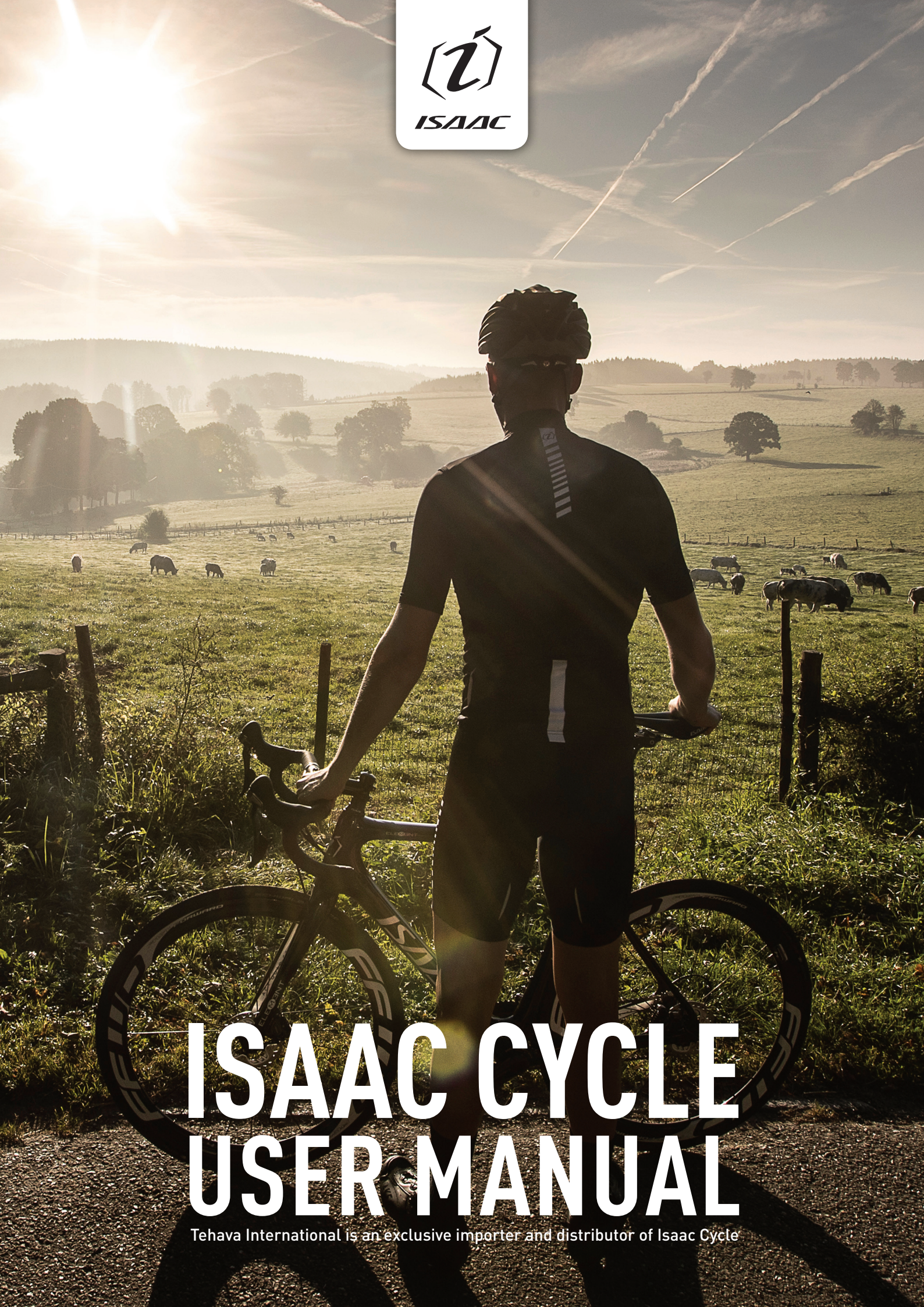


ISAAC CYCLE USER MANUAL

Tehava International is an exclusive importer and distributor of Isaac Cycle

CONTENTS

DEAR CUSTOMER,

Congratulations on purchasing one of our bikes and thank you for the confidence you have in us. In this user manual, you will find numerous tips and useful information on how to use your bike as well as on bike technology and maintenance. Please read this user manual carefully!

Even after your Isaac Cycle dealer has advised you on the purchase and assembly of your bike, they will continue to play an important role; they are your primary contact for bike maintenance, inspections, modifications and repairs. Should you have any questions about our products, please contact your Isaac Cycle dealer.

Isaac, Challenging the Elements

1 ABOUT THIS USER MANUAL

1.1 User manual

Risk of personal injury and material damage!

Failure to observe the instructions in this user manual may result in dangerous situations, crashes, accidents and damage to the bike.
- Read this user manual carefully before using your bike for the first time.
- All bike parts mentioned in this manual are displayed in the associated images.
- The images in this manual serve as an example and apply to all Isaac Cycle bikes and bike frames.
- Save this manual for future reference, and pass it on to the next owner.
- It is your responsibility to inspect your bike as described in this manual and to (arrange to) have any work carried out.

If you do not understand any sections of this manual, ask your dealer for help.

1.1.1 Scope

Risk of personal injury and material damage!

- This user manual is not intended to teach you how to ride a bike.
- This user manual is not intended to teach you cycling techniques.

This user manual applies:
- to all bikes constructed in 2017 or later, which are delivered to the customer fully assembled by an Isaac Cycle dealer.
- partially to all Isaac Cycle bike frames constructed in 2016 or later, with which this manual was included with the purchase. See Section 5 for more information.

Risk of personal injury and material damage!

- New technical developments may result in changes to existing models and their use and the development of entirely new models.
- Pay attention to any special instructions.
- Check with your dealer whether this user manual is up-to-date and valid.

Check with your dealer which information in this manual also applies to custom-built bikes.

1.1.2 Other relevant documents

- User manuals for components supplied by other manufacturers

Risk of personal injury and material damage!

- Due to the large number of bike parts that are available, it is impossible to create a universal user manual.
- Some parts that have been mounted on this bike may not be described in this manual.
- Therefore, please always observe the instructions in the manual of the respective manufacturer.
- The instructions and information contained in those manuals always take precedence over deviating information in this manual.
- Contact your dealer for more information.

1.1.3 Images

Images which accompany descriptions come either straight before or after the corresponding text.

1.2 Symbols and terminology used

1.2.1 Symbols

Please note!
Indicates information that requires particular attention.

Warning!
Indicates that there is a risk of minor personal injuries and risk of damage to the bike.

Danger!
Indicates that there is a risk of serious injuries, possibly even fatal injuries.

Risk of burns!
The temperature is above 45°C (coagulation of protein) and can cause burn injuries.

1.2.2 Position description

Where this user manual refers to 'right', 'left', 'in front' or 'behind', this is always 'as seen from the direction of travel'.

1.2.3 List of abbreviations/definitions

Wobble	A deviation in the curve of the rim is called a 'wobble in the wheel'.
bar	Common unit for air pressure.
Torque	Indicates how tight a bolt should be fastened.
DIN	German industrial standard.
EN	European standard (often linked to DIN).
Dealer/qualified bicycle mechanic	Dealers and qualified bicycle mechanics are licensed companies who are authorised by the competent authority in the country concerned to be called as such, and to sell and repair bikes. Dealers authorised by Isaac Cycle: Isaac Cycle only authorises selected dealers to sell and repair its products.
Nm	Newton meters; unit for torque
psi	pounds per square inch; American unit for pressure; 1 psi = 0.06897 bar
StVO	Deutsche Straßenverkehrsordnung = German Road Traffic Act
StVZO	Deutsche Straßenverkehrs-zulassungsordnung = German Road Traffic Licensing Act, regards technical requirements and licensing.
Correct screwed connection	The term 'correct screwed connection' means that the entire area of the bolt head is flush against the component.

1.2.4 Incorrect screwed connection

You can often recognise a loose screw because the bolt head will protrude.

Correct screwed connection Bolt head is flush.

Incorrect screwed connection Space between the bolt head and the component.

For an explanation of the technical terms used for bike parts, please refer to the photos on the cover sheets or the images used throughout the manual.

Legislation:
The STVO (Road Traffic Act) and the STVZO (Road Traffic Licensing Act) only apply in Germany. Find out which legislation applies in your country before using your bike for the first time. For more information, please contact the responsible authorities or ask your dealer.

2 FOR YOUR SAFETY

2.1 Use your bike for the purpose for which it was created

2.1.1 Who is allowed to ride your bike?

Risk of personal injury and material damage!

The person must be able to ride a bike, i.e., they must have the basic skills and the necessary sense of balance for riding a bicycle.
- The cyclist must be tall enough to ride this bike (ask your dealer for more information).
- The cyclist must be physically and mentally able to ride this bike on public roads.

2.1.2 How should you ride your bike?

Risk of personal injury and material damage!

You can ride your bike by either sitting on the saddle or standing on the pedals.
- Hold the left handle grip with your left hand, and the right handle grip with your right hand.
- To cycle, place your left foot on the left pedal and your right foot on the right pedal.
- This bike is only intended for use as a method of transport.

2.1.3 Where can you ride your bike?

Risk of personal injury and material damage!

Isaac Cycle bikes are divided into categories: road bikes, time-trial bikes and mountain bikes.

For streets and roads, the following categories apply:
- Street: tarmacked
- Path: sand, gravel, or similar surfaces (e.g., forest path, dirt track)
- Paved path: few or no roots, steps, stones, differences in height etc.
- Unpaved path: with roots, steps, stones, differences in height etc.
- Sports park: Special tracks for freeriding, downhill, BMX and dirt biking

Please note that all streets and paths can be damaged and/or have obstacles which may put your safety at risk and damage your bike.

The manufacturer has stipulated that the following bikes are suitable, from a technical point of view, for use on the following types of surfaces:
- Road bikes and time-trial bikes: roads, no jumps
- All kinds of bikes with road bike or racing bike tyres: roads, no jumps.
- Mountain bikes: roads, sand, gravel, or similar surfaces (e.g., forest paths, dirt tracks).

Other tyres of bikes may also be fitted with road bike or racing bike tires.
In such cases, those bikes may only be used on tarmac roads.

Check with your dealer.

Risk of personal injury and material damage!

In principle, the faster you cycle, the greater the risk of falling. Therefore, only cycle at high speeds if you have full control of your bike and adhere to the local legislations.

2.1.4 What condition must your bike be in when cycling?

Your new bike is classified as sports equipment and may not be used on public roads without the necessary equipment as stipulated in the German Road Traffic Licensing Act (StVZO).
To meet the current StVZO specifications, your bike must be fitted with the following:

The following requirements are a simplified description.

! The complete text of the regulations for cycling in Germany is included in the StVZO. Your dealer can also provide you with more information.

If using the bike outside Germany, make sure you follow the traffic regulations in your country. Check with your dealer or the responsible authority.

- two independently functioning brakes
- a bell
- dynamo lights on the front (white) and rear (red) of the bike

! Racing bikes lighter than 11 kg do not require dynamo lights.

Instead, you must have approved battery-powered lights with you at all times - even during the day.

When participating in races, racing bikes are exempt from this rule.

- white reflector at the front (often integrated into the headlight) and a red reflector at the rear
- two yellow reflectors on each wheel; or alternatively: tyres with reflective stripe on either side
- two yellow reflectors on each pedal

! All bike lights and reflectors must be approved.

Approval is indicated by the 'K', a wavy line or a multi-digit number.

Contact your dealer to have these parts mounted in accordance with the legislation.

2.1.5 What you should not do

Risk of personal injury and material damage!

Many cyclists like to modify their bikes and adapt them to their specific needs.
Saddle, handlebars, pedals, brakes, tyres, suspension elements: there are many things you can do to configure your bike at a later stage.

Work on the bike, even though it might seem simple, requires proper training, thorough knowledge and a lot of experience.

If performed incorrectly, it can lead to dangerous situations, crashes, accidents and damage to the bike.

- Use only EN-certified accessories. This rule does not apply to bike computers and bottle cages, provided they are selected and mounted by the dealer.
- Consult your dealer when choosing accessories.
- Adjustments, maintenance and other work on your bike must only be carried out by a qualified bicycle mechanic.

Risk of personal injury and material damage!

Bike trainers can damage this bike.
- Isaac Cycle is not responsible for damage caused by the use of a bike trainer.

2.2 Other risk factors

2.2.1 Risks arising from improper final assembly

Risk of personal injury and material damage!

If this bike is assembled incorrectly, it can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Make sure that your dealer checks whether the bike has been assembled correctly and that the seat is at the right height for you.

2.2.2 Risks of improper use

Risk of personal injury and material damage!

Failure to observe the instructions in this user manual may result in dangerous situations, crashes, accidents and damage to the bike.
- Follow the instructions in Section 2.1.
- Only transport your luggage using suitable bike backpacks.
- Isaac Cycle does not allow luggage racks to be fitted on their bikes.

Follow the maintenance instructions in Sections 11 and 12.

2.2.3 Burn hazard

Risk of burns!

During longer descents, bike rims and disc brakes become very hot.
- Never touch a rim or disc brake immediately after a descent.
- Allow the rim or disc brake to cool before you touch it.

2.2.4 Other risk factors and safety instructions

Risk of personal injury and material damage!

Failure to observe the instructions in this user manual may result in dangerous situations, crashes, accidents and damage to the bike.
- Wear a helmet when cycling.
- Ride in an anticipatory and defensive manner.
- Do not ride if you have consumed alcohol.
- Ride in such a way that you are in control of your bike at all times and can adequately respond to sudden danger.
- Wet weather may affect the operation of the brakes. This means that the braking distance is longer.
- When cycling, only wear appropriate clothing which does not hinder the operation of the bike or obstruct your vision.
- When cycling, only wear tight-fitting trousers or shorts. Loose clothing can become entangled in the bike and cause serious accidents.
- In the dark and in poor visibility, wear reflective clothing and use the bike lights.
- Additional weight increases the braking distance.
- Note that certain items of clothing and backpacks can restrict your movement.
- Follow the maintenance instructions in Sections 11 and 12.

2.3 Disposing of the bike

! At the end of the bike's service life, you must dispose of it in the appropriate manner.

Check with your dealer or contact a recycling plant.

3 PACKAGE CONTENTS, TECHNICAL SPECIFICATIONS

3.1 Package contents

Isaac Cycle bikes are delivered either fully assembled by your dealer (excluding pedals) or as a disassembled frame kit.

3.2 Technical specifications

Bike type	road bike/time-trial bike/mountain bike	
Headset size	Element (Disc), Meson, Boson (Disc), Kaon (Disc), Vitron, Graviton (Disc), Baryon 29, Baryon 650B, Tensor 29	1 1/8" - 1 1/2"
	Muon, Photon	1 1/8"
Seatpost diameter	Element (Disc), Boson (Disc), Kaon (Disc), Vitron, Graviton (Disc)	27.2 mm
	Meson, Muon, Photon	Aero seatpost
	Baryon 29, Baryon 650B, Tensor 29	31.6 mm
Bottom bracket bearing	Element (Disc), Meson, Boson (Disc), Muon, Photon	Pressfit 86.5x41
	Kaon (Disc), Vitron, Graviton (Disc), Tensor 29	BSA
	Baryon 29, Baryon 650B	Pressfit 92 x 41
Ambient temperatures	-10°C tot 50°C	

Risk of personal injury and material damage!

New technical developments may result in changes to existing models and their technical specifications and the development of entirely new models.
- Pay attention to any special instructions.
- Check with your dealer whether this manual is up-to-date and valid.

Example of an Isaac Cycle racing bike.

3.3 Torques - screwed connections

Type	Model	Torque
Seatpost clamp	Element (Disc), Kaon (Disc), Boson (Disc)	Max. 8NM
	Vitron, Graviton (Disc), Tensor 29, Baryon 29, Baryon 650B	Max. 6NM
	Meson, Muon, Photon	Max. 8NM
Saddle clamp	Element (Disc), Meson, Boson (Disc), Kaon (Disc) Muon, Photon	Max. 8NM
	Baryon 29, Baryon 650B Tensor 29, Vitron Graviton (Disc)	Max. 12NM

4 COMPOSITION AND FUNCTION

This type of bike is available in the following versions:
- Classic racing bike: racing handlebars, two rim or disc brakes for racing bikes
- Racing bike set up for time trials/triathlon: aero handlebars, aero frame
- Mountain bike: straight handlebars, two disc brakes

! All Isaac Cycle racing bikes are supplied with tyres fitted.

When using rims with glued tubes, you must observe the instructions contained in the relevant rim and tyre manufacturer's user manual.

Ask your dealer for more information.

4.1 Frame

Your bike is equipped with either a carbon fibre or aluminium frame.

⚠ Risk of personal injury and material damage!

Carbon is a light material which, when used normally and for the intended purpose, has very special characteristics. It is, however, vulnerable in the event of crashes, bumps, and assembly errors.
- Follow the instructions in Sections 10, 11 and 12.

4.2 Brakes

Your bike is equipped with two independently functioning rim or disc brakes.

⚠ Risk of personal injury and material damage!

Improper use of the brakes can lead to dangerous riding situations, crashes, accidents and damage to the bike.
- Make sure you know how to use the brakes properly.
- As standard, the front brake is installed on the left, and the rear brake is installed on the right. This, of course, can be adjusted by the Isaac Cycle dealer.
- Determine which brake lever operates the front brake and which operates the rear brake.
- To do this, squeeze the relevant brake lever several times when stationary. You will notice that the brake pads/disc brake pads open and close on one of the rims.

4.3 Gear system

Your bike has:
- Derailleur gears and a chainset with one, two or three chainrings.

With this system, you have the right gear for any speed. This makes it easier to cycle up an incline.

The number of gears is determined as follows:
Derailleur gears: Number of front chainrings multiplied by the number of sprockets at the rear.
E.g., 2 chainrings x 11 sprockets = 22 gears.

5 ISAAC CYCLE BIKE FRAMES

⚠ Risk of personal injury and material damage!

Incorrect assembly of your frame can lead to serious accidents!

Isaac Cycle frames are also available separately and can be assembled according to your personal wishes. Observe the following instructions.

ISAAC CYCLE ONLY PERMITS AUTHORISED DEALERS TO ASSEMBLE YOUR FRAME.
-The person who assembles a bike frame to create a complete bike is considered to be the producer and is liable for any assembly errors or defects.
- This user manual does not constitute assembly instructions for your bike frame.
- Only use EN-certified brand accessories to assemble your bike. These can be identified by the following attributes in the accompanying documents:
  - manufacturer's details with complete address
  - information on inspections performed and inspection guidelines used (with EN number)
  - detailed and clear product information and assembly instructions in the language of your country
- For questions about suitable accessories, please ask your dealer.

⚠ Risk of personal injury and material damage!

Road bike frames must only be fitted with rigid racing bike forks. Suspension forks are not permitted.

6 BEFORE FIRST USE

Risk of personal injury and material damage!

Using a bike which is not roadworthy can lead to dangerous riding situations, crashes, accidents and damage to the bike. The same risks apply if you are not yet familiar with your new bike and do not know how to use it properly.

- Familiarise yourself with your bike before riding it for the first time. Make sure you know which brake lever operates the front brake and which operates the rear brake (see Section 8.5).
- Modern brakes have a very strong braking force. This means that when the brake lever is squeezed too far, the respective wheel can become blocked and thus can cause an accident. Practice using the brakes on safe terrain.
- For new rim or disc brakes, or after replacing brake pads or disc brake pads (for disc brakes), it takes a while (running-in period) before the brakes reach their maximum braking force. Bear in mind that the braking distance will be longer at first.
- If your bike is equipped with optional clipless pedals (Isaac Cycle bikes are not fitted with pedals as standard) which securely fasten the shoe to the pedal:
  Practice clicking and unclicking your shoes onto the pedal before use.
  Clipless pedals are not safety pedals!
- If you need to remove the seatpost and front and/or rear wheel for transporting your bike, refer to Sections 11.1 and 11.2.

1 Have your dealer check that the bike is assembled correctly and confirm that your bike is roadworthy.

2 Have your dealer adjust the saddle position so that it is at the right height for you.

! You can fine-tune and make minor adjustments yourself, as described in Sections 8.2 and 8.3.

3 Only use your bike once your dealer has explained the technical aspects of your bike.

4 Protect your bike with spray wax, see Section 12.

5 Read Sections 6 and 7 before riding your bike for the first time.

7 BEFORE EACH RIDE

Risk of personal injury and material damage!

Using a bike which is not roadworthy can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Also take into account the possibility that your bike may have fallen over when left unguarded or that others may have tampered with it.

- Before every ride, check that your bike is roadworthy.
- Remember the condition of your bike upon purchase so you can easily recognise at a later stage whether any parts of the bike deviate from the correct state (it is sometimes a good idea to take photos).
- Immediately contact your dealer if you find that the condition of your bike deviates from the correct state.
- Only ride this bike again once the dealer has completed the necessary repairs.

Visually inspect the whole bike:

- Make sure all screws are tight (see Section 1.2.4).
- Check the whole bike for tears, cracks, deep scratches or other mechanical damage.

Contact your dealer if you discover any defects during this visual inspection.

7.1 Checking the wheels

A wheel is made up of the following components:
- hub
- disc brake (optional)
- sprockets or sprocket cassette (rear hub only)
- spokes
- rim
- tubeless tyre (without inner tube) or clincher/ folding tyre (with inner tube and rim tape)

! Some racing bikes are fitted with so-called tubular tyres. In such cases, the inner tube is sown into the outer tyre. Outer and inner tubes are then glued on to the special rim during assembly. The assembly instructions issued by the tyre, glue and rim manufacturer must be followed.
Refer to the instructions in 7.1.3.

Rim reflectors may be fitted on bikes which conform to the StVZO specifications.

7.1.1 Checking the assembly

Vigorously shake both wheels back and forth, perpendicular to the direction of travel.
- The wheels must not move in the clamp.
- The quick release/thru-axle must be closed/ tightened.
- There should be no cracking or grinding sounds.

Contact your dealer if you discover any defects when checking the assembly.

7.1.2 Checking the rims

Risk of personal injury and material damage!

Worn rims and/or big wobbles in the wheel can lead to dangerous riding situations, crashes, accidents and damage to the bike.
Worn rims must be replaced; if there is a wobble in the wheel, it must be repaired!

Risk of personal injury and material damage!

For rim brakes: dirty rims may reduce the braking force.
Dirty rims must be cleaned immediately.

Rim with a groove as wear indicator.

Rim with a groove as wear indicator.

Rim with dot as wear indicator.

Rim without wear indicator.

1 Check the rims for wear:
- Rims with wear indicators: visual inspection
- Rims without wear indicators:
  - visual inspection
  - fingernail test: run your fingernail across the surface of the rim.

  You shouldn't be able to feel any grooves.
- If the wear indicator is no longer visible, or if the rim has visible grooves or you can feel grooves when doing the fingernail test, it needs replacing.

2 Check the roundness of the rims:
- Lift the bike and spin the front wheel and then the rear wheel.
- Note the distance between the rim and brake pads. The maximum permissible deviation per revolution is 2 mm.

3 Check your rims for dirt, especially oil and grease.

4 Contaminated rims must be cleaned immediately (see Section 12).

7.1.3 Checking the tyres

Check the position of the valve:

⚠ Risk of personal injury and material damage!

If the valve is slanted, the base of the valve may break when riding the bike. This can cause the tyre to deflate suddenly. This can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Have a qualified bicycle mechanic fit the tyres properly.
You can carry out these actions yourself if you know how to remove and mount the wheels (see Section 11.1) and replace tyres and inner tubes.

- If necessary, remove the valve nut.
- Check the position of the valve: valves should point towards the centre of the wheel.

Correct valve position:
Valve points towards the centre of the wheel.

Incorrect valve position:
Valve does not point towards the centre of the wheel.

Check the air pressure:
Check what type of tyres are fitted on your bike

! Mountain bikes may be fitted with racing tires; road bikes may be fitted with trekking tyres.

Rule of thumb:

Mountain bike tyre:
Tyre wider than 40 mm

Trekking/cross and fitness bike tyres:
Tyres are 28mm - 40mm wide

Road bike tyre:
Tyre narrower than 30mm

Check with your dealer what type of tyre is fitted on your bike.

Guidelines for tyre pressure:
mountain bike tyres: 2.5 - 3.5 bar
trekking tyres: 3.5 - 5.0 bar
road bike tyres: 6.0 - 10.0 bar

⚠ Risk of personal injury and material damage!

If the tyre pressure is too low, there is a greater risk of punctures and it becomes dangerous to ride the bike. When going round a corner, the tyre may come loose from the rim and start to shift.
This can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Pump up the tyres to the specified pressure.

! Air pressure is sometimes measured in the unit 'psi'. You can use the table below to convert the unit used.

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 air pressure can be found in the information supplied by the tyre and rim manufacturer.
The permissible tyre pressure is usually indicated on the side of the tyre. Contact your dealer for more information about this.

! The heavier the cyclist, the greater the tyre pressure needs to be.

Check the air pressure using a tyre pressure gauge. Read the supplied manual or ask your dealer for a demonstration before using the tyre pressure gauge.

If the tyre pressure is too low: pump up the tyre further.

If the tyre pressure is too high: open the valve to let air escape and then check the tyre pressure again.

! If your bike pump has a pressure gauge, you can check the pressure while pumping up the tyre. Let some air out of the tyre first and then pump up until the required tyre pressure is reached.

! There are different types of valves available.
If the tyre has a 'car' or Dunlop valve, you can attach the pump head directly onto the valve.
If the tyre has a ‚French' valve, you first need to open the locking nut as far as possible before attaching the pump and then close it fully once you have finished pumping up the tyre. Ask your dealer to show you how to do this.

Types of valves.

Check your tyres for external damage and wear:
- the original profile of the rubber should be visible over the entire surface of the tyre.
- the plies under the rubber must not be visible.
- the rubber must not exhibit any bulges or cracks.

Check that the tyres have been fitted correctly:
- Lift the front and rear wheel in turn and spin them by hand.
- The tyre must spin seamlessly. There must be no radial or lateral runout.

If your bike is fitted with tubular tyres:

Some racing bikes are fitted with so-called tubular tyres. In such cases, the inner tube is sown into the outer tyre. Outer and inner tubes are then glued on to the special rim during assembly. The assembly instructions issued by the tyre, glue and rim manufacturer must be followed.

Risk of personal injury and material damage!

If a tyre is glued incorrectly, when going round a corner it may come loose from the rim and start to shift.

- Check the glue work on the tubes.
- If you can push the tyre away from the rim using your hand, you must not use the bike.
- The tyre must be re-glued.
- Follow the assembly instructions issued by the tyre, glue and rim manufacturer.
- Contact your dealer for more information.

At different points on the tyre, try to push the inflated tyre (sideways) away from the rim.

The tyre must not move away from the rim.

- If you can push the tyre away from the rim, you must not use the bike.

Have the tyre re-glued by a qualified bicycle mechanic.
A tyre that has just been glued must be left to dry properly. Follow the assembly instructions issued by the tyre, glue and rim manufacturer.

7.1.4 Checking other issues

Check the wheels for loose parts such as twigs, bits of fabric, loose spoke reflectors etc.

If there are loose parts:
- Remove them, if it is possible to do so without using much force.
- Check whether these loose parts have damaged your wheels.
- Re-attach loose bike parts, such as spoke reflectors. Contact your dealer immediately if you cannot or do not want to do this yourself.
- Note: the bike must be fitted with all reflectors in accordance with StVZO (see Section 2.1.4). The reflectors must be fitted correctly, and be visible and clean.

7.2 Checking the saddle and seatpost

Risk of personal injury and material damage!

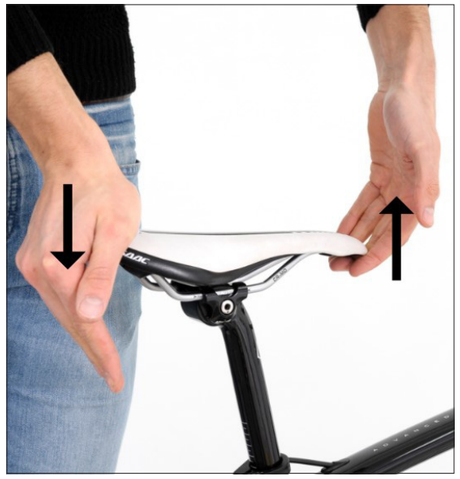
If the seatpost does not extend far enough into the frame, it may come off. This can lead to dangerous riding situations, crashes, accidents and damage to the bike.
Make sure that the seatpost extends far enough into the frame. The minimum insertion depth is indicated on the seatpost. Refer to Section 8.3 for more information.

If you have the necessary technical knowledge, you can attach the seatpost yourself.
Also refer to Sections 8.2, 8.3 and 11.2 for more information.

Make sure saddle and seatpost are firmly in position:
- By hand, try to twist the saddle, including post, in the frame. It must not be possible to rotate them.

Checking the seatpost.

- Try to move the saddle in its clamp by pushing it up and down by hand.
  The saddle should not move.



Checking the saddle.

If the saddle and/or seatpost do move, secure them in place (see Sections 8.2, 8.3 and 11.2).

7.3 Checking the assembly of the handlebar, stem and headset

Risk of personal injury and material damage!

The handlebar and stem are vital parts for ensuring your safety when cycling.
Damage to and incorrect assembly of these parts can cause very serious accidents.

If you find that these parts are defective, or if you are not sure whether they are in optimum condition, you must not use your bike on any account. Have your bike checked by a qualified bicycle mechanic straight away.

Check that the handlebar, stem and headset have been fitted correctly.

- The stem must be parallel to the front wheel rim; the handlebar must be perpendicular to that.
- Clamp the front wheel between your legs.
- Hold the handlebar at both ends.
- Try to turn the handlebar in both directions (by hand).
- Try to turn the handlebar in the stem (by hand).

Checking that the stem is mounted securely.

Checking that the handlebar is mounted securely.

7.4 Checking the handlebar parts

Check that the shifter/brake lever, handles (only if handlebar is straight) and time-trial/triathlon handlebars (only for time-trial and triathlon bikes) are securely fitted:

Checking the grip shift.

- Clamp the front wheel between your legs or hold the handlebar tight with your hands.
- Try to turn the shifter/brake lever by hand.
- Try to pull the handles off the handlebar (only if handlebar is straight).
- The parts must not rotate or shift.
- There should be no cracking or grinding sounds.

7.5 Checking the headset

The headset is the part which keeps the fork crown securely in position in the head tube.

Check the headset.
It must be easy to rotate the front wheel in both directions, and there should not be any play.
- Stand next to your bike and hold the handlebar grips with both hands.
- Squeeze the front brake, keep it compressed.
- Push your bike forwards and backwards in short jerking movements.
- There must be no detectable play in the headset:
  There must be no cracking or grinding sounds.
  There must also be no crunching sounds.
- Lift the whole bike off the ground such that the rear wheel is higher than the front wheel.

Checking the headset: turning the handlebar.

- Turn the front wheel by turning the handlebar sideways and release immediately.

Checking the headset: turning the handlebar.

- The front wheel should return to its original position.
- The front wheel must not remain in the rotated position.

7.6 Checking the brakes

Risk of personal injury and material damage!

Faulty brakes can cause life-threatening accidents.
Check your brake system particularly thoroughly.

During longer trips, brake pads and disc brakes can quickly become worn.
Always take a spare set with you on such trips.

! Only replace the brake pads yourself if you know how to do it properly.
Contact your dealer for more information.
Have a qualified bicycle mechanic replace the brake pads or disc brakes if you do not know how to do this properly yourself.

Check that your brakes are working properly:
- When stationary, squeeze both brake levers until the end stop.

Note that in this position the minimum distance between the brake lever and handlebar grip must be at least 30 mm.

Checking the brake lever.

- Try to move the bike while squeezing both brake levers.
- Both wheels must remain locked.

7.6.1 Checking the rim brake with brake cable (road bike version)

Rim brake on a road bike.

Check the brake cables and make sure they are securely in place:
- The brake cables must not be damaged or corroded.
- The brake cables must be clamped in position at the brake callipers (so that the entire breadth of the cable is secure).

Correct clamping of the brake cable.

Check that the entire brake system has been fitted and assembled correctly:
- By hand, try to pull the brakes away from the fork (front) or the frame (rear).

Checking the brakes are fitted securely.

It must not be possible to pull the brakes loose and they must be fitted without play.

Check the position of the brake shoes.
- When the brakes are squeezed, almost the entire surface area of the brake pads must come in contact with the rim flank.

Correct position of the brake shoes.

- Under no circumstances must the brake shoes touch the tyre, even if the brake is not being squeezed.

Check the brake shoes for wear and tear.
- The brake shoes must not be worn beyond the wear indicator.

Wear indicator.

Check the left/right symmetry of the brake:
- The brake shoes must be the same distance from the rim on both sides.

7.6.2 Checking the (hydraulic) disc brakes

Risk of personal injury and material damage!

Dirty disc brakes can reduce the braking force.
- Dirty disc brakes must be cleaned immediately.

1 Make sure the brake calliper is securely in place.
- The brake calliper should not move.

2 Check the tightness of your brake system:
- Operate the brake lever while stationary and keep it compressed.
- Check the brake system, from the brake lever via the cables to the brakes.
- There must be no hydraulic fluid leakage anywhere in the system.

3 Check the disc brake for damage:
- There must be no be dents, cracks, deep scratches or other mechanical damage.

4 Lift both the front and rear wheel and spin them by hand:
- If there is any lateral play on the disc brake, this must be minimal.

5 Have your dealer check the wear on the brake pads and the disc brakes:
- The brake linings must not be used if they are worn passed the wear indicators.
- The thickness of the disc brakes must not drop below the minimum level.
- You can find the minimum thickness in the instructions supplied with the relevant component.

6 Check whether your brakes are dirty. Especially check for oil and fatty substances.
- Dirty disc brakes should be cleaned immediately.

Risk of personal injury and material damage!

- Contact with the eyes can cause irritation. In case of contact, rinse your eyes with clean water and seek immediate medical attention.
- Contact with the skin can cause rashes and irritation. In case of contact, wash your skin thoroughly with soap and water.
- Inhalation of mineral oil mist or vapours may cause nausea. Cover your nose and mouth with a dust mask and work in a well ventilated area. If you inhale mineral oil mist or vapour, go to a place with fresh air immediately. Wrap a blanket around you. Stay warm and stable and seek professional medical attention.

7.7 Checking the drive, chain

1 Turn the right crank anticlockwise and observe the chainrings and sprocket cassette from above.
- The chainrings and sprocket cassette must not exhibit any lateral runout.
- There must be no foreign objects between the sprockets. Remove if possible.

2 Push the left crank towards the horizontal chainstay as shown in the image.

3 Inspect the chain for damage.
- There must be no damage on any part of the chain e.g. bent link plates, protruding rivets or rollers, etc., and there must be no jammed, rigid chain links.

4 When stationary, turn the right crank in the opposite direction to pedalling and observe how the chain moves over the chain guide on the rear derailleur.

5 The chain must run smoothly over the chain guide and must not jump.

Checking the crank.

- It must be securely in place; there should be no movement at the bearing.
- There should be no cracking or grinding sounds.

7.8 Checking the suspension fork

Check your suspension fork:
- Squeeze the front brake and keep it compressed.
- Push down on the handlebar with your whole body weight so that there is pressure on the fork.
- The fork should spring back easily unless it is 'locked'.
- There should be no cracking or rattling.
- Clamp the front wheel between your legs and try to lift the bike by the handlebar.
- The frame tubes must not come out of the suspension tube or the fork arch.
- Also refer to the information contained in the fork manual (issued separately).

8 ADJUSTING AND USING THE BIKE

You may make some adjustments to the bike yourself. Only perform these adjustments if you have sufficient technical knowledge and experience, and have the right tools.

8.1 Adjusting the stem (optional)

Some bikes are fitted with a height/angle-adjustable stem. This must only be adjusted by a qualified bicycle mechanic.

8.2 Adjusting the saddle position

Your saddle is attached using one or two clamping bolts.
To change the position of the saddle, you need the appropriate Allen key and a torque wrench.

To adjust the height or angle of your saddle:
- Loosen the clamping bolt(s) slightly until you can easily shift the saddle and/or adjust the angle.

- Adjust the saddle to the desired position.
- If there is only one clamping bolt: Tighten the clamping bolt using the specified torque. Make sure that any loosened parts fit back into position correctly.

- If there are two clamping bolts: Tighten each bolt, one at a time, in quarter/half-turn increments until you have reached the specified torque.
- The required tightening torques are specified in Table 3.3.
- For certain saddle brackets, different torques may be required. If these are not listed in the table or indicated on the saddle bracket itself, contact your dealer.

8.3 Adjusting the saddle height

If the seatpost clamp is secured using a bolt, you will need the appropriate Allen key and a torque wrench.
1 Loosen the clamp as described in Section 11.2.
2 Adjust the saddle, including bracket, to the desired position. Observe the instructions in Section 11.2 regarding the insertion depth of the seatpost.
3 Secure the seatpost as described in Section 11.2.

8.4 Operating the gear system

Use the photos to find out which gear system has been fitted on your bike.
If it is not clear from the photos, check with your dealer.

Shimano STI

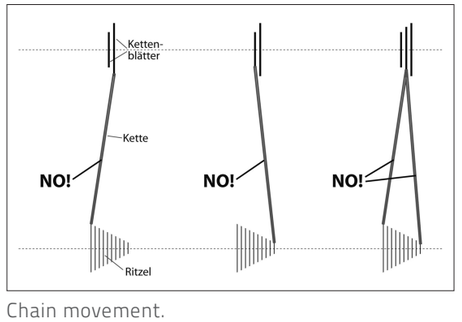
Campagnolo.

SRAM MTB.

Shimano MTB.

If your grip shift is not among the photos, consult the manufacturer's manual which was supplied with the product and/or contact the dealer for more information regarding the operation of your system.

! If your bike is fitted with derailleur gears, the chain shifts to another gear by moving from one cog to another. The cogs near the chainset are called 'chainrings'; the cogs on the rear wheel are called 'sprockets'.



Chain movement.

Observe the specified chain position.
- Avoid:
  - largest chainring + largest sprocket
  - middle chainring + largest sprocket (only applies to triple chainset)
  - middle chainring + smallest sprocket (only applies to triple chainset)
  - smallest chainring + smallest sprocket

! The left grip shift controls the front derailleur, the right grip shift controls the rear derailleur.

⚠ Risk of material damage!

Incorrect operation of the grip shift can damage your crank parts.

Never operate both grip shifts or shifters at the same time!

To switch gear with chainrings (left handle): Never do so while applying full power on the pedals.

8.4.1 Shimano STI

This gearshift system has two levers.
Lever B can be used both to brake and switch to a bigger chainring or sprocket. Lever A is used to switch to a lower gear.

To switch to a smaller chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever A until you feel the chain skip and then release immediately.

Shimano shifter/brake lever.

Switching to a smaller sprocket.

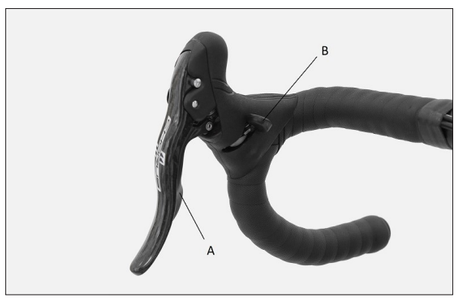
To switch to a larger chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever B until you hear the first ‘click’ and release it when the desired gear has been selected.
- To shift up a few gears at a time, press lever B and click through twice (max.) until the desired gear has been selected.

Switching to a larger sprocket and skipping several gears.

> **!** Ultegra and Dura Ace Di2
>
> This system switches gears electronically. Operation of the grip shift is similar to that of the mechanical grip shift, but you do not need to push as hard.
>
> For more information, see the instruction manuals provided by your dealer/Shimano.

8.4.2 Campagnolo

This shifter has two levers. Lever A is used to switch to a bigger chainring or sprocket. Lever B is used to switch to a smaller chainring or sprocket.



Campagnolo shifter/brake lever.

To switch to a larger chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever A until you hear the first ‘click’ and release it when the desired gear has been selected.

Switching to the next largest sprocket.

- To shift up a few gears at a time, press lever A and click through twice (max.) until the desired gear has been selected.

To switch to a smaller chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever B downwards until you feel the chain skip and then release immediately.

Switching to a smaller sprocket.

- To shift up a few gears at a time, press lever A downwards until the desired gear has been selected. Then release it immediately.

8.4.3 SRAM MTB

This shifter has two levers. Lever A is used to switch to a bigger chainring or sprocket. Lever B is used to switch to a smaller chainring or sprocket.

To switch to a larger chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever A until you hear the first ‘click’ and keep it compressed until the desired gear has been selected.
- To quickly jump to a different sprocket (skipping other sprockets), press the lever downwards and keep compressed until the desired gear is selected.

Switching to the next largest sprocket.

To switch to a smaller chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever B until you feel the chain skip and then release immediately.

Switching to a smaller sprocket.

8.4.4 Shimano MTB

This shifter has two levers.
Lever A is used to switch to a bigger chainring or sprocket. Lever B is used to switch to a smaller chainring or sprocket.

To switch to a larger chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever A until you hear the first ‘click’ and keep it compressed until the desired gear has been selected.
- To quickly jump to a different sprocket (skipping other sprockets), press the lever downwards and keep compressed until the desired gear is selected.

Switching to the next largest sprocket.

To switch to a smaller chainring or sprocket, do the following:
- You must keep pedalling while changing gears.
- Press lever B until you feel the chain skip and then release immediately.

Switching to a smaller sprocket.

8.5 Operating the brakes

Risk of personal injury and material damage!

Improper use of the brakes can lead to dangerous riding situations, crashes, accidents and damage to the bike.
- Make sure you know how to use the brakes properly.
- Determine which brake lever operates the front brake and which operates the rear brake.
- To do this, squeeze the relevant lever several times when stationary. You will notice that the brake pads or disc brake pads open and close on one of the rims.

To operate the brake, pull the lever towards the handlebar.

Operating the brakes.

The best braking performance is achieved by applying the right amount of pressure to both levers at the same time.

8.6 Mounting a wheel

8.6.1 Operating the thru-axle

Thru-axle before mounting.

Mounting the wheel:
- If your bike has a thru-axle system with quick-release lever, place the wheel in the fork and position the disc brake correctly in the brake arch.
- Make sure the wheel is straight, and then slide:
  - road bike: the axle, with quick-release lever open, from left to right through the wheel suspension and the hub.
  - mountain bike: front wheel → the axle, with quick-release lever open, from right to left through the wheel suspension and the hub, rear wheel → the axle, with quick-release lever open, from left to right through the wheel suspension and the hub.

- Tighten the thru-axle in the screw thread and apply pressure to close the quick-release lever.

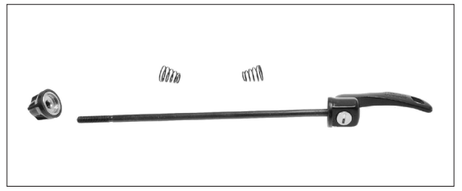
Removing the wheel:
- Open the quick-release lever and loosen the thru-axle.
- Remove the quick release from the fork and hub.

- Carefully remove the wheel from the fork and the disc brake from the brake arch.
- Put the thru-axle back into position in the fork.

Special versions

Some wheels are mounted with a different type of thru-axle or combination of thru-axle and quick release. For information on using these systems, please refer to the user manuals issued by the respective rim or fork manufacturer.

8.6.2 Operating the quick-release axle



Quick-release axle dismantled in separate parts.

The wheel hubs and possibly the seatpost clamp are fitted with quick-release axles (usually referred to as the ‚quick release'). These quick releases make it easier to dismantle and assemble the parts without requiring tools. A quick release consists of
- a long axle with screw thread
- a nut at one end
- and an eccentrically mounted lever at the other
- There are springs between the lock nut and the hub, and between the lever and the hub.
- The side of the springs with the smaller diameter always points towards the hub.
- If there is a quick release for clamping the seatpost, there is an internal hex screw head where the nut usually is.

To open the quick release:
- Pull the eccentrically mounted lever away from the hub. This can now be turned approximately 180° on its own axis.

Quick release closed.

Opening the quick release.

Opening the quick release.

Rotate the lock nut anticlockwise until the wheel can be removed from the frame or fork without using excessive force.
If you unscrew the nut so far that it comes off the screw thread, make sure you do not lose the springs.

Loosening the lock nut by turning anticlockwise.

Quick release open, front wheel removed.

To close: Follow the instructions in the reverse order.

1 If you removed the quick-release axle from the hub completely, insert it in the hub from the left-hand side (in direction of travel).

Inserting the quick-release axle.

2 Place the springs and lock nut on the axle. Position the lock nut on the end which is protruding from the hub on the right-hand side, and tighten by turning it clockwise. Make sure the handle is in the open position.

Turning the lock nut on the axle in a clockwise direction.

3 Tilt the eccentrically mounted lever so that it is in line with the hub axle. Keep the handle in this position.

4 Tighten the lock nut until it is only possible to rotate the lever 90° on its bearing by applying some force (it should be just about in line with the hub axle).

5 Push the lever another 90° to the end stop.

End position of the closed quick-release lever.

Risk of personal injury and material damage!

Improper use of the quick release can lead to dangerous riding situations, crashes, accidents and damage to the bike.

If the lever can be easily pushed into its final position, the wheel is not clamped tightly enough and may slip or come loose while riding. This can cause accidents and crashes.

- Open the lever again and tighten the lock nut in a clockwise direction.

Under no circumstances should it only be possible to push the leaver into its end position by applying excessive force or not be possible to move it into its end position at all (= 90° relative to the hub axle).
Due to the eccentric bearing, it may become loose while riding.
If this occurs, there is a serious risk of an accident.

- Open the lever again and turn the lock nut anticlockwise.
- Check that the wheels are securely clamped in position as described in Section 7.1.1

8.5 Adjusting the fork (mountain bike)

1 See the instructions for adjusting the fork which are included in the fork manufacturer's manual.

2 If your fork has a control mechanism on the handlebar, read the instructions included in the fork manufacturer's manual.

! Only the preload of the fork can be adjusted by compressing the springs using a screw. This only changes the operating torque of the fork, i.e., if the preload is higher, the fork will only spring back under greater operating forces.

If there is too much preload on the fork, the suspension will be considerably less effective.

To find out how much weight the spring elements in your fork can bear, refer to the enclosed fork manufacturer's manual and/or contact your dealer.

If the total weight is outside this range, have your dealer install a spring element that is suitable for your weight.

9 WHILE RIDING

9.1 Defects

Risk of personal injury and material damage!

Performing maintenance tasks without having the relevant knowledge can lead to dangerous situations, crashes, accidents and damage to the bike.

Therefore, all maintenance tasks which are not mentioned in the table below should only be performed by a qualified bicycle mechanic.

Risk of personal injury and material damage!

If you notice that your bike starts to handle differently, makes unusual noises or exhibits any defects which are not discussed in this Section, this can lead to dangerous riding situations, crashes, accidents and damage to the bike.

If you notice any abnormalities that are not listed in the table below, have them checked immediately by your dealer and repaired if necessary.

9.1.1 Gear system, drive

Problem	Possible causes	Remedy
Can't switch gears (properly)	▪ Grip shift not being used correctly ▪ Gear system not set up properly ▪ Too much pressure on the pedal/ pedalling too slowly on steep inclines	▪ Try switching gears again ▪ Have the gear system adjusted by a qualified bicycle mechanic ▪ Try switching gears on flat terrain ▪ Switch gear while stationary: lift the rear wheel, rotate the crank in the direction of pedalling until the desired gear has been selected.
Chain becomes blocked after or while switching gears	▪ Chain is jammed	▪ Stop, press the shifter in the opposite direction, lift the rear wheel and turn the crank in the opposite direction of pedalling. ▪ Never use force if you cannot turn the crank. Have your bike checked by a qualified bicycle mechanic straight away.
Unusual noises such as cracking, loud grinding and/or flapping	▪ Drive/gear system parts are damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away
Irregular resistance while pedalling	▪ Drive/gear system parts are damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away
Chain has fallen off	▪ Improper use of gear system (see Section 8.4) ▪ Gear system not set up properly or damaged due to exposure to adverse conditions.	▪ Stop, manually place the chain on the next sprocket, lift the rear wheel, turn the crank in the direction of pedalling (only if there is no resistance). ▪ If this does not resolve the problem, have your bike checked by a qualified bicycle mechanic straight away.
Chain has fallen off after or while switching gear	▪ Improper use of gear system (see Section 8.4) ▪ Gear system not set up properly or damaged due to exposure to adverse conditions.	▪ Stop, press the shifter in the opposite direction, manually place the chain on the next sprocket, lift the rear wheel, turn the crank in the direction of pedalling (only if there is no resistance). ▪ If this does not resolve the problem, have your bike checked by a qualified bicycle mechanic straight away.
Chain keeps falling off	▪ Continuous improper use of the gear system ▪ Gear system not set up properly or damaged.	▪ Only use the gear system as per the instructions in Section 8.4. ▪ If you are using the gears correctly, have your bike checked by a qualified bicycle mechanic as soon as possible.

9.1.2 Brakes

Risk of personal injury and material damage!

Your bike's brakes are vital for ensuring your safety.
If the brakes are not working properly it can lead to dangerous riding situations, crashes, accidents and damage to the bike.

- Contact your dealer immediately if you notice any defects, no matter how small, or if the braking performance is deteriorating.
- Only ride this bike again once the dealer has completed the necessary repairs.

Problem	Possible causes	Remedy
Brakes are not working	▪ Brake has not been fitted properly ▪ Brake is damaged	▪ Check that the brakes have been fitted as per the instructions in Section 7.6. ▪ If they have been fitted incorrectly, have your bike checked by a qualified bicycle mechanic straight away.
		▪ Have your bike checked by a qualified bicycle mechanic straight away.
Deteriorating braking performance, brake levers can be squeezed too far	▪ Brake pads, disc brake pads or brake lining is worn	▪ Have the brake pads, disc brake pads or brake lining replaced by a qualified bicycle mechanic immediately.
	▪ Brake cable stretched or worn, clamp damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away.
	▪ For hydraulic brakes: Leaking braking system	▪ Have your bike checked by a qualified bicycle mechanic straight away.

9.1.3 Frame and suspension

Risk of personal injury and material damage!

Defects on the frame and suspension can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Contact your dealer immediately if you notice any defects, no matter how small.
- Only ride this bike again once the dealer has completed the necessary repairs.

Problem	Possible causes	Remedy
Sounds: cracking, flapping, scraping etc.	▪ Frame and/or fork damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away
Lack of resilience	▪ Suspension not set up correctly	▪ Make sure the suspension is set up and adjusted in accordance with the instructions contained in the manufacturer's manual.
Less resilience despite correct set up	▪ Suspension damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away.

9.1.4 Wheels and tyres

Risk of personal injury and material damage!

Damaged wheels and tyres can lead to dangerous riding situations, crashes, accidents and damage to the bike.

- Contact your dealer immediately if you notice any defects, no matter how small.
- Only ride this bike again once the dealer has completed the necessary repairs.

Problem	Possible causes	Remedy
Wheel wobbles	▪ Tyre is damaged ▪ Spoke is broken	▪ Have your bike checked by a qualified bicycle mechanic straight away
Sounds: cracking, flapping, scraping etc.	▪ There is a foreign object stuck in the wheel	▪ Remove the foreign object. Then cycle very cautiously. Have your bike checked by a qualified bicycle mechanic for any consequential damage.
	▪ Wheel is damaged	▪ Have your bike checked by a qualified bicycle mechanic straight away.
Unstable riding performance	▪ Air pressure is too low	Pump up the tyre (see Section 7.1.3). If the bike starts to ride in the same way shortly after, the tyres are deflating slowly (see next point).
Increasingly unstable riding performance, extremely wobbly (you can feel every stone)	▪ Puncture	▪ Replace the inner tube, rim tape and outer tyre (if necessary) if your bike has a separate tyre system. ▪ Change the tyres. Have your bike checked by a qualified bicycle mechanic(*). You must not use the bike until this issue has been fixed.

(*): You can replace an inner tube, tyre and rim tape yourself if you have enough experience.
Have your dealer demonstrate the appropriate actions and practice them until you know how to do them properly yourself. When assembling and dismantling wheels, observe the instructions in Sections 8.6 and 11.1.

10 AFTER A CRASH OR ACCIDENT

Risk of personal injury and material damage!

Damage resulting from a crash or accident can lead to dangerous riding situations, crashes, accidents and damage to the bike.

- After a fall or accident, or if the bike has fallen over, you must inspect it for damage.
- After a fall or accident, or if the bike has fallen over, contact your dealer immediately.
- Only ride this bike again once the dealer has completed the necessary repairs.

After a crash, you should replace any parts which could have been impacted, such as;
- handlebar
- stem
- seatpost (if carbon)
- saddle (if saddle bracket is made from carbon)
- rims (if carbon)
- crank

All other parts of the bike must be inspected by the dealer and replaced if necessary.

Risk of personal injury and material damage!

The frame and other parts of your bike are (possibly) made from carbon.

Carbon parts are very sensitive. If they are fitted incorrectly or if they become slightly damaged as a result of a crash or accident, they can cause dangerous riding situations and damage.

- When fitting, maintaining and inspecting these parts, follow all special instructions contained in the corresponding manual.
- Assembly on or of carbon parts must only be carried out by a qualified bicycle mechanic.
- Always contact your dealer if your bike is damaged and after accidents.
- Only use your bike again once the damaged parts have been replaced or if your dealer has assured you that your bike is safe to use.

11 TRANSPORTING YOUR BIKE

Risk of personal injury and material damage!

Improper transportation of your bike can damage bike parts which are important for your safety and can lead to dangerous riding situations, crashes, accidents and damage to the bike.

This bike or frame must only be transported inside your car.

No other objects must be placed on top of this bike or frame.

This bike must not be transported on a car-mounted rack (such as roof racks, bike carriers).

This bike must always be inside a vehicle when being transported. Make sure the bike is secure and cannot be damaged by other luggage.

When transporting, you can remove the front and rear wheels and the seatpost and saddle. Only do this if you know how to mount these parts correctly. See Sections 8.6 and 11.

Risk of material damage!

If your bike is being transported in a vehicle, the tyres may burst or come off the rim due to exposure to sunlight.

Before transporting, let some air out of the tyres and inflate them again once you are at your destination (see Section 7.1.3).

11.1 Fitting and removing the wheels

Risk of personal injury and material damage!

Improperly fitted wheels can lead to dangerous riding situations, crashes, accidents and damage to the bike.

- Ask your dealer to show you how to remove and fit the wheels.
- Practice removing and fitting the wheel at least once under his supervision.
- Only assemble and disassemble the relevant parts if you are sure that you have mastered all the steps.

Risk of burns!

After longer descents, bike rims and disc brakes become very hot.

- Never touch a rim or disc brake immediately after a descent.
- Allow the rim or disc brake to cool before you touch it.

Risk of personal injury and material damage!

Only applies to rim brakes:
when mounting and removing, the tyres can twist the brake pads.

- Check the position of the brake pads after you have mounted the wheels (see Section 7.6).
- If they are not in the correct position, contact a qualified bicycle mechanic straight away.

When transporting your bike, you can remove the wheels and re-mount them if they are fitted with a quick release or thru-axle.

If your bike has rim brakes, be careful that the tyres do not change the position of the brake pads. This can especially be the case with thick tyres. If the tyre does not fit in the brake calliper, open the valve and let air escape. Then pump up the tyre to the correct pressure.

This is how to remove the wheels. Remove the front wheel first. Open the rim brake.

If your bike is fitted with rim brakes:

a] Shimano:
Turn the lever upwards.

Brake open.

Brake open.

b] Campagnolo:
- There is no lever on the calliper:
- To open the calliper, press the pin on the brake lever towards the outside. At the same time, slightly pull the brake lever.

Brake open.

Brake open.

If your bike has disc brakes, you do not need to open the brake.

1 On the rear wheel, shift to the smallest sprocket on the cassette (see Section 8.4).
   - To do this, lift up the back of the bike, press the corresponding shifter and turn the crank by hand in the direction of pedalling until the chain moves onto the smallest sprocket.
2 Loosen the wheel hub. If your bike has a quick release:
   - Open the quick release for your wheel (see also Section 8.6).
   - Loosen the lock nut until it just about stays in contact with the axle. If your bike has a thru-axle:▪ Open the thru-axle on your wheel
   - Loosen the thru-axle and remove it from the frame.
3 Remove the wheel from the frame and the fork.
   - Front wheel: Lift up the front wheel by the handlebar, and then remove the wheel from the fork dropouts.
   - Rear wheel: Lift up the back of the bike slightly and push the derailleur backwards. This is how to slide the rear wheel towards the fork dropouts using minimal force.

Push the derailleur backwards and lift the frame.

Wheel removed from the frame.

Once the wheels have been removed, gently set the bike down on its left-hand side.

Risk of material damage!

Without a rear wheel, the frame and/or derailleur can become damaged.
Once the rear wheel has been removed, set the bike down on its left-hand side or use an appropriate assembly stand.

This is how to mount the wheels.
Mount the rear wheel first.

a] Put the rear wheel into position:
   - Lift up the back end of the bike.
   - Put the rear wheel into position under the frame so that the chain sits above the smallest sprocket.
   - Carefully lower the back of the bike until the axle rests against the end stop of the fork on the left and right side (if you have disc brakes: until the disc is positioned in the brake). If your bike has a quick release, secure the wheel in place by tightening the lock nut and closing the fastener (with some force). If your bike has a thru-axle, re-insert it in the frame, tighten it in place, and close the fastener.

Positioning the hub in the fork dropouts.

Positioning the hub in the fork dropouts.

b] Put the front wheel into position:
   - Lift up the bike by the handlebar
   - If your bike has a quick release, position the front wheel under the fork dropouts. If your bike has a thru-axle, position the front wheel in front of the openings.
   - Slowly lower the fork until the axle sits tightly against the end stop of the fork on the left and right side.

1 Tighten the wheel hubs.
   - If your bike has a thru-axle, see Section 8.6.1.
   - If your bike has a quick release: see Section 8.6.2.

2 Close the rim brakes
Racing bike brakes:
a] Shimano:
- Turn the lever downwards.

Closing the brake.

b] Campagnolo:
- There is no lever on the brake calliper:
- Follow the instructions for opening the brake in the reverse order and push the pin on the brake lever towards the inside.
- To do this, pull the brake lever.

1 Make sure that when you squeeze the brake lever the brake pads rest on the rim flank properly.

Correct position of the brake shoes.

2 Check the assembly:
- Squeeze the brakes.
- If only one of the two brake pads touches the rim, this may indicate that the hub has been positioned incorrectly in the fork.
- If this is the case, re-release the quick release, check the position of the hub, perform any corrections and close the quick release again.
- The brake (if your bike has rim brakes) does not need to be reopened. If these steps do not improve the position of the pads, please contact your dealer immediately.
- Check whether the lights (if fitted) work.
- Make sure the wheels do not come into contact with mudguards or luggage racks (if fitted).

Disc brakes:
- Check that the wheel can rotate freely.
- If this is not the case, squeeze the brake lever a few times while the wheel is mounted.
- If the wheel still does not rotate freely, loosen the axle and mount the wheel again.
- If after these steps the wheel still does not rotate freely, please contact your dealer immediately.

11.2 Fitting and removing the seatpost and saddle

Risk of personal injury and material damage!

An incorrectly mounted seatpost can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Ask your dealer to show you how to fit and remove your seatpost.

Practice removing and fitting the seatpost at least once under his supervision. Only assemble and disassemble the seatpost and saddle if you are sure that you have mastered all the steps.

When transporting your bike, you can remove the seatpost and saddle and re-mount them when you are at your destination.

To loosen or tighten the seatpost, you need the appropriate Allen key and a torque wrench. Ask your dealer for more information about this.

This is how to remove the seatpost:
- Open the saddle clamp by loosening the hexagon socket screw with the appropriate Allen key.

Loosening the clamping screw.

Pull the seatpost and saddle out of the frame.
This is how to mount the seatpost:
If the seatpost and seat tube are made of metal:
- Grease the part of the seatpost that is inserted in the seat tube with mounting paste.

If the seatpost and/or seat tube are made of carbon:
- The part that is clamped must be free of any fatty substances, or you can use a special mounting paste which is suitable for carbon components.

Seatposts on a complete Isaac Cycle bike:
- Push the saddle and seatpost pin into the seat tube until it is at the desired seat height.
- The seatpost must be pushed into the tube at least until the 'minimum' mark is no longer visible.

Minimum insertion depth indicated on the seatpost.

Seatposts selected from the range of accessories:
- Push the saddle and seatpost pin into the seat tube until it is at the desired seat height.
- If there is a 'minimum' mark indicated on the seatpost, the seatpost must be pushed into the tube at least until this no longer visible.
- If the minimum mark is not indicated, the lower end of the seatpost must be at least 3 cm below the lower edge of the top frame tube.

Note the following instructions.

Do not rely solely on the mark on the seatpost. You can check the proper insertion depth as follows:
- Hold your finger at the point on the seatpost which is visible just above the seat clamp when mounted.
- Keep your finger on the same spot and pull the seatpost out of the seat tube.

- Hold the seatpost next to the seat tube so that your finger is at the same height as the top of the tube frame.
- In this position, the lower end of the seatpost must be at least 3 cm below the lower edge of the top frame tube.

Note the maximum insertion depth of your seatpost!

- Do not push the seatpost further into the seat tube with unnecessary force.
- It must be possible, with its diameter and shape, to clamp the seatpost in place near the seat clamp.
- For seatposts on a complete Isaac Cycle bike: the distance between the saddle clamp and the seatpost clamp must be at least 8 cm.

1 Turn the saddle so that the tip of the saddle points in the direction of travel.
2 Make sure that the seat clamp is tight against the frame, and that the grooves on the seat tube and the seat clamp are aligned.
3 Tighten the hexagon socket screw on the clamp with a torque wrench. The required torque is listed in Section 3.3.

Risk of personal injury and material damage!

If a carbon seatpost is fastened too tightly it might break while riding and this can lead to dangerous riding situations, crashes, accidents and damage to the bike.

Observe the assembly instructions and the required torque.

Use adhesive tape to mark the position on the seatpost which is the right height for you.

12 CLEANING AND MAINTAINING THE BIKE

Risk of personal injury and material damage!

Corrosion can damage parts which are important for ensuring your safety. This means that their strength is no longer guaranteed. These parts could then break while riding and cause serious accidents.

The following can contribute to corrosion:
- salt (e.g., after spreading salt on the road in the winter)
- salty air (e.g., in coastal areas, industrial sites)
- sweat

Even non-corrosive materials can be affected by this corrosion.

If your bike is exposed to substances which can cause corrosion, you must take the following steps:
- protect your bike against these substances
- clean your bike every time it comes into contact with such substances, and carry out any protective measures again

Risk of material damage!

Do not use a pressure washer. The powerful water jet can damage your bike.

Proper maintenance extends the service life of your bike and its components. Therefore, you should regularly clean and service your bike.

For wet cleaning, use a low-pressure water jet or a bucket of water and a sponge.

Use only fresh or desalinated water.

There are many ways to clean a bike. A proven way to clean a very dirty bike is as follows:

1 Remove coarse dirt such as mud, stones, sand, etc., with a low-pressure water jet.
2 Allow the bike to dry slightly.
3 Spray your entire bike with a suitable cleaning agent.

For most cleaning agents, if your bike is just lightly soiled it is usually sufficient to spray it all over and rinse off after the specified application time.
Before rinsing, you can remove stubborn dirt by scrubbing it with a radiator brush after the specified application time.

Risk of material damage!

Cleaning agents, lubricants and preservatives are chemical products.
Improper use of these agents can damage your bike.
- Only use products specifically for bikes and carbon parts.
- Make sure that these products do not damage or corrode paint, rubber, plastic or metal. Contact your dealer for more information.
- Follow the instructions issued by the relevant manufacturer.

1 Rinse the whole bike with a low-pressure water jet and let it dry.
2 Clean the chain:
   - Add a few drops of cleaning agent (suitable for cleaning a chain) on a clean, lint-free cotton cloth and wipe the chain.
   - While doing so, turn the crank slowly against the direction of pedalling.
   - Repeat until the chain is clean, using a clean section of cloth.
   - Let the cleaning agent evaporate for about one hour.

If there are still residues of cleaning agent between chain links, this will compromise the new lubricant and render it ineffective.

   - Sparingly apply a lubricant that is suitable for bike chains on the chain links.

Risk of material damage!

Lubricant for motorbike chains will stick to the bike chain and drive components.

Only use lubricants which are specifically for bike chains.

Risk of personal injury and material damage!

If you use too much lubricant the excess may drip onto and contaminate the rims. This reduces the braking performance.
- Therefore, remove excess lubricant from the chain using a clean, dry, lint-free cotton cloth.
- Clean the rim and disc brake with a suitable degreasing agent.
- Contact your dealer for more information.

Risk of personal injury and material damage!

If spray wax or a preservative gets onto the rims and/or brake pads, the braking performance decreases.
- Clean these parts with a suitable degreasing agent. Contact your dealer for more information.

1 Clean the areas that are still dirty by hand, using a clean, lint-free cotton cloth and a suitable cleaning agent.

2 Spray the whole bike with a suitable spray wax or a similar preservative.
Exceptions:
- brake pads
- rims, if your bike is fitted with rim brakes

3 After the application time, wipe the bike with a clean, lint-free cotton cloth.

4 Clean the brake pads and rims by hand, using a clean, lint-free cotton cloth and a suitable cleaning agent.

! Clean and lubricate your chain as described after every ride in the rain, mud or snow, or a longer ride over sandy ground, or at least every 200 km.

You must never clamp anything to the frame, such as an assembly stand or any other part which is fitted using a clamp.

Risk of material damage!

Service plan:
The service activities should be performed at the recommended intervals and only by a qualified bicycle mechanic who is authorised by the manufacturer.

Type of inspection	**Normal usage**	**Frequent, more intense or competitive usage**
1. Inspect	▪ at least every 200 km or 2 months	▪ after every ride
Next inspections	▪ every 2,000 km or 1x per year	▪ every 500 km or every 2 months
Check brakes and brake pads/ disc brake pads	▪ every 400 km	▪ every 100 km
Check the chain wear	▪ every 500 km	▪ every 250 km
Replace handlebar and stem	▪ after crash (see Section 10) ▪ according to the manufacturer's guidelines or ▪ at least every five years	▪ after crash (see Section 10) ▪ according to the manufacturer's guidelines or ▪ at least every 2 years

! Your chain can wear quickly if exposed to adverse conditions. By replacing it in time, the sprockets will last longer.

13 STORING YOUR BIKE FOR LONGER PERIODS

Risk of material damage!

Storing a bike incorrectly can damage bearings and tyres. Parts can also become corroded.

Please observe the following guidelines.

Clean and service your bike as described in Section 12.

1 Only store your bike in dry and dust-free rooms.
2 Use a suitable bike support (e.g. tripod or wall brackets).
Contact your dealer for more information.

3 If your bike is stored with one or two wheels on the ground:
- Lift your bike every 2-3 weeks and turn both wheels a few times by hand.
- Turn the handlebar a few times back and forth.
- Turn the crank by hand a few times against the direction of pedalling.

Before you ride your bike again, perform an inspection as described in Section 7.

14 WARRANTY

You can find the warranty terms on the Isaac Cycle website.

The warranty expires:
- if defects and damage are caused by non-compliance with the instructions in this user manual.
- if complaints can be ascribed to the fact that, during the replacement of bike components, genuine replacement parts – as specifically described in the user manual – were not used.
- if adjustments were made to the bike without the prior consent of Isaac Cycle.

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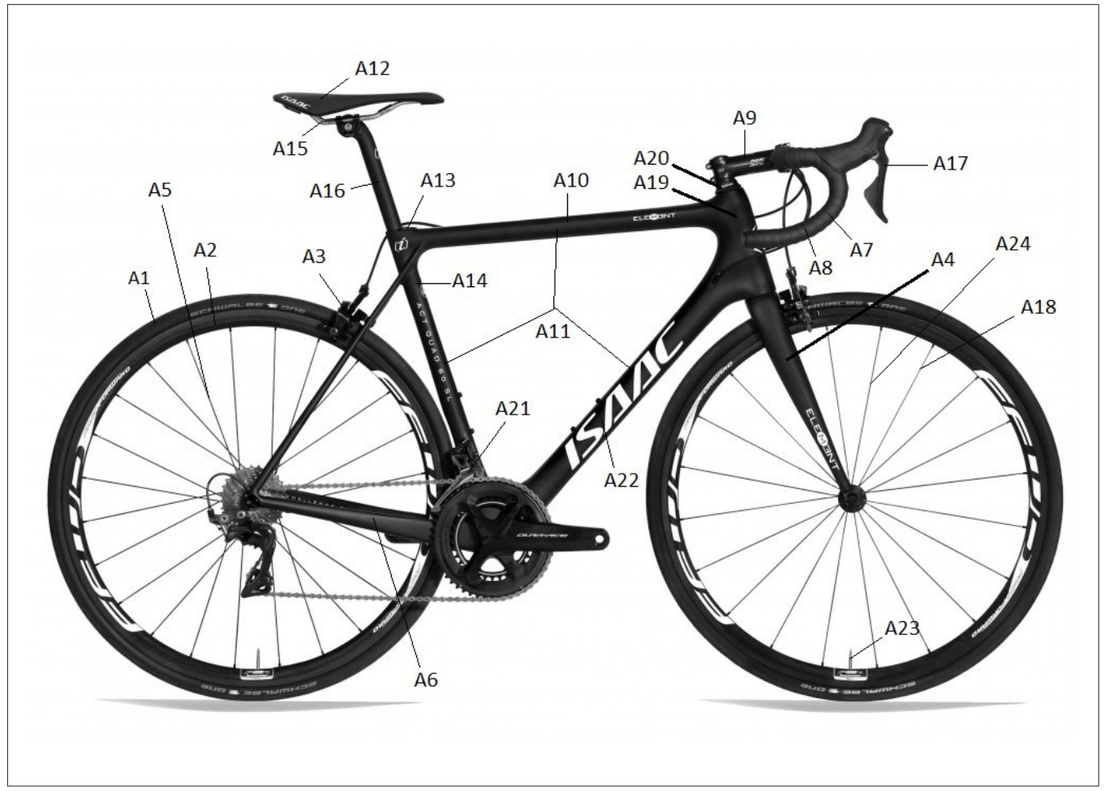
15 PHOTO LEGEND

Terms

- Rear derailleur
- Rear wheel
- Rear-wheel hub, hub, rear
- Headset
- Tyre
- Top frame tube
- Cassette, sprockets, sprocket cassette
- Crank
- Frame
- Chain
- Chainring
- Rivet
- Chain plate
- Chainstay
- Hub, front, front wheel hub
- Lower frame tube
- Brake pad
- Brake lever
  (Shimano STI: Grip shift is also located on the brake lever)
- Brake cable
- Brake shoe
- Shift/brake lever, shifter
- Grip shift
- Chain guide
- Wear indicator on rim
- Quick-release axle
- Quick-release lever
- Quick release, quick-release lever
- Spoke
- Drop bars
- Head tube
- Bar tape
- Stem
- Rim
- Rim brake (road bike)
- Valve
- Valve cap, dust cap
- Valve nut
- Front derailleur
- Front wheel
- Fork
- Fork dropout
- Saddle
- Seatpost
- Seatpost clamp
- Saddle rail

Image A



A1 Tyre
A2 Rim
A3 Rim brake (road bike)
A4 Fork
A5 Rear wheel
A6 Chainstay
A7 Drop bars
A8 Bar tape
A9 Stem
A10 Top frame tube
A11 Frame
A12 Saddle
A13 Seatpost clamp
A14 Seat tube
A15 Saddle rail
A16 Seatpost
A17 Shift/brake lever, shifter
A18 Spoke
A19 Head tube
A20 Headset
A21 Front derailleur
A22 Lower frame tube
A23 Valve
A24 Front wheel

Image B

B1 Chain
B2 Chainring
B3 Crank
B4 Rear derailleur
B5 Chain guide
B6 Cassette, sprockets, sprocket cassette

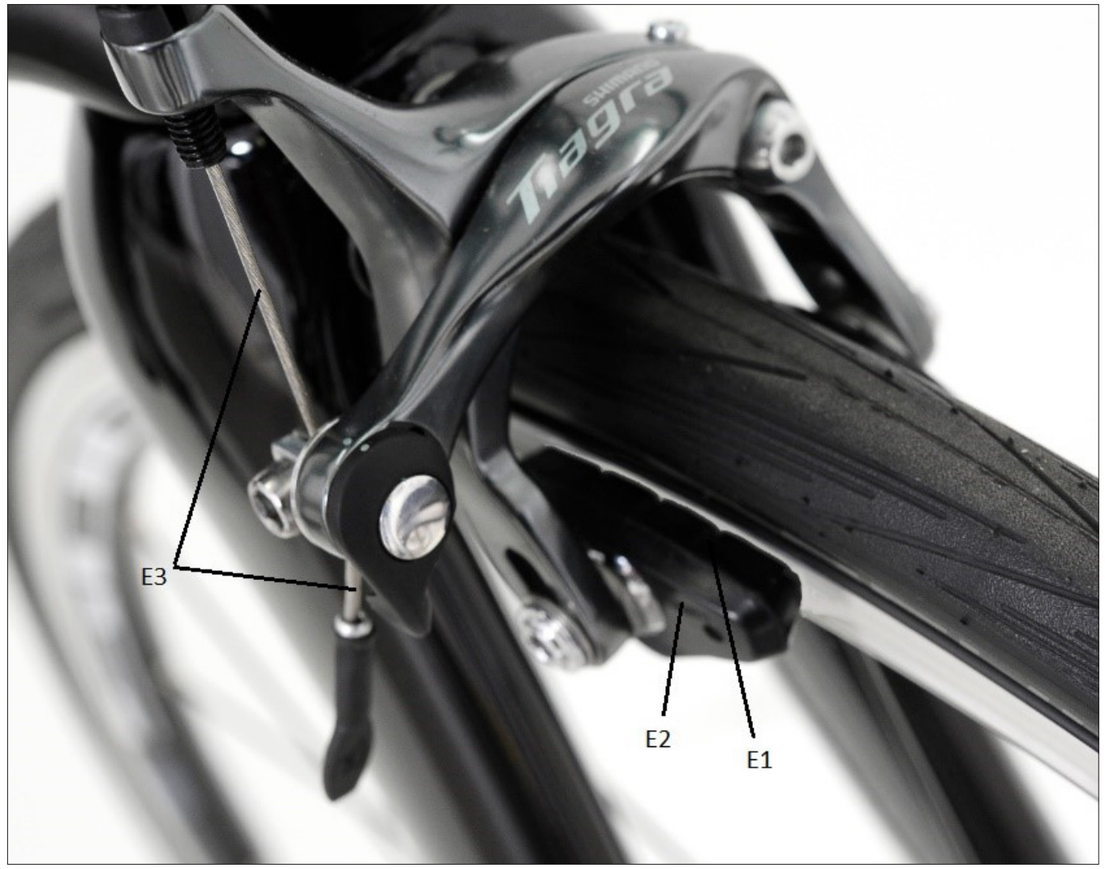
Image C

C1 Brake lever
(Shimano STI: Grip shift is also located on the brake lever)
C2 Grip shift

Image D

D1 Fork dropout
D2 Rear-wheel hub, hub, rear
D3 Quick release, quick-release lever

Image E

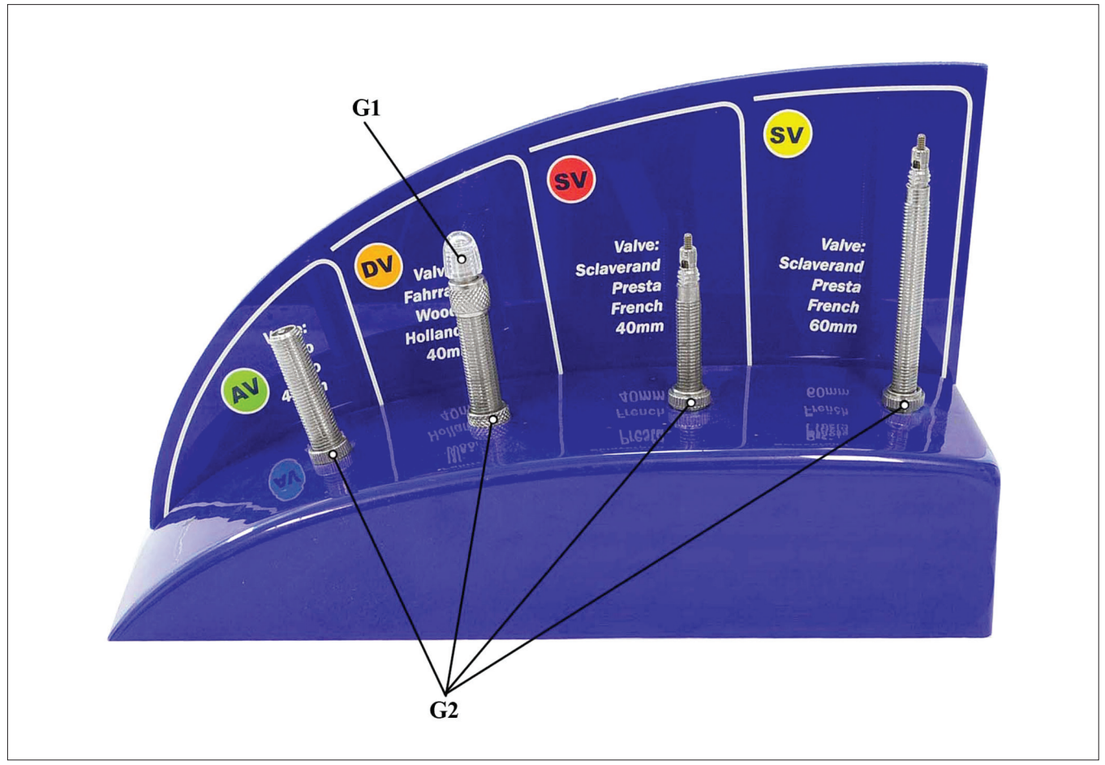


E1 Brake pad
E2 Brake shoe
E3 Brake cable

Image F

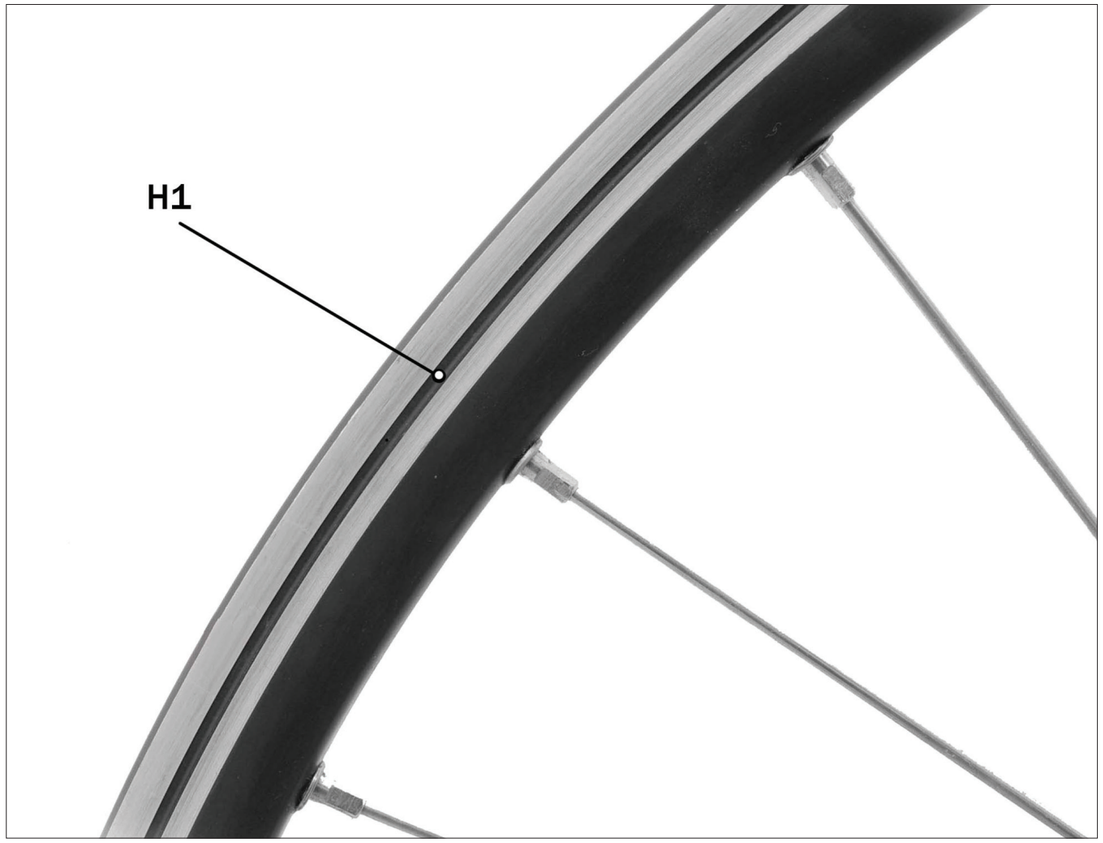
F1 Hub, front, front wheel hub
F2 Quick-release axle
F3 Quick-release lever

Image G



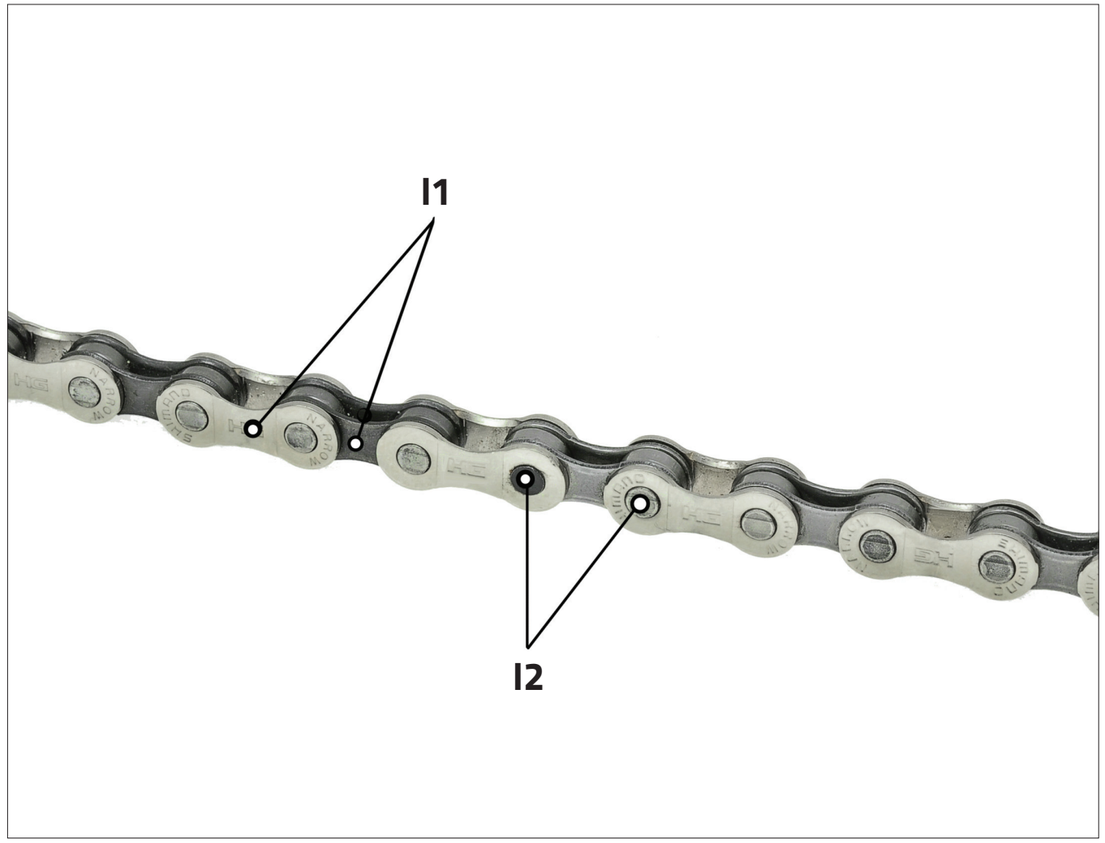
G1 Valve cap, dust cap
G2 Valve nut

Image H



H1 Wear indicator on rim

Image I



I1 Chain plate
I2 Rivet

www.isaac-cycle.com