.**

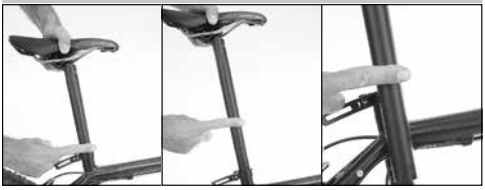
! **To check the correct insertion distance (y): hold a finger tip against the seat post when fitted directly above the clamp.**

! **Keep your finger tip in this position and withdraw the seat post from the seat tube.**

! **Hold the seat post laterally beside the seat tube so that your finger is again level and directly above the clamp.**

! **In this position the lower end of the seat post (length (x)) must be at least (y) mm below the top edge of the seat tube.**

120mm (y) at 400mm (x)
120mm (y) at 420mm (x) RockShox Reverb
110mm (y) at 380mm (x)
100mm (y) at 350mm (x)



3. **Turn the saddle so that the saddle points in the direction of travel.**
4. **Ensure that the clamp is flush in the frame and that the seat tube slots and the clamp are covered.**
5. **Close the quick release as per chapter 8.8 or tighten the allen screw with a torque wrench.**

Please observe assembly instructions and the specified torque in the accompanying parts instructions indicated in table 3.3.

Risk of Personal Injury and Material Damage!

An over-tightened carbon fibre seat post can break when riding and lead to dangerous riding situations, falling, accidents and material damage.

- The seat tube clamp must be tightened firmly in order to prevent the seat post from lowering into the frame or laterally twisting during the ride.
- If the seat post does not remain in the desired position, even though you have reached the maximum admissible tightening torque, please consult your specialist dealer immediately.

! **Please observe assembly instructions and the specified torque in the accompanying parts instructions**

12 Cleaning and caring for your bike

Risk of Personal Injury and Material Damage!

Corrosion can damage components of your bike which are important for safety so that they are no longer secure. These components may then brake during riding and thus result in serious falls.

Corrosion is caused, amongst other things, by

- **salt (e.g. due to salt spreading in winter)**
- **salty air (e.g in coastal or industrial areas)**
- **perspiration.**

Danger of material damage!

Do not use steam washers. The high pressure water jet can damage your bike.

Good maintenance will increase the life of your bike and its components. Clean and maintain your bike regularly.

For wet cleaning, use a gentle water jet or a bucket of water and a sponge.
Only use clean fresh water or desalinated water.

There are many ways of washing a bike. A proven cleaning recommendation for a very dirty bike is as follows:

1. **With a gentle water jet, remove large items of debris such as soil, stones and sand etc.**
2. **Let the bike dry off to a certain extent.**
3. **Spray your entire bike with a suitable detergent.**

! With many detergents and if there is only a low level of soiling, simply spraying and rinsing off after the specified time for them to work is sufficient.

! You can remove stubborn dirt after the working time, for example, with a radiator paintbrush before rinsing off.

Danger of material damage!

Cleaning, lubrication and preserving agents are chemical products.

Incorrect use can damage your bike.

- Only use products expressly suitable for bikes.
- Ensure that these products do not attack either paint, rubber, plastic or metal parts etc. Consult your dealer.
- Follow the respective manufacturer's instructions.

4. **Rinse the entire bike with a gentle water jet and allow it to dry.**
5. **Clean the chain.**

- Drip a suitable chain cleaner into a clean, spirit-free cotton cloth and wipe the chain down. When doing so, slowly operate the crank against the direction of drive.
- Repeat this process as often as possible with a clean area of the cloth until the chain is clean.
- Drip a suitable chain cleaner into a clean, spirit-free cotton cloth and wipe the chain down.

! If cleaner remains between the chain links, the new grease will be immediately broken down and will be totally ineffective.

- Sparingly apply a lubricant suitable for bicycle chains to the chain links.

Danger of material damage!

Greases for motor cycle chains will gum up your bike chain and the drive chain components.

- Only use lubricants expressly approved for use with bike chains.

Risk of Personal Injury and Material Damage!

If too much lubricant is used it can drip onto the rim and brake disk and contaminate them.

This will reduce the effectiveness of the brakes

- Remove excessive lubricant on the chain using a clean, dry and spirit-free cotton cloth.
- Clean the rim and brake disk with a suitable degreasing agent. Please consult your dealer.

Risk of Personal Injury and Material Damage!

If wax polish spray or a preserving agent gets onto the rim or brake disks and/ or brake blocks, the effectiveness of the brakes will be reduced.

- Clean these parts with a suitable degreasing agent. Consult your specialist dealer.

6. **Clean any remaining very dirty parts by hand using a clean spirit-free cotton cloth using a suitable detergent.**
7. **Spray the entire bike with a suitable wax polish or similar preserving agent.**

   Exceptions:

   - **Brake blocks or brake pads**
   - **Rims in the case of rim brakes**
   - **Brake disks**
   - **Handlebar grips/ brake lever/ shifter**
   - **Saddle**
   - **Tyre**
8. **Polish your bike after the prescribed working time using a clean, spirit-free cotton cloth.**
9. **Clean the brake blocks, brake pads, rims (in the case of rim brakes) and brake disks by hand using a clean, spirit-free cloth using a suitable degreasing agent.**

Clean and lubricate your chain as described after every ride in wet conditions and every extended ride on a sandy subsurface and at the latest every 200 km.

Risk of Personal Injury and Material Damage!

Worn parts and unrepaired damage can lead to dangerous riding situations, falls, injuries and property damage.

- Regularly maintain and service your bicycle.
- Take your bicycle to a specialist workshop at the compulsory maintenance intervals.
- Only this way, worn parts and possible damages can be discovered and repaired.

Risk of Personal Injury and Material Damage!

Compared to adults, children and juveniles often use their bicycles in a way that damages the material and parts more quickly.

- Take bicycles of children and juveniles which are frequently used to a specialist workshop for inspection every 6 months.
- If you discover damage on a bicycle ridden by children or juveniles, immediately take it to a specialist workshop for inspection.

Servicing schedule:

Have servicing carried out at the intervals prescribed only in a specialist workshop authorised by the manufacturer.

Type of inspection	Normal use	Frequent sport, competition or use of a competitive nature
1. Inspection	at the latest after 200 km or 2 months	at the latest after 100 km or 1 month
Subsequent inspections	every 2000 km or 1 x per annum	every 500 km or every 2 months
Check brake pads/brake blocks	every 400 km	every 100 km
Check brake disks	every 400 km	every 100 km
Check chain wear	every 500 km	every 250 km
Check the rear suspension bearing for full-suspension frames incl. checks/relubricating the roller bearing on the shock absorber (if applicable)	Every 500 km or once a year	Every 250 km or every two months
Replace handlebars and stem	after a crash (see Chapter 10) as indicated by component manufacturer or every 5 years at the latest	after a crash (see Chapter 10) as indicated by component manufacturer or every 2 years at the latest

! Under unfavourable conditions, your chain can wear rapidly. Changing it early will extend the life of your sprockets.

13 Storing your bike for a lengthy period

Danger of material damage!

Incorrect storage of a bike can damage bearings and tyres and promote corrosion.

- **Please observe the following instructions.**

1. **Clean and maintain your bike as described in Chapter 12.**
2. **Only store your bike in dry and dust-free premises.**
3. **Use suitable bike stands (e.g. tripod, wall hooks). Please consult your dealer.**
4. **Place your bike with one or both wheels on the floor**

- Lift your bike every 2-3 weeks and spin your wheels a couple of turns.
- Rotate the handlebars back and forwards a couple of times.
- Turn the crank by hand a couple of revolutions against the direction of drive.
- When using again, carry out a check as described in Chapter 7.

14 Warranty and Guarantee

14.1 Warranty

Generally, we grant the two years by law warranty for all Cube frames and rigid forks. The period of validity counts from the day of purchase.

14.2 Guarantee

We extend the legal warranty for some of our Cube frames and rigid forks as following, counting from the day of purchase:

Aluminium	6 years guarantee
Carbon, Alu-Carbon	3 years guarantee

In case of material failure within this period of time, we obligate ourselves to replace the article with the same or a corresponding one.

We reserve the right to repair certain damaged frames and parts or to get them replaced by the corresponding successor.

If the frame of the same type is not available any more, we reserve the right, to deliver a substitute which differs in colour and design from the original one. There is no legal claim to obtain an article of the exact same type.

Technical alterations and changes beyond the legal guarantee (2 years) will not be refunded and will be executed free of charge.

Exception:
The extended guarantee is not granted for the models FRITZZ, HANZZ and TWO 15 including all assembly parts needed for the frame change.

The statutory warranty of 2 years is valid for these exceptions.

14.3 Warranty Policy

Warranty only refers to frames and rigid forks, not to paint and decor.

The extra costs for parts needed because of the frame changes (e.g. derailleurs, headsets, shocks, etc.) are not covered by warranty and have to be paid by the customer.

14.4 Warranty claim/warranty is void

Due to modifications without official approval by the CUBE dealer.

Due to expansion of any kind of electric drive (e.g. front hub motor, rear hub motor, middle motor, etc.).

In case of deficiencies and damage:

- by additional accessories (e.g. bags, locks, carriers, etc).
- due to a violation of this guideline.
- due to force majeure, accident, abuse, unprofessional repairs, lacking service / care or wearing.
- due to misuse (e.g. use of bicycle not according to dedicated category (see 2.1.3 and 4.1); use of a double crown fork; extension of system travel; use of larger disc brake rotors; overload by jumps, etc).
- due to a use of replacement parts not according to orignial bicycle specification or by CUBE approved spare parts.

15 Handover inspection checklist

Inspecting the brake

- ◯ Laying of brake cables/lines
- ◯ Adjustment of the hand brake lever
- ◯ Adjustment of the brake pads
- ◯ Visual tightness test of the hydraulic brake systems
- ◯ Checking all fastening screws in the brake system
- ◯ The functioning and response of the front and rear wheel brakes

Inspecting the gearshift:

- ◯ Laying the hub cable and shift cable
- ◯ Adjustment of the gear lever or gearshifter
- ◯ Adjustment of the end stops (derailleur/switch-gear)
- ◯ Adjustment of the cable tension
- ◯ Functioning and freedom of movement of the gearshift
- ◯ Checking all fastening screws in the gearshift system

Inspecting the chassis:

- ◯ Basic functions and tightness of the front fork
- ◯ Basic functions and tightness of the suspension strut, adjustment/freedom of movement of the steering head bearing, checking all fastening screws of the chassis components
- ◯ Inspecting all screw connections in the chain-stays

Inspecting the wheels:

- ◯ Concentricity and centring of the wheel rims, concentricity and position of the cover
- ◯ Testing the spoke tension / air and tyre pressure
- ◯ Correct installation and fixed position of the wheels

Other inspections:

- ◯ Adjustment and fixed position of the handlebars and handlebar stem, fixed position of the crank arm
- ◯ Adjustment and fixed position of the saddle and seatpost, fixed position of the handles
- ◯ Fixed position of the assembly rivet of the chain
- ◯ Functioning of lights (if available)
- ◯ Adjustment and fixed position of the carrier, mudguards and kickstands (if available)
- ◯ Assembly and fixed position of other attachment parts

When handing over the bicycle:

- ◯ The purchased object was handed over in a complete and perfect condition including the operating manual.
- ◯ Verbal instructions were given on the safe use of the bicycle, particularly operating guidelines for the disc brakes – if applicable.
- ◯ Reference was made to the respective instructions in the operating manual which are to be observed.
- ◯ Reference was made to the warranty obligations in the CUBE operating manual.

After inspecting these items, please check off!

Comments: .....

.....

Place, date: Retailer signature:

.....

Purchaser signature (legal guardian for children under 18 years of age)

.....

Händler / Verkäufer:
Retailer/seller:

Name Verkäufer:
Name of retailer:

Firma:
Company:

Straße:
Street:

PLZ / Ort:
Post code/city:

Land:
Country:

Telefon / Fax:
Telephone/fax:

E-Mail:

Kunde / Käufer:
Customer/purchaser

Nachname:
Name:

Vorname:
Surname:

Straße:
Street

PLZ / Ort:
Post code/city:

Telefon:
Telephone:

Das Fahrrad wurde endmontiert von:
The bicycle was finally assembled by:

und wird in einem fahrbereiten Zustand übergeben.
and will be handed over n a roadworthy condition.

Ort
location

Datum
Date

Stempel/ stamp
Unterschrift des Händlers/ Signature of the dealer

Das Original verbleibt in dieser Bedienungsanleitung
The Original should remain in the Owner's Manual