

PASSONI

I LIVE TO RIDE. I RIDE PASSONI.

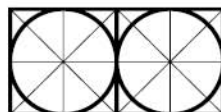
ROAD RACING BICYCLE GRAVEL BIKE

Bicycle User Manual

Operating instructions EN ISO 4210-2

Read pages 4 to 9 before your first ride! Perform the functional check on pages 10 and 11 before every ride!

Observe the bike card on the rear cover!



PASSONI



Road racing bicycle

Frame:

- ① Top tube
- ② Down tube
- ③ Seat tube
- ④ Chainstay
- ⑤ Rear stay
- ⑥ Head tube



In the industry, two categorisations/classifications of bicycles are common. One is the ASTM F2043-13 category and the other one the EN 17406:2021-11, which are partly contradictory. For this reason, both categories are mentioned in the relevant sections. For more information see the chapter **“Intended use”**.

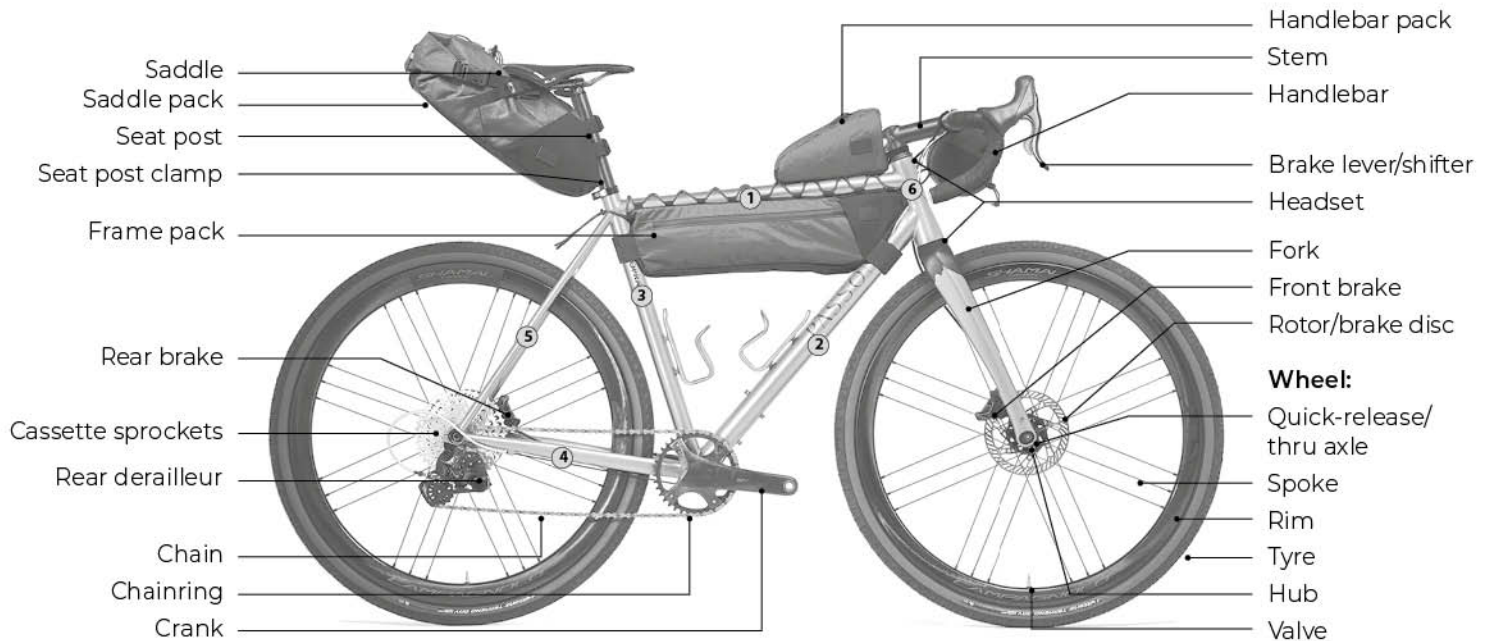
PASSONI



Gravel bike

Frame:

- ① Top tube
- ② Down tube
- ③ Seat tube
- ④ Chainstay
- ⑤ Rear stay
- ⑥ Head tube







Pay particular attention to the following symbols:

⚠ WARNING

This symbol indicates a hazardous situation which could result in death or serious injury – if the relevant operational instructions are not followed or if the relevant protective measures are not taken.

⚠ CAUTION

This symbol indicates a hazardous situation which could result in minor or moderate injury – if the relevant operational instructions are not followed or if the relevant protective measures are not taken.

NOTICE

This symbol is used to address practices not related to physical injury – which may, however, result in damage to property and the environment.

SAFETY INSTRUCTIONS

This symbol indicates specific safety-related instructions or procedures about how to handle the product or refers to a section in the operating instructions that deserves your particular attention.

The described possible consequences will not be repeated in the operating instructions every time one of the symbols appears.

For the sake of better legibility, the male form is used with personal names and personal nouns throughout these operating instructions. The terms in question principally apply to all genders in the spirit of equal treatment. The abbreviated language form is used solely for editorial reasons and does not represent any value judgement.

SOME NOTES ON THIS MANUAL

The illustrations (c+d) show typical Passoni road racing bicycles – one of these types may look similar to the Passoni bicycle you have purchased. Today's bicycles come in various types that are designed for specific uses and equipped accordingly.

These operating instructions are not intended to help you assemble a Passoni bicycle from individual components, to repair it or to make a partly assembled Passoni bicycle ready-for-use.

These operating instructions are not applicable to any other than the displayed or specified bicycle type.

Technical details in the text and illustrations of these operating instructions are subject to change.

This manual complies with the requirements of the EN ISO standard 4210-2.

Also observe the enclosed operating instructions of the component manufacturers. These operating instructions are subject to European law. If delivered to countries outside Europe, supplementary information has to be provided by the bicycle manufacturer, if necessary.





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GENERAL SAFETY INSTRUCTIONS

Dear Passoni Customer,

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

This manual contains a wealth of information on the proper use of your Passoni bicycle, its maintenance and operation as well as interesting information on bicycle design and engineering. Read this manual thoroughly. We are sure that even if you have been cycling all your life you will find useful and detailed information. Bicycle technology has developed at a rapid pace during recent years (b). Therefore, before setting off on your new Passoni road racing bicycle, be sure to read at least the chapter **"Before Your FIRST Ride"**.

To have as much fun as possible during cycling, be sure to carry out the functional check described in chapter **"Before EVERY Ride"** before setting off.

Even a manual as big as an encyclopedia could not describe any possible combination of bicycle models and components or parts on the market. It therefore focuses on your newly purchased Passoni bicycle and standard components and provides useful information and warnings.

When doing any of the adjusting or servicing (c), be aware that the instructions and notes provided in your manual only refer to this Passoni road racing bicycle.

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

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





Before you set off, let us point out a few things to you that are very important to every cyclist: Never ride without a properly adjusted helmet and without glasses (e). Make sure you wear suitable, bright clothing, as a minimum, however, straight cut trousers and shoes (f) fitting the pedal system.

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

Like any sport, cycling involves the risk of injury. By choosing to ride a bike, you assume the responsibility for the risk. Note that on a Passoni bicycle you have no protection technique around you (e.g. bodywork, ABS, airbag) like you have in a car. Therefore, always ride carefully and respect the other traffic participants. Never ride under the influence of drugs, medication, alcohol or when you are tired. Do not ride with a second person on your Passoni bicycle and never ride without having both hands on the handlebar.

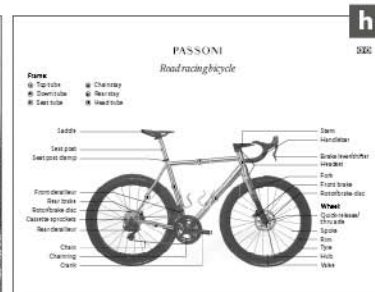
Observe the legal regulations concerning cycling on public roads (g). These regulations may differ in each country. Only use your Passoni road racing bicycle on signposted, well-maintained trails and hard-surface roads.

First we would like to familiarise you with the various components used on your Passoni bicycle. Unfold the cover of this manual (h). Here you will find two exemplary Passoni bicycles showing all the essential components. Leave the page unfolded as you read so that you can easily locate the components as they are referred to in the text.

⚠ WARNING

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

Note: During cycling you must not hold onto a moving vehicle or trailer. Keep both hands on the handlebar. Only take your feet off the pedals, if required by the condition of the road. Also bear in mind that riding with headphones is in some countries allowed as long as the acoustic perception is not impaired. Inform yourself about the law situation in the country where you use your bike.





INTENDED USE

Note that each type and/or kind of bicycle, referred to as **category** in the following, is designed for a specific use. Use your Passoni bicycle only according to its intended use, as it may otherwise not withstand the loads, fail and cause an accident with unforeseeable consequences! If you use your Passoni bicycle for another than its intended purpose, the warranty will become void, in addition.

Ask your Passoni dealer to confirm the category to which your Passoni bicycle belongs. Have a look at your bike card.

Category 2 “Sports”: gravel bikes (a) and cyclocross bikes

Passoni bicycles and components of the category 2 “Sports” are used for sports and competition rides which high effort. Passoni bicycles and components of this category are intended for riding on paved surfaces, i.e. on asphalted roads and gravel paths where the front and rear wheels mainly remain in contact to the ground. They are also suitable for moderate technical trail features where a short loss of tyre contact with the ground due to small drops can occur.

Passoni bicycles and components of this category are not suitable for riding over terrain of the category mountain bike.



Category 2 “Sports” describes **gravel bikes** and **cyclocross bicycles** (bicycles for riding cross country). In general, these Passoni bicycles have 28-inch wheels with narrow tyres. The tyre width is 28 to max. 42 mm.

Category 1 (ASTM F2043-13) / Category 6 (EN 17406:2021-11): road racing (b), time trial (e), triathlon and track bicycles

Passoni bicycles and components of the ASTM category 1 / EN category 6 are used for sports and competition rides which high effort at speeds of more than 50 km/h (31 mph). Passoni bicycles and components of this category are intended for riding on paved roads with asphalted or cobbled surfaces, where the front and rear wheels remain in permanent contact to the ground.

Passoni bicycles and components of this category are not suitable for off-road use.

Category 1 (ASTM F2043-13) / Category 6 (EN 17406:2021-11) describes **road racing**, **triathlon** and **time trial bicycles**. In general, these are Passoni road racing bicycles with drop or straight bars, triathlon bicycles or time trial machines. The tyre width is very narrow, i.e. 22 to max. 28 mm.

Due to their design and equipment, Passoni bicycles of the categories 2 “Sports” and 1 (ASTM) / 6 (EN) are not intended to be used on public roads. Prior to using them on public roads they must be equipped according to the respective rules. Observe the traffic rules when riding on public roads.

For more information see the chapter “**Legal requirements for riding on public roads**”.

The **maximum permissible overall weight** is specified on the type plate on the Passoni bicycle or in the bike card in these operating instructions. Under certain circumstances the maximum permissible overall weight can be further limited by the component manufacturers’ recommendations for use. If you are in doubt, contact your Passoni dealer.



⚠ WARNING

- *Be aware that the distance you need to stop your Passoni bicycle increases, when you are riding with your hands on aero bars. The brake levers are not in all gripping positions within easy reach.*
- *Passoni bicycles of the categories 2 "Sports" and 1 (ASTM) / 6 (EN) are not suitable for riding off-road, stair riding, jumps, slides, stoppies (f), wheelies, tricks etc.!*
- *For your own safety, do not overestimate your riding skills. Note that though looking easy the riding manoeuvres of a professional are hazardous to your life and limb. Always protect yourself with suitable clothing.*
- *Use your Passoni bicycle only for its intended purpose, as it may otherwise not withstand the loads and fail! Risk of accident!*
- *Your Passoni bicycle is designed for a maximum permissible overall weight including rider, luggage, Passoni bicycle and child seat or trailer load, if permitted. The maximum permissible overall weight is specified on the type plate on the Passoni bicycle or in the bike card in these operating instructions. If you are in doubt, contact your Passoni dealer.*



⚠ WARNING

- *Due to their design and equipment, Passoni bicycles of the categories 2 "Sports" and 1 (ASTM) / 6 (EN) are not always intended to be used on public roads. If you want to use them on public roads, these Passoni bicycles must be equipped according to the respective rules. Observe the traffic rules when riding on public roads.*

SAFETY INSTRUCTIONS

- *For more information about the intended use of your Passoni bicycle and the maximum permissible overall weight (rider, luggage, Passoni bicycle and child seat or trailer load, if permitted) see the bike card and chapter "Before Your First Ride".*

Track bicycles are pure sports bicycles and only intended for use on outdoor or indoor cycle racing tracks. The use of track bicycles on public roads or lanes is neither intended nor permitted.

Note that track bicycles have neither freewheel nor brakes. Even if used on an indoor track it is therefore important that you are instructed accordingly by a trainer.

The **maximum permissible overall weight** is specified on the type plate on the Passoni bicycle or in the bike card in these operating instructions. Under certain circumstances the maximum permissible overall weight can be further limited by the component manufacturers' recommendations for use. If you are in doubt, contact your Passoni dealer.

⚠ WARNING

- *Track bicycles are not suitable for use on public roads. In addition, they are neither suitable for riding off-road, stair riding, jumps, slides, stoppies, wheelies, tricks etc.!*



BEFORE YOUR FIRST RIDE

1. Your Passoni bicycle is designed for a **maximum permissible overall weight** including rider, luggage, Passoni bicycle and child seat or trailer load, if permitted. The maximum permissible overall weight is specified on the type plate on the Passoni bicycle or in the bike card in these operating instructions. If you are in doubt, contact your Passoni dealer.
2. If you want to use your Passoni bicycle on public roads, it has to comply with the respective legal requirements. These requirements may vary in each country. The equipment of your Passoni bicycle is, therefore, not necessarily complete (a). Ask your Passoni dealer for the laws and regulations applicable in your country or in the country you intend to use the Passoni bicycle. Have your Passoni bicycle equipped accordingly, before using it on public roads.
3. Are you familiar with the brake system (b)? Have a look at the bike card and check whether you can actuate the front brake with the brake lever/shifter you are used to (right or left). If this is not the case, ask your Passoni dealer to switch the brake levers/shifters before you set off for the first time.

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

For more information see chapter "**Brake System**" and the enclosed operating instructions.

4. Are you familiar with the type and functioning of the gears (d)? Ask your Passoni dealer to explain the gear system to you and make yourself familiar with your new gears in an area free of traffic.

For more information see chapter "**Gears**" and the enclosed operating instructions.

5. Are both saddle and handlebar properly adjusted? The saddle should be set to a height from which you can just reach the pedal in its lowest position with your heel. Check whether your toes reach to the floor when you are sitting on the saddle (e). Your Passoni dealer will be pleased to help you, if you are not happy with your seating position.

For more information see chapter "**Adjusting the Passoni Bicycle to the Rider**".





6. If your Passoni bicycle is equipped with clipless or step-in pedals (f): Have you ever tried cycling with the respective cycling shoes? Do not set off until you have practised engaging and disengaging the shoes in standing (g). Ask your Passoni dealer to explain the pedals to you.

For more information see chapter “Pedals and Shoes” and the enclosed operating instructions.

⚠ WARNING

- Use your Passoni bicycle only for its intended purpose, as it may otherwise not withstand the loads and fail! Risk of accident!
- A lack of practice when using clipless pedals or too much spring tension in the mechanism can lead to a very firm connection, from which you cannot quickly step out. Risk of accident!
- Regular maintenance of your Passoni bicycle is essential for its suitability and decisive for its safety. You as owner are the only one who knows how often you use your Passoni bicycle, where you use it and how hard you do. It is therefore your responsibility, to have regular servicing and maintenance carried out. For more information see chapter “Service and maintenance schedule” or contact your Passoni dealer.

⚠ WARNING

Be aware that the distance you need to stop your Passoni bicycle increases, when you are riding with your hands on aerobars. The brake levers are not in all gripping positions within easy reach.

⚠ CAUTION

In particular, make sure there is enough clearance between your crotch and the top tube (h) so that you do not hurt yourself, if you have to get off quickly.

NOTICE

We recommend that you take out private liability insurance. Make sure that coverage for this kind of damage is provided by your insurance. Contact your insurance company or agency.

SAFETY INSTRUCTIONS

Towing a trailer or mounting a child carrier is not allowed with your Passoni bicycle. Have a look at the bike card and contact your Passoni dealer.





BEFORE EVERY RIDE

Your Passoni bicycle has undergone numerous tests during production and a final check has been carried out by your Passoni dealer. Nevertheless, be sure to check the following points to exclude any malfunctioning that may be due to the transport of your Passoni bicycle or to a work a third person may have performed on your Passoni bicycle before delivery:

1. Are the quick-release levers (a) of the front and rear wheel properly closed and the bolts of the seat post and other components accurately tightened?

For more information see chapter “How to Use Quick-Releases and Thru Axles”.

2. Are the tyres in good condition and do they have sufficient pressure (b)? A higher pressure gives a better riding stability and reduces the risk of a puncture. The minimum and maximum pressure (in bar or psi) is indicated on the tyre side.

For more information see chapter “Wheels and Tyre Equipment” and the enclosed operating instructions.

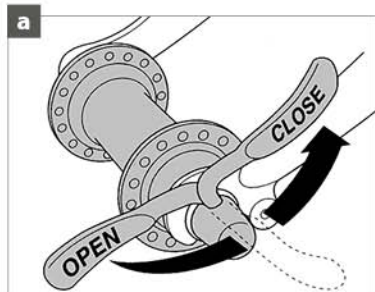
3. Spin the wheels to check whether the rims are true. Watch the gap between rim and brake pad. Untrue rims can be an indication of tyres with ruptured sides, broken axles or spokes.

For more information see chapter “Wheels and Tyre Equipment” and the enclosed operating instructions.

4. Test the brakes in standing by firmly pulling the brake levers/shifters towards the handlebar (c). The brake pads of **rim brakes** must hit the rim evenly with their entire surface without touching the tyre during braking, in open condition or in between. You should not be able to pull the brake levers/shifters all the way to the handlebar! Also check the thickness of the brake pads.

With **disc brakes** (d) you should have a stable pressure point at once. If you have to actuate the brake lever more than once to get a positive braking response, have the Passoni bicycle checked by your Passoni dealer. You should not be able to pull the lever all the way to the handlebar. If your bike has hydraulic brakes, check the hydraulic brake hoses for oil or brake fluid leaks! Also check the thickness of the brake pads.

For more information see chapter “Brake System” and the enclosed operating instructions.





5. Let your Passoni bicycle bounce on the ground from a small height (e). If there is any rattling, check the proper fit. Check the bearings and bolted connections, if necessary.
6. If you want to ride on public roads, make sure your Passoni bicycle is equipped according to the regulations of your country (f). Riding without lights and reflectors in dark or dim conditions is very dangerous because you will be seen too late or not at all by other road users. A permissible lighting system is a must on public roads. Turn on the lights as soon as dusk sets in.

For more information see chapter “**Legal requirements for riding on public roads**”.
7. Do not forget to take a high-value D-, folding (g) or chain lock with you on your ride. The only way to effectively protect your Passoni bicycle against theft is to lock it to an immovable object.

⚠ WARNING

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

⚠ WARNING

Improperly closed fastenings can cause components to come loose and result in serious accidents!

During use your Passoni bicycle is undergoing stress resulting from the surface of the road and from the rider's action. Due to these dynamic loads, the different parts of the Passoni bicycle react with wear and fatigue. Check your Passoni bicycle regularly for wear marks, scratches, deformations, colour changes and any indication of cracking. Components which have reached the end of their service life may fail suddenly without previous warning.

Be aware that the distance you need to stop your Passoni bicycle increases, when you are riding with your hands on aerobars (h). The brake levers are not in all gripping positions within easy reach.

SAFETY INSTRUCTIONS

Let your Passoni dealer maintain and service your Passoni bicycle regularly and in cases of doubt it is always best to replace components.





AFTER AN ACCIDENT

1. Check whether the wheels are still firmly fixed in the drop-outs (a) and whether the rims are still centred with respect to the frame or fork. Spin the wheels and observe the gap either between brake pads and rim sides or between frame and tyre. If the width of the gap changes markedly and you have no way to true the rim where you are, you will need to open the rim brake a little so that the rim can run between the brake pads without touching them. Note that in this case the brakes may not act as powerfully as you are used to. For more information see chapters **"Brake System"**, **"How to Use Quick-Releases and Thru Axles"** and **"Wheels and Tyre Equipment"** as well as the enclosed operating instructions.
2. Check that handlebar and stem are neither bent nor broken and that they are level and upright. Make sure the stem is firmly fixed on the fork by trying to twist the handlebar relative to the front wheel (b). Briefly lean on the brake levers/shifters to make sure the handlebar is firmly fixed in the stem. Realign the components, if necessary, and gently tighten the bolts (c) to ensure a reliable clamping of the components.



You find the torque values on the components themselves, in the chapter **"Recommended Torque Values"** or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers. For more information see chapters **"Adjusting the Passoni Bicycle to the Rider"**, **"Head-set"** and the enclosed operating instructions.

3. Check whether the chain still runs on the chainrings and the sprockets. If your Passoni bicycle fell over to the chain side, verify the proper functioning of the gears. Ask somebody to lift the Passoni bicycle by the saddle and carefully shift through all the gears. Pay particular attention when shifting to the small gears and make sure the rear derailleur does not get too close to the spokes (d) as the chain climbs onto the larger sprockets.

If the rear derailleur or the drop-outs/derailleur hanger are bent, the rear derailleur may collide with the spokes or the chain may slip. This can result in damage to the rear derailleur, the rear wheel and the frame.

Check the function of the front derailleur, as a displaced front derailleur can throw off the chain, thus interrupting suddenly the drive of the Passoni bicycle. For more information see chapter **"Gears"** and the enclosed operating instructions.



4. Make sure the saddle is in alignment using the top tube or the bottom bracket shell as a reference (e). If necessary, open the clamping, realign the saddle and retighten the clamping. For more information see chapters **"Adjusting the Passoni Bicycle to the Rider"**, **"How to Use Quick-Releases and Thru Axles"** and the enclosed manuals of the component manufacturers.
5. Lift your Passoni bicycle up a few centimetres and let it bounce onto the ground (f). If this causes any sort of noise, search for loosened bolts or components. Tighten them slightly, if necessary.
6. Finally, take a good look at the whole Passoni bicycle to detect any deformations, colour changes or cracks.

Ride back very carefully by taking the shortest route possible, even if your Passoni bicycle went through this check without any problems. Do not accelerate or brake hard and do not ride your Passoni bicycle out of the saddle. If you are in doubt about the performance of your Passoni bicycle, have yourself picked up by car, instead of taking any risk.

Back home you need to check your Passoni bicycle thoroughly. The damaged parts must be replaced. Ask your Passoni dealer for help. For more information about carbon components see chapter **"Carbon – Important Information"**.

⚠ WARNING

Deformed components, especially components made of aluminium, can break without previous warning. They must not be repaired, i.e. straightened, as this will not reduce the imminent risk of breakage. This applies in particular to the fork, the handlebar, the stem, the cranks, the seat post and the pedals. When in doubt, it is always recommendable to have these components replaced, as your safety comes first. Ask your Passoni dealer for help.

If your Passoni bicycle is assembled with carbon components (g), it is imperative that you have your Passoni bicycle checked by your Passoni dealer after an accident or similar incident. Carbon is an extremely strong material which combines high resistance with low weight. It is, however, one of the inherent properties of carbon that possible overstress may compromise the inner carbon-fibre structure without showing any visible deformation as is the case with steel or aluminium. A damaged component (h) can fail without previous warning. Risk of accident!





HOW TO USE QUICK-RELEASES AND THRU AXLES

Quick-Releases

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

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

Quick-release mechanisms essentially consist of two operative elements:

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

⚠ WARNING

Never ride a Passoni bicycle without having checked first whether the wheels are securely fastened (c)! Risk of accident!



⚠ WARNING

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

⚠ CAUTION

Do not touch the possibly hot rotor directly after having stopped – you may burn your fingers! Always let the rotor cool down before opening the quick-release.

NOTICE

If your Passoni bicycle is equipped with quick-releases, be sure to lock it to an immovable object together with the wheels when you leave it outside.

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



How to Fasten Components Securely with a Quick-Release

Open the quick-release. The marking "Open" on the lever should become visible now (e).

Make sure the component to be fastened is in the accurate position. For more information see the chapters "Wheels and Tyre Equipment" and "Adjusting the Passoni Bicycle to the Rider".

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

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

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

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

Finally lift the wheel a few centimetres so that it no longer touches the ground and hit the tyre from above. A securely fastened wheel remains in the axle mounts of frame or fork and will not rattle.

WARNING

With an insufficiently closed quick-release the wheel can come loose. Imminent risk of accident!





Thru Axles

Passoni road racing and cyclocross bicycles are equipped with thru axles which provide the forks and the rear frames with a higher stiffness. Whenever your Passoni road racing or cyclocross bicycle is exposed to high loads, it remains directionally stable.

SAFETY INSTRUCTIONS

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

There is currently a wide range of thru-axle systems available. Some systems are tightened with quick-releases (a). Other systems may require special tools for assembly or disassembly. And others again have integrated levers.

The thru-axle system typically consists of two operative elements:

1. There is a nut on the right side often integrated into the frame.
2. On the left side there is either a clamping lever which can be folded, a rigid lever for tightening or a tool mount hole, e.g. for an Allen key, 5 mm.



Whatever system you use, make sure during the assembly that the thru axles, the drop-outs in forks and hubs are clean. Clean the components with an absorbent cloth, if necessary, by using water and a little detergent. In case you do not succeed in adjusting and fixing the wheel, as described, contact your Passoni dealer.

Wheel Mounting

Slide the wheel into the fork or rear frame, mount the brake disc/rotor at the same time into the brake calliper and guide the chain over the outmost sprocket of the cassette in the case of rear wheels. Make sure that in the area of the rear wheel the chain runs over the sprockets and over both pulleys of the rear derailleur (b).

Bring the wheel into the right position between the drop-outs and slide the axle with open quick-release lever from the left side through the drop-out and the hub (c).

When the axle thread engages with the nut thread, turn the axle clockwise (d). During the first rotations you should be able to rotate the thru axle nearly without resistance. Tighten the axle slightly.

Close the possibly available **quick-release lever** like a usual quick-release lever.



When you start closing the lever you should feel virtually no resistance with your hand, during the second half of the way the resistance you feel should increase significantly and towards the end even more strength is required to close the lever.

In case you do not succeed in closing the lever fully, re-open it and turn the axle a little anticlockwise. Try again to close the quick-release lever.

Use the palm of your hand to push it in all the way while your fingers pull on the rear frame (e), but not on a spoke or the brake disc/rotor.

In its end position the quick-release lever should be tight so that it can no longer be turned. Make sure the quick-release lever does not stand out to the rear or to the side. The best position is in parallel to a frame tube (f). If necessary, modify the nut to change the position.

If it fits perfectly turn the **quick-release lever** or the **tool** used clockwise to pre-tighten the thru-axle system. You will feel an increasing resistance at the lever. Only turn the axle until it is hand-tight. Observe the possibly prescribed torque values. In these cases, use a torque wrench and do not exceed the value.

Remove the tool and pack it into the saddle bag. You may need it during the ride.

If you have an RWS system slightly pull out the RWS quick-release lever (g) of the DT Swiss system to bring it into a favourable position. Turn the RWS quick-release lever then into the desired position and re-close it towards the hub. Make sure the RWS quick-release lever at the fork does not stand out to the front.

If you have rim brakes, close the quick-release lever (h) at the brake.





Wheel Removal

Open the **quick-release** and turn it anticlockwise (a). Loosen **all kinds** of thru axles anticlockwise.

After the thru-axle thread has fully loosened from the nut thread, you can pull out the thru axle. Keep frame and wheel in position, while doing so (b), to ensure that parts do not fall down or topple over.

After that you can remove the wheel.

⚠ WARNING

- Improperly mounted wheels may throw you off your bike or result in serious accidents! If you have the slightest doubt or in case of any inquiries, contact your Passoni dealer.
- To mount the axle only use the tools recommended by the manufacturer. Always use a torque wrench. Never exceed the maximum torque value indicated by the manufacturer! A too tight fixing of the axle can impair the axle or the frame.

⚠ WARNING

- After the wheel mounting do a brake test at standstill (c). You should reach the pressure point of the brake before the brake lever reaches the handlebar. In the case of hydraulic brakes pump them, if necessary, until you reach a precise pressure point.

SAFETY INSTRUCTIONS

- Manufacturers of thru-axle systems (d) deliver their products usually with detailed manuals. Read them carefully before removing the wheel or doing any maintenance work.
- More information are provided at
www.dtswiss.com – RWS System
<https://bike.shimano.com> – Shimano E-Thru
www.syntace.com – X-12
www.focus-bikes.com – R.A.T. (Rapid Axle Technology)





ADJUSTING THE PASSONI BICYCLE TO THE RIDER

Your body height and proportions are decisive for the frame size of your Passoni bicycle. In particular, make sure there is enough clearance between crotch and top tube to so you cannot hurt yourself when you have to get off quickly (e).

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

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

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

⚠ WARNING

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

All tasks described in the following require the know-how of a mechanic and appropriate tools. Make it a rule to tighten the bolted connections always with greatest attention. Increase the torque values bit by bit and check the fit of the component in between. Use a torque wrench and never exceed the maximum torque values! You find the torque values on the components themselves, in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.

SAFETY INSTRUCTIONS

If sitting on the saddle is painful, e.g. because it numbs your crotch, this may be due to the saddle. Your Passoni dealer has a very wide range of saddles available, and can offer advice on position (h).





Adjusting the Height of the Saddle

The correct saddle height for almost all bicycle types is the height which gives maximum pedalling comfort and efficiency. During pedalling the ball of your foot should be positioned above the centre of the pedal axle. With your feet in this position you should not be able to stretch your legs completely straight at the lowest point, otherwise your pedalling will become awkward (a).

Check the height of your saddle with flat-soled shoes. This is best done with suitable cycling shoes.

Sit on the saddle and put your heel on the pedal at its lowest point. Your leg should be fully stretched and your hips should remain horizontal.

To adjust the saddle height, release the seat post binder bolt (b) at the upper end of the seat tube. To do so you need suitable tools, e.g. an Allen key, with which you turn the bolt two to three turns anticlockwise. Now you can perform the vertical adjustment of the seat post.

Be sure not to pull out the seat post too far. The mark on the seat post (min. insert, minimum, maximum, stop or the like) should always remain within the seat tube (c). Always grease the surface of an aluminium or titanium seat post that is inserted into a seat tube made of aluminium, titanium or steel.

Do **not grease carbon seat posts** and/or **carbon seat tubes** in the clamping area! Use special **carbon assembly paste** instead.

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

Clamp the seat post tight again. Tighten the seat post binder bolt clockwise in half turns (d). You should not need much strength in your hands to clamp the seat post sufficiently tight. Otherwise the seat post does not match the frame.





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

Does the leg stretch test now produce the correct result? Check by moving your foot and pedal to the lowest point. When the ball of your foot is exactly above the pedal centre in the ideal pedalling position, your knee should be slightly bent. If it is, you have adjusted the saddle height correctly.

Check whether you can touch the ground safely while sitting on the saddle by stretching your feet to the floor (f). If you cannot, you should lower the saddle a little, at least to begin with.

⚠ WARNING

Never apply grease or oil into a seat tube of a frame made of carbon, unless an aluminium sleeve is inside the frame. If you mount a carbon seat post, do not put any grease on it, even if the frame is made of metal. Once greased carbon fibre components may never again be clamped reliably! Use special carbon assembly paste (g) instead.



⚠ WARNING

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

⚠ CAUTION

Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Do not exceed the maximum torque value indicated by the manufacturer! You find the torque values on the components themselves, in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.

SAFETY INSTRUCTIONS

If the seat post does not move easily inside the seat tube or if it cannot be tightened sufficiently, ask your Passoni dealer for advice. Do not use brute force!



Adjusting the Height of the Handlebar

In principle, Passoni road racing bicycles are sports bikes designed for speed. For this reason alone riding a Passoni road racing bicycle requires certain basic preconditions of the trunk, shoulder and neck muscles. The height of the handlebar compared to the saddle and the distance between saddle and handlebar determines how much your upper body will be inclined forward. Lowering the handlebar gives you a streamlined position and brings more weight to bear on the front wheel. However, it also entails an extremely forward leaning posture which is tiring and less comfortable, because it increases the strain on your wrists, arms, back, upper body and neck. As a general rule you should be able to adopt the three basic positions (a-c) on a Passoni road racing bicycle without any problems with your hands around the respective area on the handlebar.

In the case of your Passoni road racing bicycle an Aheadset®-stem allows the vertical adjustment of the handlebar. This requires special knowledge. In this regard, the descriptions hereafter may be incomplete. If you are in doubt or if you have any questions, contact your Passoni dealer.

⚠ WARNING

- *The stem is one of the load bearing parts of your Passoni bicycle. Changes to it can impair your safety. If you are in doubt or if you have any questions, contact your Passoni dealer!*
- *Stems are available in different lengths, shaft and binder tube diameters. A stem of inappropriate dimension can become a source of danger: Handlebars or stems can break, resulting in an accident. When replacing any parts, be sure to only use suitable original spare parts that bear the appropriate mark. Your Passoni dealer will be pleased to help you.*
- *The bolted connections of stem and handlebar have to be tightened to the prescribed torque values (d). If you disregard the prescribed values, the handlebar or stem may come loose or break. Use a torque wrench and do not exceed the maximum torque value indicated by the manufacturer! You find the torque values on the components themselves, in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.*
- *Make sure the handlebar/stem-combination is approved by the handlebar and/or stem manufacturer.*
- *Make sure the handlebar clamping area is free of sharp edges.*





Stems for Threadless Systems, the Aheadset®-System

(Aheadset® is a registered trade mark of Dia-Compe)

In the case of Passoni bicycles with Aheadset® the stem also serves to adjust the bearing preload. If you change the position of the stem you have to readjust the bearing play (see chapter **"Headset"**). The vertical setting range is determined by the intermediate rings, also referred to as spacers (e). In the case of flip-flop stem models the stem can be mounted the other way round to achieve a different handlebar height.

Unscrew the bolt at the top of the fork steerer tube which serves to adjust the bearing preload, remove the Ahead cap and release the bolts on either side of the stem by up to three turns (f). Remove stem and spacers from the fork steerer tube. In doing so keep hold of both frame and fork to prevent the fork from slipping off the head tube.

You can determine the handlebar height by the arrangement of stem and spacers. Slip the remaining spacers onto the fork steerer tube above the stem. Adjust the headset, as described in chapter **"Headset"**.

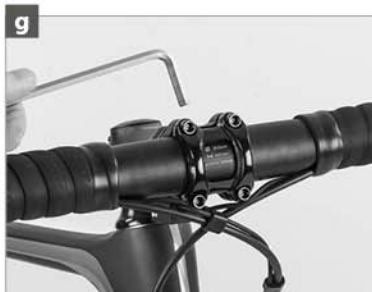
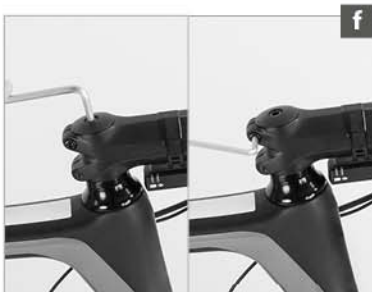
If you want to turn the stem around, you have to also release the bolts of the faceplate securing the handlebar (g).

If the stem has a faceplate, you can simply remove the handlebar. If it has no faceplate, you have to remove the handlebar equipment.

Mount the handlebar and, if necessary, the handlebar equipment, as described in chapter **"Adjusting the Tilt of Handlebar and Brake Lever/Shifter Units"** and/or in the manuals of the component manufacturers.

Check whether the handlebar is firmly seated in the stem by trying to rotate the handlebar downwards. Verify whether the handlebar/stem-combination can be turned relative to the fork. Do this by taking the front wheel between your knees and trying to turn the handlebar (h). If there is movement, carefully tighten the bolts a little more and check the proper fit again.

Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Do not exceed the maximum torque value indicated by the manufacturer! You find the torque values on the components themselves, in the chapter **"Recommended Torque Values"** or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.





⚠ WARNING

These routines require a certain amount of manual skill and (special) tools and are best left to your Passoni dealer. If you nevertheless want to try it by yourself, read the operating instructions of the stem manufacturer carefully before you start.

In the case of turned stems, the cables may be too short. Riding with too short cables is dangerous. Ask your Passoni dealer for help.

Stems are available in different lengths (a), shaft and binder tube diameters. A stem of inappropriate dimension can become a source of danger: Handlebars or stems can break, resulting in an accident. When replacing any parts, be sure to only use suitable original spare parts that bear the appropriate mark. Your Passoni dealer will be pleased to help you.

NOTICE

When removing spacers the fork steerer tube must be shortened. This procedure is irreversible. The shortening should be carried out by you Passoni dealer, but only after you have found your preferred position.

Adjusting the Tilt of Handlebar and Brake Lever/Shifter Units

The straight extensions below the drops should be parallel to the ground or point slightly downwards towards the rear (b). The ends of the brake lever/shifter units should meet an imaginary extension of the bottom line of the drops. Shifting the brake levers/shifters is a job best left to your Passoni dealer, as it involves retaping the handlebar afterwards.

To adjust the tilt of the handlebar, release the Allen bolt(s) on the underside or front side of the stem. Turn the handlebar to the desired position. Make sure the handlebar is accurately centred in the stem (c). Carefully retighten the bolt(s) in a cross pattern by using the torque wrench. Make sure the upper and lower clamping slots of the stem are parallel and identical in width. Tighten the bolt(s) evenly in a cross pattern by using a torque wrench and observe the recommended torque values (d).





Once clamped in the stem try rotating the handlebar and tighten the bolt a little more, if necessary. Use a torque wrench and do not exceed the maximum torque value indicated by the manufacturer! You find the torque values on the components themselves, in the chapter “**Recommended Torque Values**” or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.

⚠ WARNING

Note that the bolted connections of the stem (e), handlebar and brakes have to be tightened to the prescribed torque values. Use a torque wrench and do not exceed the maximum torque value indicated by the manufacturer! You find the torque values on the components themselves, in the chapter “Recommended Torque Values” or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.

Be aware that the distance you need to stop your Passoni bicycle increases, when you are riding with your hands on aerobars (f). The brake levers are not in all gripping positions within easy reach.



Adjusting the Brake Lever Reach

Riders with small hands should, in particular, ask their Passoni dealer to adjust the brake lever position where the brake starts to be effective to the length of the rider's fingers directly after purchase.

In the case of some models of various manufacturers brake lever/shifter spacers allow an adjustment to your needs (g). In the case of the other models the brake cables are clamped according to your wishes at the brake bodies. Adjusting bolts located in this area only serve to compensate brake pad wear. Have the lever reach adjusted and make sure the first phalanx of the index finger reaches around the brake lever/shifter (h). Check the proper adjustment and functioning of the brake system subsequently, as described in chapter “**Brake System**” and/or in the brake manufacturer's instructions.

⚠ WARNING

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

SAFETY INSTRUCTIONS

There are brake levers/shifters from Shimano that are suitable for small hands. If you have any problems with the brake lever reach, contact your Passoni dealer.



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

The position of the saddle is essential for your ride and for painless riding.

The distance between the handlebar grips and the saddle has an effect on the inclination of your upper body (a) and hence on your riding comfort and riding dynamics. This distance can be modified to a small extent by changing the position of the saddle rails in the seat post. However, moving the saddle rails in the seat post also influences pedalling. The rider pedals more or less from the back.

If the saddle is not in horizontal position, the rider cannot pedal in a relaxed manner. He must constantly support himself or hold on the handlebar to avoid sliding off the saddle.

Make sure that the seat of the saddle remains horizontal (b) as you retighten the bolt(s). The Passoni bicycle should stand on level ground while you adjust the saddle.

The adjustment range of the saddle is very small. With adjustable stems or stems at different lengths you can realise more important adjustments in length. In parts, you can realise a difference of more than 10 cm. In most of the cases you also have to adjust the Bowden and brake cables; a job best left to your Passoni dealer!

After the mounting check whether the re-tightened saddle tilts (c) or can be twisted (d) when you alternately apply load with your hands on the nose and the end of the saddle.

⚠ WARNING

There bolts of the saddle clamp are among the most sensitive ones on the entire Passoni bicycle. Therefore, make absolutely sure that you do not fall below the recommended minimum torque value and do not exceed the recommended maximum torque value and always use a torque wrench.

You find the torque values on the components themselves, in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.



**⚠ WARNING**

- Make sure the saddle rails are only clamped within the range of the marking (e). Otherwise the saddle rails can fail!
- If the saddle rails do not fit, do not try to force them into the clamp grooves of the seat post. The clamp device or the saddle rails could break. Use another saddle model instead or ask your Passoni dealer.
- Poorly tightened or loosening bolts can fail. Check the bolts once a month by using a torque wrench (f) according to the values indicated on the components themselves (g), in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers.

SAFETY INSTRUCTIONS

- The saddle and/or seat post manufacturers possibly supply their products with detailed instructions. Read them carefully before adjusting the position of your saddle. If you are not absolutely sure or have any questions, contact your Passoni dealer.





Patent Clamp with one or two Parallel Bolts

In the case of patent seat posts one (a) or two (b) central Allen bolts hold the head that fixes both the tilt and the horizontal position of the saddle. Most seat posts have two bolts side by side.

To adjust the saddle position undo the bolt (c) or the bolts (d) at the seat post head. To do so loosen both bolt(s) two to three turns at the most, otherwise there is a risk that the entire mechanism will fall apart. Move the saddle horizontally to adjust the fore-to-aft position. Often you have to give the saddle a light tap to move it. Observe the marking on the saddle rails and do not go beyond (e+f).

After you have found the desired position, check that both halves of the clamp mechanism fit snugly around the saddle rails.

Make sure that the saddle or the clamp mechanism engages in one of the serrations on the seat post head while you start to tighten. Tighten the bolt(s) step by step.

If everything fits turn the bolt (g) or the bolts (h) by using a torque wrench according to the instructions of the manufacturer.

SAFETY INSTRUCTIONS

Also read the general part at the beginning of the chapter.





Yoke Clamp with two Bolts in Line

In the case of seat posts with yoke clamp (i) two vertical Allen bolts hold the head that fixes both the tilt as well as the horizontal position of the saddle. One bolt is behind the seat post, another one in front of it or in the centre (k) of the seat post.

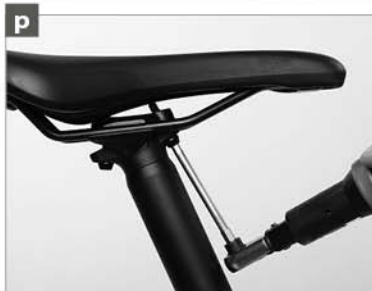
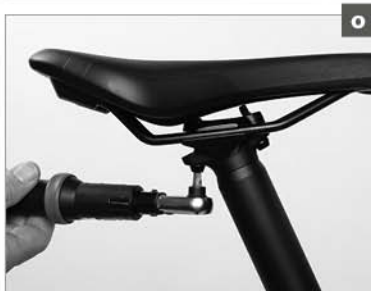
To adjust the saddle position undo both bolts two to three turns at the most (l+m), otherwise there is a risk that the entire mechanism will fall apart. Move the saddle horizontally to adjust the fore-to-aft position. Often you have to give the saddle a light tap to move it. Observe the marking on the saddle rails (n) and do not go beyond. After you have found the desired position, check that both halves of the clamp mechanism fit snugly around the saddle rails.

Tighten both bolts evenly so that the saddle remains at the same angle. If you wish to lower the saddle nose a little, turn the front bolt clockwise. If necessary, you even have to loosen the rear bolt a little. To lower the rear part of the saddle, the rear bolt has to be turned clockwise and the front bolt to be loosened, if necessary.

If everything fits turn the bolts by using a torque wrench according to the instructions of the manufacturers (o+p).

SAFETY INSTRUCTIONS

Also read the general part at the beginning of the chapter.





Single or Two Bolt System (Horizontal)

In the case of seat posts with horizontal clamp one (a) or two (b) Allen bolts hold the head that fixes both the tilt and the horizontal position of the saddle.

To adjust the saddle position undo the transverse fixing bolt (c) or bolts (d) one to two turns at the most, otherwise there is a risk that the entire mechanism will fall apart.

Move the saddle horizontally to adjust the fore-to-aft position. Often you have to give the saddle a light tap to move it. Observe the marking (e+f) on the saddle rails and do not go beyond. Bring the saddle now in the desired position. Tighten the bolt(s) step by step.

If it is necessary to dismantle the clamping device, unscrew the fixing bolt(s) completely. This will release the outer clamp pieces. The inner clamp pieces may remain in their position due to a rubber fixing. Mount the saddle rails into the inner clamp pieces, add the outer pieces and re-insert the fixing bolt(s).





If the saddle fits slide it into the desired position, as above described. Check that the clamping device is still positioned exactly on the seat post head and that the saddle rails fit snugly in both halves of the clamping mechanism. Tighten the bolt(s) step by step.

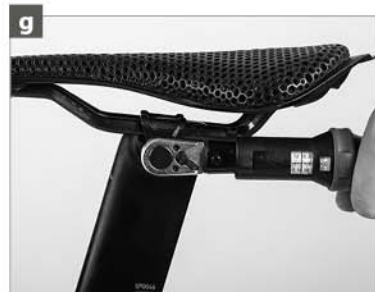
If everything fits turn the bolt (g) or the bolts (h+i) by using a torque wrench according to the instructions of the manufacturer.

⚠ WARNING

For most of the sports saddles the seat post is usually designed for a saddle rail diameter of 7 mm. Replacement outer clamps for ovalized saddle rails sized 8 mm x 8.5 mm (W x H) as well as for carbon saddle rails sized larger than 8 x 8.5 mm are also available. If you are not sure which type of saddle rail you have or if you need further information, contact your Passoni dealer.

SAFETY INSTRUCTIONS

Also read the general part at the beginning of the chapter.







CARBON – IMPORTANT INFORMATION

Special characteristics of carbon components made of carbon-fibre-reinforced plastics (e+f), also referred to as carbon or CRP, need to be taken into account.

Carbon is an extremely strong material which allows producing components of high strength and low weight. When used in a typical and reasonable riding scenario in accordance with its respective category of use, the resistance it offers equals or even exceeds that of aluminium or steel. However, it should be noted that carbon, unlike metals, does not show visible deformation after undue stress, even as its internal fibre structure may already be damaged.

In further use, a carbon component that was damaged previously in an overload event may fail just like a component made of metal would, potentially resulting in an accident with unforeseeable consequences. If your carbon component was exposed to a high load, we strongly recommend that you take the component, or ideally even your complete Passoni bicycle, to your Passoni dealer for inspection. They will check the damaged Passoni bicycle and replace defective components as necessary.

For safety reasons, damaged components made of carbon must never be repaired. They must be replaced at once! Prevent further use by

taking appropriate measures, i.e. saw the component into pieces. Damaged Passoni bicycle frames only may be repaired.

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

Carbon components have, like all lightweight bike components, a limited service life. For this reason, change stem and handlebar at regular intervals (e.g. every 3 years), even if they have not experienced any undue stress, such as an accident.

When you intend to transport your Passoni bicycle or its carbon frame and components in the boot or on the back seat of your car (g), be sure to protect the Passoni bicycle or the carbon frame and components. Blankets, foam tubes or the like are a suitable padding to protect the sensitive material from damage.

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





⚠ WARNING

If any notches, tears, deformations, dents or discolorations etc. are visible on your carbon component, or if it makes creaking or cracking noises, do not use the Passoni bicycle until the component has been replaced. If the component was subjected to a high load, an accident or heavy impact, have it replaced or examined by your Passoni dealer before using it again.

Only combine carbon handlebars with aerodynamic extensions, if the handlebars are approved for these extensions. If you are in doubt or if you have any questions, contact your Passoni dealer.

Make sure all carbon clamping areas are absolutely free of grease and other lubricants. Grease will penetrate the surface of the carbon material, thereby reducing the coefficient of friction. This will no longer provide reliable clamping within the prescribed torque values. Once greased carbon fibre components may never again be clamped reliably! Use a special carbon assembly paste (a) instead as offered by various manufacturers.

⚠ WARNING

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

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

Do not sit on the top tube of your carbon frame, when you take a rest or stop your bike for example at traffic lights. The frame may sustain damage.

NOTICE

Protect the exposed areas of your carbon frame (e.g. the underside of the down tube) against rubbing cables or stone chips with special pads (d) your Passoni dealer keeps for sale.





BRAKE SYSTEM

General Information on Brakes

Brakes (e+f) are used for adjusting one's speed to the surrounding terrain and traffic. In an emergency situation, the brakes must bring the Passoni bicycle to a halt as quickly as possible.

In the event of such emergency braking, the rider's weight shifts forward abruptly, thus reducing the load on the rear wheel. The rate of deceleration is primarily limited by the danger of the rear wheel losing contact with the ground resulting in an overturning of the Passoni bicycle (g) and secondly by the tyres' grip on the road. This problem becomes particularly acute when riding downhill. Therefore, in case of an emergency braking situation you must try to put your weight back and down as far as possible.

Actuate both brakes simultaneously (h) and bear in mind that, due to the weight transfer, the front brakes can generate a far better braking effect on a surface with good grip. Wet weather reduces the braking power. Actuate the brakes carefully when riding on wet or slippery ground, as the tyres can easily slip away. Therefore, reduce your speed when riding in such conditions.

There are various types of brake systems that may be subject to the following problems:

Prolonged braking or permanent dragging of brake pads can lead to overheating of the rims in the case of **rim brakes**. This can damage the inner tube or make the tyre slip on the rim causing a sudden loss of air which could lead to a serious accident in the process.





Rims also wear down over time. They are even likely to burst. Therefore, they have to be replaced from time to time.







In the case of **disc brakes** (a+b) prolonged braking or permanent dragging of brake pads can also lead to an overheating of the brake system. This can result in a reduction of the braking force or brake failure. **Risk of accident!**

WARNING

-  The assignment of brake lever to brake calliper (c) can vary, e.g. left lever acts on front brake. Ask your Passoni dealer to change the brakes as you want them.
-  Make yourself carefully familiar with your brakes. Practise emergency stops in a place clear of traffic until you are comfortable controlling your Passoni bicycle. This can save you from having accidents.
-  Wet weather reduces the braking effect and the road grip of the tyres. Be aware of longer stopping distances when riding in the rain, reduce your speed and actuate the brakes carefully.
-  Ensure that braking surfaces and brake pads are absolutely free of wax, grease and oil. Risk of accident!

SAFETY INSTRUCTIONS

-  When replacing any parts, be sure to only use suitable original spare parts that bear the appropriate mark (d). Your Passoni dealer will be pleased to help you.
-  Be sure to obtain the relevant operating instructions from the brake manufacturer so that you can adjust the brake yourself if necessary. After each adjustment, practise braking in a place free of traffic to get used to it.





Rim Brakes

Racing/Side-Pull Brakes

Operation and Wear

Actuating the levers on the handlebar (e) and cables (f) causes a brake pad (g) to be pressed against a brake surface. The friction produced slows down the wheel. If water, dirt or oil come into contact with one of the braking surfaces, this changes the coefficient of friction and deceleration is reduced. This is why brakes respond with a slight delay and less powerfully in wet weather.

In order to maintain their effectiveness, brakes need to be checked and readjusted regularly.

The friction generated by braking causes wear to the brake pads as well as to the rims. Frequent rides in the rain and dirt and over hilly terrain can accelerate wear on both braking surfaces. Some rims are provided with wear indicators, e.g. grooves or circular indentations. If the rim is worn down to the point where the grooves or indentations are no longer visible, they need to be replaced. Once the abrasion of the rim has reached a certain critical point, the rim may break under the tyre pressure. This can make the wheel jam or the inner tube burst, both of which can cause an accident!

Functional Check

Check whether the brake pads are accurately aligned with the rims and still sufficiently thick. You can judge the wear of the brake pads by the appearance of grooves. If the pads are worn down to the bottom of the grooves (h), it is time to replace them. Be sure to observe the according instructions of the respective manufacturers.

See your Passoni dealer and ask them to examine the remaining thickness of the rims when you have worn through your second set of brake pads at the latest. Your Passoni dealer has special measuring devices for determining the remaining thickness of the rims.

Both brake arms must hit the rim simultaneously, when you actuate the brake lever. They must keep off the tyre.

The brake lever must always remain clear of the handlebar. You should not even be able to pull them all the way to the handlebar in the event of an emergency stop. If this is the case, however, observe the following chapter **"Synchronising and Readjusting"**.

Only a successful passing of all these points will ensure a correctly adjusted brake.





⚠ WARNING

- **Brake cables that are damaged (a), e.g. frayed, must be replaced immediately, as they can otherwise fail in a critical moment, possibly causing a fall!**
- **Adjusting the position of the brake pads relative to the rims requires a considerable degree of skill. Replacing and adjusting the brake pads is a job best left to your Passoni dealer.**
- **Have your rims regularly inspected and measured by the Passoni dealer (b).**

Synchronising and Readjusting Dual Pivot Brakes

In the case of dual pivot brakes turn the screw located on the side (c) or above and a little on the side until the gap between brake pad and rim is equal on either side.

Also check whether the bolt by which the brake is screwed to the frame is still tightened to the proper torque, i.e. according to the torque value given in chapter “Recommended Torque Values”.

The position of the brake lever where the brake starts to act, also referred to as pressure point, can be adjusted to the size of the hand as well as to individual convenience by readjusting the brake cable. Make absolutely sure you cannot pull the brake lever all the way to the handlebar grip. With an unapplied brake the brake pads should not be too close to the rim sides, otherwise they could drag along the rim during riding. Before making this adjustment, observe the notes in chapter “Adjusting the Brake Lever Reach”.

With ongoing brake pad wear, the pressure point at the brake lever moves towards the handlebar. Check the free travel at regular intervals; it should not be longer than a quarter of the whole travel. For readjustment turn the knurled nut or bolt (d) through which the cable runs into the brake body until the lever has the desired travel. Test the brakes subsequently in a place free of traffic.

⚠ WARNING

- **Always test the brakes' function at standstill after adjusting them, making sure the brake pads engage fully with the rim without touching the tyre when you pull them hard. Make sure you cannot pull the lever all the way to the handlebar.**





Cross/Cantilever Brakes

Cyclocross bicycles have cantilever brakes (e) that provide wider clearance for muddy tyres and that are equipped with additional brake levers also allowing braking from the upper part of the handlebar (f).

Operation and Wear

Cantilever brake designs have two brake arms mounted separately on either side of the rim. When actuating the brake lever, both arms are pressed together by the cable, the pads touching the rim. The friction produced slows down the wheel. If water, dirt or oil come into contact with one of the braking surfaces, this changes the coefficient of friction and deceleration is reduced. This is why brakes respond with a slight delay and less powerfully in wet weather. In order to maintain their effectiveness, brakes need to be checked and readjusted regularly (g).

The friction generated by braking causes wear to the brake pads as well as to the rims. Frequent rides in the rain and dirt and over hilly terrain can accelerate wear on both braking surfaces. Some rims are provided with wear indicators, e.g. grooves or circular indentations. If the rim is worn down to the point where the grooves or indentations are no longer visible, they need to be replaced. Once the abrasion of the rim has reached a certain critical point, the rim may break under the tyre pressure. This can make the wheel jam or the inner tube burst, both of which can cause an accident!

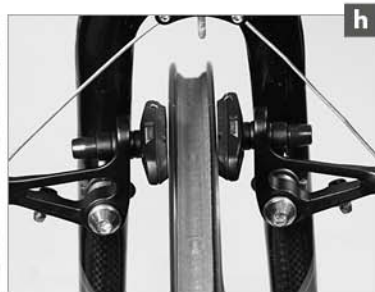
Functional Check

Check whether the brake pads are accurately aligned with the rims and still sufficiently thick. You can judge the wear of the brake pads by the appearance of grooves. If the pads are worn down to the bottom of the grooves, it is time to replace them. Be sure to observe the accompanying instructions of the respective manufacturers.

See your Passoni dealer and ask them to examine the remaining thickness of the rims when you have worn through your second set of brake pads at the latest. Your Passoni dealer has special measuring devices for determining the remaining thickness of the rims. The brake pads must hit the rim simultaneously, first touching it with the front portion of their surface. At the moment of first contact the rear part of the pads should be a millimetre away from the braking surface. Viewed from the top the brake pads form a "V" with the trough pointing to the front (h). This setting is to prevent the brake pads from screeching when applied.

The brake lever must always remain clear of the handlebar. You should not even be able to pull them all the way to the handlebar in the event of an emergency stop. If this is the case, however, observe the following chapter **"Synchronising and Readjusting"**.

Only a successful passing of all these points will ensure a correctly adjusted brake.





⚠ WARNING

- **Brake cables which are damaged, e.g. frayed, must be replaced immediately, as they can otherwise fail in a critical moment, possibly causing a fall!**
- **Adjusting the position of the brake pads relative to the rims requires a considerable degree of skill. Replacing and adjusting the brake pads is a job best left to your Passoni dealer.**
- **Have your rims regularly checked and measured by the Passoni dealer.**

Synchronising and Readjusting

Almost all brake designs have a bolt located next to one or both brake callipers for adjusting the spring preload (a). Turn the bolt slowly and watch how the gap changes between brake pads and rim.

Adjust the spring in a way that with an unapplied brake the gaps are equal on either side and the brake pads touch the rim simultaneously during braking.

The position of the brake lever where the brake starts to act, also referred to as pressure point, can be adjusted to the size of the hand as well as to individual convenience by readjusting the brake cable.

Make absolutely sure you cannot pull the brake lever all the way to the handlebar grip. With an unapplied brake the brake pads should not be too close to the rim sides, otherwise they could drag along the rim during riding. Before making this adjustment, observe the notes in chapter “Adjusting the Brake Lever Reach”.

With ongoing brake pad wear, the pressure point at the brake lever moves towards the handlebar. Check the free travel at regular intervals; it should not be longer than a quarter of the whole travel. If necessary, readjust at the additional brake levers on the handlebar (b). Turn the adjusting bolt anticlockwise.

If no additional brake levers are installed, readjust at the cable stop at the fork or the frame. Release the lock nut and undo the slotted adjusting screw anticlockwise (c). If the free travel complies with your wishes, hold the adjusting screw tight and turn the lock nut against the cable stop until you feel a resistance.

⚠ WARNING

- **Always test the brakes' function when standing after adjusting them, making sure the brake pads engage fully with the rim when you pull them hard (d). Make sure you cannot pull the lever all the way to the handlebar.**





Disc Brakes on Cyclocross and Passoni Road Racing Bicycles

Operation and Wear

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

Disc brakes (e+f) consist of the brake calliper (1), the brake disc/rotor (2), the brake hose or cable (3) as well as the brake grip/lever (g). Actuating the brake lever compresses the hydraulic pistons through hydraulic pressure or mechanically, pushing the brake pads against the rotor.

The friction generated by braking causes wear to the brake pads as well as to the rotors. Frequent rides in the rain and dirt and over hilly terrain can accelerate wear of the rotors. Depending on the manufacturer and the model there are different ways of checking the brake pads and rotors for their wear limits.

⚠ WARNING

- **New brake pads need a "break-in" period before they reach their optimal braking performance. For this purpose, accelerate the Passoni bicycle 30 to 50 times to around 30 km/h (18 mph) and bring it to a halt each time. This procedure is finished, when the force required at the lever for braking has stopped decreasing.**
- **Dirty brake pads and brake discs/rotors can lead to drastically reduced braking force. Therefore, make sure the brake remains free of oil and other fluids, especially when you clean your Passoni bicycle or grease the chain. Dirty brake pads can under no circumstances be cleaned, they must be replaced! Rotors can be cleaned with special brake cleaners and with a clean absorbing cloth or with warm water and mild soap (h).**

⚠ CAUTION

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



**⚠ WARNING**

Unusual noises (scratching, chafing etc.) during braking and/or a noticeable change of the braking force (stronger or weaker) are indications that the brake pads (a) are soiled or worn down. Check the brake pads and replace them, if necessary. Otherwise you risk further damage, e.g. to the rotor (b), or even an accident due to brake failure! If you are in doubt, contact your Passoni dealer.

SAFETY INSTRUCTIONS

When replacing any parts, be sure to only use parts that bear the appropriate mark and, to be on the safe side, original spare parts compatible with the brake.

Hydraulic Disc Brakes**Functional Check**

Regularly check the hoses and connections for leaks while pulling on the lever (c). In case of a brake liquid leakage, contact your Passoni dealer immediately. A leak in the brake lines can render the brake ineffective. **Risk of accident!**

Wear and Maintenance

Check the pads for wear at regular intervals (d) by following the service instructions of the respective manufacturer.

Measure the thickness of the brake pad on the mount by using a caliper gauge (e). The brake pad must all over be 0.5 mm thick at least. Measure the pad and the mount together as well as the mount alone; the difference is the thickness of the pad. Re-insert the cleaned brake pads into the cleaned calliper.





⚠ WARNING

- Loose connections and leaky brake hoses drastically impair braking effect. Risk of accident! If you find leaks in the brake system or buckled hoses, contact your Passoni dealer immediately.
- A heavily clogged brake can lead to squeaking noises during braking.
- If your Passoni bicycle has hydraulic disc brakes, do not place it upside down (f) for repair purposes, i.e. handlebar and saddle on the ground. This would render the brake ineffective.
- Pull the brake levers and secure them with a strong elastic band (g), when transporting a Passoni bicycle with hydraulic disc brakes upside down. This will prevent air from entering the system.

⚠ CAUTION

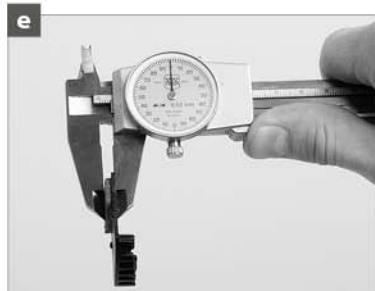
- Do not open the brake hoses. Brake fluid that can be very unhealthy and damaging to the paint could leak out.

NOTICE

- With the wheels dismantled, do not actuate the brake levers. This would cause the brake pads to be pushed together, making it difficult to remount the wheel. Mount the enclosed transport locks after dismantling the wheels (h).

SAFETY INSTRUCTIONS

- If your brake system works with DOT brake fluid, the latter needs to be replaced regularly according to the intervals prescribed by the manufacturer.
- The manufacturers of hydraulic disc brakes usually deliver their products with detailed instructions. Be sure to read them carefully before removing a wheel or doing any maintenance work.





Mechanical Disc Brakes

Functional Check

The more brake pads of mechanical disc brakes wear down, the longer is the brake lever travel. Regularly check whether you get a positive braking response before the lever touches the handlebar. Make sure the brake cables are in sound condition!

⚠ WARNING

Damaged cables (a) should be replaced immediately, as they can snap. Risk of accident!

Wear and Maintenance

To a certain extent, wear of the brake pads can be compensated directly at the brake calliper. Unscrew the knurled lock nut on the bolt through which the cable enters the brake calliper (b) and then unscrew the bolt until the lever has the desired travel. Retighten the lock nut by taking care that the slot of the bolt does not face upward or forward, as this would permit an unnecessarily high amount of water or dirt to enter.

Now check the functioning of the brake and make sure the brake pads do not drag on the brake disc/rotor (c) when you release the brake lever and let the wheel spin.

Repeated readjustment at the brake lever makes the arm on the brake calliper change its position. This can reduce braking power and result in a complete brake failure in an extreme case. **Risk of accident!**

Some models offer further ways of adjusting the brakes directly at the brake calliper, though this requires a certain amount of skill. In any case, be sure to read the original instructions of the brake manufacturer before adjusting the brakes. If you are in doubt or if you have any questions, contact your Passoni dealer.

⚠ WARNING

Repeated readjustment at the brake lever or at the cable on the brake calliper can drastically reduce the maximum braking effect.

SAFETY INSTRUCTIONS

Some systems must be readjusted directly at the brake calliper to compensate wear (d). For more information read the enclosed manual of the brake manufacturer.

The manufacturers of mechanical disc brakes usually deliver their products with detailed instructions. Be sure to read them carefully before removing a wheel or doing any maintenance work.





GEARS

Deraillleur Gears

The gears (e) of your Passoni bicycle serve to adjust the gear ratio to the terrain you are riding on and the desired speed.

A low gear (where in the case of deraillleur gears the chain runs on the small chainring and a large sprocket) allows you to climb steep hills with moderate pedalling force. You must, however, pedal at a faster pace. High gears (large chainring, small sprocket) are for riding downhill. Every turn of the pedals takes you many metres forward at correspondingly high speed.

On level ground your pedalling speed, also referred to as cadence, should be higher than 60 strokes a minute. Racing cyclists pedal at a rate between 90 and 110 strokes a minute on level ground. When climbing uphill, your cadence will naturally fall off somewhat. Your pedalling should, however, always continue to flow.



Operation and Control

Deraillleur gears always work according to the following principle:

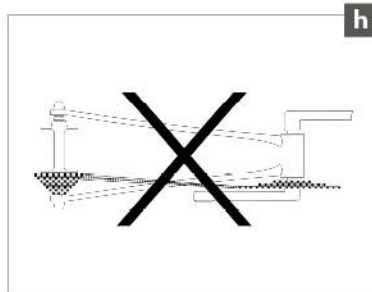
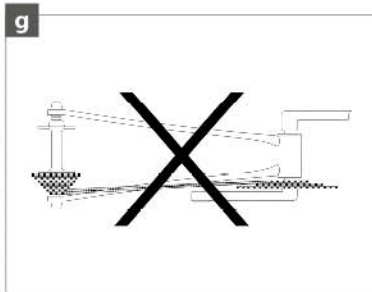
Large front chainring – high/heavy gear – bigger gear ratio
 Small front chainring – low/easy gear – smaller gear ratio
 Large rear sprocket – low/easy gear – smaller gear ratio
 Small rear sprocket – high/heavy gear – bigger gear ratio

Normally, the shifters are mounted as follows:

Shift lever right – rear sprockets
 Shift lever left – front chainrings

There are meanwhile various gear systems with one, two or three front chainrings.

Modern Passoni road racing bicycles can have up to 33 gears (f). As there are, however, overlapping ranges, actually 15 to 18 gears are usable. It is not advisable to use gears with the chain running at an extreme angle, as this reduces power transmission efficiency and hastens wear of the chain. An unfavourable run of the chain is when the smallest chainring is used with one of the two or three outermost (smallest) sprockets (g) or when the largest chainring is used with one of the inmost (largest) sprockets (h).





The bottom bracket (a) is the interface between cranks and frame. There are different designs, in some cases the bearing shaft is part of the bottom bracket, in some other cases it is integrated into the right crank. Sealed bottom brackets are maintenance free and delivered without play ex works. The bottom bracket in the frame and the cranks on the shaft must be checked for play at regular intervals.

Also check at regular intervals whether the cranks are firmly attached to the bearing shaft or whether there is play. Grab the crank and try to jiggle it forcefully. It must be absolutely free of play. If you notice any play, contact your Passoni dealer immediately.

Depending on the gear system, gear shifting is initiated by actuating a brake lever/shifter unit or by a shifter in the case of flatbars (b). Continue pedalling during gear shifting, however, at reduced pedalling force.

Further below you find the most common brake levers/shifter units and their operation. It is, however, also possible that your new Passoni bicycle has a gear system that is not listed below.

In the case of **Campagnolo Ergopower** (c) you shift with the shifter located behind the brake lever to the larger chainrings or sprockets by moving it with the index or middle finger inwards.

By pressing with the thumb on the shifter inside the unit the chain moves on the smaller chainrings or sprockets. By pressing the shifter once you can shift up to two chainrings or three sprockets at a time.

In the case of **Shimano Dual Control** (d) brake lever/shifter units you shift to the larger chainrings or sprockets by moving the entire brake lever inwards. You can shift up to two chainrings or three sprockets per gear shift stroke. By moving inward only the small lever located behind the brake lever the chain moves on the smaller chainrings or sprockets. You can shift only one chainring/sprocket per stroke.

The **Di2** is the electronic version of the high-quality drive groups from **Shimano**. Instead of cables the signal is transmitted by wires. The rear and the front derailleurs are moved by small electrical motors. The power supply is provided by a rechargeable battery that is mounted to the frame.





The shifters are positioned and actuated like the mechanical gears: With a Di2 you only have to press control buttons, instead of pressing the entire brake lever or the lever positioned behind inward as is the case with usual dual control shifters from Shimano.

Shift to the larger sprockets by pressing the long control button on the side of the brake lever. When you press the triangular control button that is behind the brake lever (e) the chain moves onto the smaller cogwheels.

For more information on adjustment and maintenance of the Di2 visit the website www.shimano.com

SRAM Force brake levers/shifters (f) have only one shifter that is located behind the brake lever. With one complete sweep of the shifter, the rear derailleur shifts in a higher gear by one to two chainrings or three sprockets. With a short sweep the chain changes to the next smaller chainring or sprocket.

In the case of the **Shimano**, **SRAM** and **Campagnolo bar end shifters** for triathlon and time trial use (g) you must press down the shifter to shift to the smaller sprockets, i.e. to a high gear ratio, and to the smaller chainrings, i.e. to a lower gear ratio. By pulling the shifter upwards you can shift to the larger chainrings or sprockets.

The **shift levers for flat bars** are located underneath the handlebar (h). The right-hand, big shifter is actuated with the thumb. The chain moves on larger sprockets, i.e. to lower gears. The smaller shifter is actuated either with the index finger or with the thumb and shifts into the other direction. By actuating the big shifter with the thumb on the left side you shift to the larger chainring, i.e. to a higher gear ratio.





⚠ WARNING

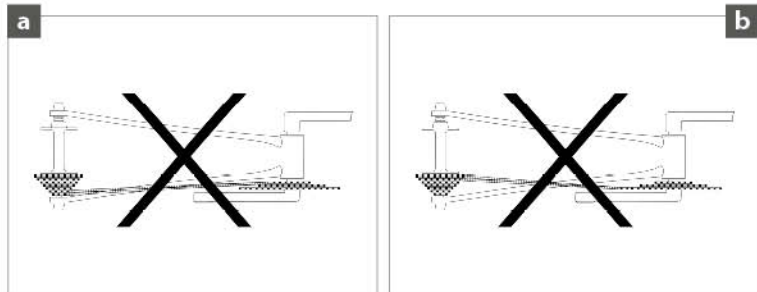
- Always wear straight-cut trousers or use trouser clips or the like to make sure your trousers do not get caught in the chain or the chainrings. Risk of accident!
- Shifting gears under load, i.e. while pedalling hard, can make the chain slip. At the front derailleur the chain may even slip off the chainrings and result in an accident! At least the service life of the chain will be shortened considerably.
- Practise switching gears in a place free of traffic until you are familiar with the functioning of the brake lever/shifter units or the shifters of your Passoni bicycle.

NOTICE

- If there is play between bearing shaft and cranks, they can sustain damage. Risk of breakage!
- Avoid gears with the chain running at an extreme angle (a+b), as this will increase wear!

SAFETY INSTRUCTIONS

- The gear manufacturers usually deliver their products with detailed manuals. Read them thoroughly. Make yourself familiar with your new gears, if necessary, in an area free of traffic. If you are in doubt or if you have any questions, contact your Passoni dealer.



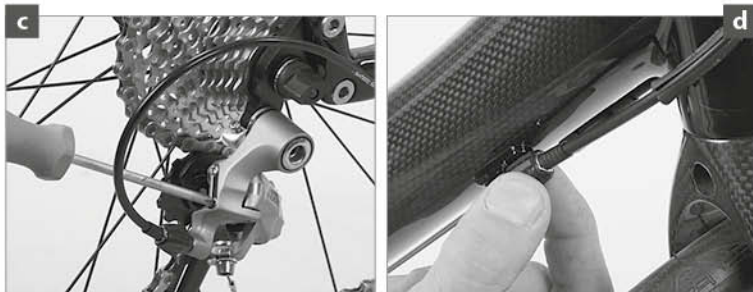
Checking and Readjusting

The derailleur gears of your Passoni bicycle were carefully adjusted by your Passoni dealer before delivery. However, Bowden cables may stretch a little on the first kilometres/miles, making gear shifting imprecise and the chain rattle.

Adjusting the front and rear derailleur (c) accurately is a job for an experienced mechanic. If you want to try it by yourself, observe the gear manufacturer's operating instructions. If you have any problems with the gears, contact your Passoni dealer.

⚠ WARNING

- For your own safety, bring your category 2 "Sports" Passoni bicycle to your Passoni dealer for its first inspection after 100 to 300 kilometres (60 to 180 miles), 4 to 12 hours of initial use or four to six weeks, at the very latest, however, after three months.
- For your own safety, bring your category 1 (ASTM) / 6 (EN) Passoni bicycle to your Passoni dealer for its first inspection after 300 to 450 kilometres (180 to 270 miles), 10 to 15 hours of initial use or four to six weeks, at the very latest, however, after three months.





Adjusting the Rear Derailleur

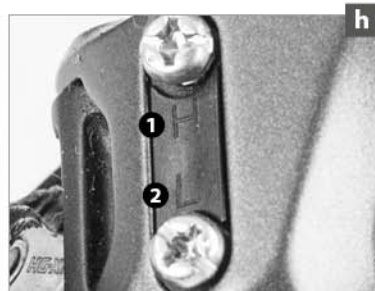
Increase the tension of the Bowden cable by turning the adjustable downtube cable stop (d) or the adjusting bolt through which it runs into the rear derailleur (e). To do so, shift to the smallest sprocket and turn the bolts anticlockwise in half turns until the cable is slightly tensioned.

After tensioning the Bowden cable check whether the chain immediately climbs onto the next larger sprocket. To find out you either have to turn the cranks by hand or ride the Passoni bicycle and shift through the gears.

If the chain easily climbs onto the next larger sprocket, check whether it just as easily shifts to the small sprockets. If it does not, release the respective adjusting bolt a little. You may need several tries.

⚠ WARNING

Adjusting the front and rear derailleur accurately is a job for an experienced mechanic. Observe the instructions of the gear manufacturer. If you have any problems with the gears, contact your Passoni dealer.



SAFETY INSTRUCTIONS

Ask a helper to lift the rear wheel. By turning the cranks and shifting through you can easily check the function.

Adjusting the Limit Stops

The rear derailleur is equipped with limit screws (g) which limit the movement range of the derailleur, thus preventing the derailleur and chain from colliding with the spokes or the chain from dropping off the smallest sprocket. The limit screws are adjusted by your Passoni dealer. They do not alter their position during normal use.

If your Passoni road racing bicycle fell over to the chain side or if you mount another wheel, it is imperative that you check the limit stops.

Shift with the right shift lever to the highest gear. The inner cable is relaxed and the chain running on the smallest sprocket (f). Look from the rear of the Passoni bicycle at the cassette and check whether the teeth of the smallest sprocket and the teeth of the top guide pulley are all in a perfectly vertical line. If necessary, correct the position by means of the limit screws (g). The limit screws on rear derailleurs are often marked "H" (1) for high gear and "L" (2) for low gear (h). High gear means that the chain is running on the smallest sprocket.



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

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

Shift to the largest (inmost) sprocket (b) and check whether the teeth of the sprocket and the teeth of the guide pulley are all in a perfectly vertical line. Turn the limit screw marked "L" clockwise until the rear derailleur stops moving towards the spokes and can neither be moved by actuating the shift lever nor by pushing it with your hand (c).

This adjustment prevents the chain from getting stuck between sprocket and spokes or the rear derailleur or the derailleur cage from touching the spokes, which could result in damage to the spokes, the rear derailleur and the frame. In the worst case, it could be impossible to continue cycling.

⚠ WARNING

Do a test ride in a place free of traffic, after adjusting the gears of your Passoni bicycle.

If your Passoni bicycle has tipped over or the rear derailleur received a blow (d), the rear derailleur or its mount, also referred to as derailleur hanger, might be bent. It is advisable to check its range of movement and readjust the limit screws, if necessary, after such an incident or after mounting a new rear wheel on your bike.

NOTICE

Poorly adjusted gears are one of the main causes for irreparable damage to frame, rear derailleur and wheels.

SAFETY INSTRUCTIONS

Have your Passoni bicycle checked by your Passoni dealer at regular intervals.





Adjusting the Front Derailleur

The range within which the (e) front derailleur keeps the chain on the chainring without itself touching the chain is very small. The swivelling range is reduced in the same way as with the rear derailleur, i.e. by turning the limit screws marked "H" and "L" (f).

First, shift the gear to the large chainring and the smallest sprocket. Turn in the outer limit screw ("H") exactly to the point where the chain does not touch the front derailleur, even under heavy load. And only at the point where the chain does not move any more from the middle to the large chainring, the limit screw can be released a little.

Continue by shifting to the smallest chainring (front) and the biggest sprocket (rear) (g). Turn in the inner limit screw ("L") exactly to the point where the chain does not touch the front derailleur. And only at the point where the chain does not move any more from the middle to the small chainring, the limit screw can be released a little.

This adjustment prevents the chain from falling off, which would suddenly interrupt the drive involving the risk of an accident. In cases of doubt this adjustment is a job best left to your Passoni dealer.

As with the rear derailleur, the cable of the front derailleur is subject to lengthening which leads to a reduced precision in gear changing. If necessary, shift to the small chainring and increase the tension of the Bowden cable by turning the adjusting bolt through which it passes at the entry to the downtube cable stop.

⚠ WARNING

- ***Always check after an accident whether the guide plates of the front derailleur are still parallel to the chainrings (h). Make sure they do not touch the large chainring which would block the drive. Risk of accident!***
- ***Adjusting the front derailleur is a very delicate job. Improper adjustment can cause the chain to jump off, thus interrupting the driving force. This can cause a fall!***
- ***Do a test ride in a place free of traffic, after adjusting the gears of your Passoni bicycle.***





Adjusting the Chain Tension of Single Speed Bicycles

Operation and Control

So-called single speed bicycles have only one speed and therefore come along without rear and front derailleur (a). Furthermore, they do not always have a freewheel on the rear wheel, but a rigid hub ("fixie").

In the case of these models the cassette sprocket of the rear wheel is directly connected with the rear wheel. This makes the pedals move with every movement of the rear wheel – and vice versa. These bicycles have often only one brake, sometimes they even have no brake at all (b)! Track bicycles are typical examples of this design.

Checking and Readjusting

The chain tension of single speed bicycles has to be checked and adjusted, if necessary, after approx. 1,000 km (600 miles) or 50 hours of use.

Turn the crank backwards to find the position where the chain is tightest. You should retighten the chain when you can lift the chain in this position by clearly more than 1 cm in the middle between chainring and sprocket.

Release the rear wheel axle bolts or nuts with an appropriate tool (c). Adjust the chain tension by pulling the wheel to the rear or by releasing/tightening the chain tensioner. Subsequently, the crank must turn freely without resistance.

Adjust the rear wheel in the centre of the rear drop-outs (d) by using the chain tensioner as limit stop. Tighten the rear wheel axle nuts with a torque wrench.

⚠ WARNING

- Note that the use of single speed bicycles with only one or without brake on public roads is not permitted according to the road traffic licensing regulation.**
- Chain tensioners are only intended to tension the chain and to pre-adjust the rear wheel. They do not hold the wheel in position or prevent a slipping off. Therefore, the wheel nuts must be tightened with a torque wrench according to the indications.**
- If the chain is considerably lengthened to various degrees over its circumference, it must be replaced.**





CHAIN – CARE AND WEAR

Regular and correct lubrication of your Passoni bicycle chain ensures enjoyable riding and prolongs its service life. It is not the quantity but the distribution and regular application of lubricant that counts. Clean the dirt and oil off your chain with an oily rag from time to time (e). Special degreasers are not necessary; they even have a damaging effect.

Having cleaned the chain as thoroughly as possible, apply chain oil, wax or grease to the chain links (f). To lubricate the chain, drip the lubricant onto the rollers of the lower run of the chain while you turn the crank. Once this is done, turn the cranks a few more times; then let the Passoni bicycle rest for a few minutes so that the lubricant can disperse. Finally wipe off excess lubricant with a rag so that it does not spatter around during riding or can collect road dirt.

⚠ WARNING

Make sure the braking surfaces of the rims, the brake discs/rotors and the brake pads remain clear of lubricants. This would render the brake ineffective.

NOTICE

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



Although the chain is one of the wearable parts of the Passoni bicycle, there are still ways for you to prolong its life. Make sure the chain is lubricated regularly, especially after riding in the rain. Try to only use gears which run the chain in the straightest line between the sprockets and chainrings and get in the habit of high cadence pedalling.

Chains on Passoni bicycles with derailleur gears are worn out after approx. 1,000 to 2,500 km (600 to 1,500 miles) or 50 to 125 hours of use. Heavily stretched chains impair the operation of derailleur gears. Cycling with a worn-out chain also accelerates the wear of the sprockets and chainrings. Replacing these components is relatively expensive compared with the costs of a new chain. It is therefore advisable to check the condition of the chain at regular intervals. Your Passoni dealer has accurate measuring instruments for checking the chain wear (g). Replacing the chain should ideally be left to an expert, as this requires special tools. In addition, you need to select a chain matching your gear system.

⚠ WARNING

An improperly joined or heavily worn chain can break and cause an accident.

SAFETY INSTRUCTIONS

When replacing your chain, only use appropriate and suitable original spare parts (h). Your Passoni dealer will be pleased to help you.



WHEELS AND TYRE EQUIPMENT

The wheel consists of the hub, the spokes and the rim. In the case of **clinchers and folding tyres**, i.e. the most common system, the tyre is mounted onto the rim so that it encases the tube. There is a rim tape running around the rim well to protect the sensitive tube against the spoke nipples and the edges of the rim trough, which are often sharp (a).

Another system comprises the **tubular tyres** which are glued on specific rims. A third system comprises **tubeless tyres** which also require specific rims. Due to the rider's weight and the luggage as well as unevennesses in the field, the wheels are subjected to considerable load. Although wheels are manufactured with great care and delivered accurately trued, spokes and nipples can lose a little tension on the first kilometres/miles. Therefore, ask your Passoni dealer to check and true up the wheels after a short "break-in" period already, i.e. after about 100 to 300 kilometres/60 to 180 miles (category 2 "Sports") or 300 to 450 kilometres/180 to 270 miles (category 1 (ASTM) / 6 (EN)) or 4 to 12 hours of use (category 2 "Sports") or 10 to 15 hours of use (category 1 (ASTM) / 6 (EN)). After this "break-in" period, check the wheels regularly. It will, however, rarely be necessary to tighten the spokes (b).

WARNING

Keep in mind that aero wheels may be affected by side winds and drift!

NOTICE

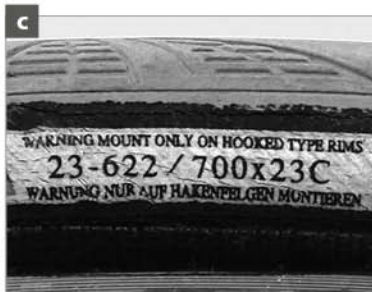
Truing (retruing) wheels is a difficult job which you should definitely leave to a specialist.

Tyres, Inner Tubes, Rim Tape, Inflation Pressure

The tyres should provide grip and traction. At the same time they should run smooth and enhance the rider's comfort by absorbing small shocks. Both the rolling friction and the grip depend on the nature of the tyre carcass, the rubber compound and the tyre tread. Your Passoni dealer will be pleased to help you choose from the numerous types of tyres.

If you want to mount a new tyre, you need to mind the sizing system and the actual size of the old tyre. The latter is specified in two different units on the side of the tyre. One of the sizes is the standardised size in millimetres which is more precise, e.g. the number sequence 23-622 means that the tyre is 23 mm wide when fully inflated and has an inner tyre diameter of 622 millimetres. The other size is indicated in inches (e.g. 23 x 7/8 or 700 x 23c) (c).

Tyres must be inflated to the proper inflation pressure (d) to provide an optimal compromise between smooth running and riding comfort. Properly inflated tyres are also more resistant to punctures. An insufficiently inflated tyre can easily get pinched ("snakebite"), when it goes over a sharp kerb.





⚠ WARNING

Are the tyres in good condition and do they have sufficient pressure? A higher pressure gives a better riding stability and reduces the risk of a puncture. The minimum and maximum pressure (in bar or psi) is indicated on the tyre side.

The air pressure recommended by the manufacturer is given on the side of the tyre or on the type label (e). The lower of the two pressure specifications makes for better cushioning for lightweight riders and is therefore best for cycling on a rough surface. Rolling resistance on level ground decreases with growing pressure, but so does comfort. Highly inflated tyres are therefore most suitable for heavy riders and for riding on smooth asphalt.

Inflation pressure is often given in the old system of units, i.e. in psi (pounds per square inch). The table below gives the most common pressure values in terms of both systems (f).

Clincher and folding tyres and rim alone are not able to hold the air. Therefore, an inner tube has to be placed inside the tyre to retain the air pressure.

Exceptions to this are the tubeless tyres and tubular tyres. In the case of tubular tyres that must be glued on the rim the tube is already integrated into the tyre and can be neither removed, nor patched in

the case of a puncture. This type of tyre requires special rims without rim flanges. For more information read the respective instructions, if necessary, before starting any work with such kind of tyres.

Valves

There is only one valve type in general use on Passoni road racing bicycles: The **Sclaverand** or **Presta valve** that is designed to withstand extremely high pressures (g).

It has a plastic cap protecting the valve from dirt.

You first have to undo the small knurled nut a little and depress it carefully until air starts to escape (h). Check the nut is tightened and seated in its stem, otherwise air may slowly leak out. It can be hard to inflate tyres to the necessary pressure by using hand pumps. It is much easier with a foot-operated or a track pump equipped with a pressure gauge.

⚠ WARNING

Replace tyres with a worn tread or with brittle or frayed sides. Dampness and dirt penetrating the tyre can cause damage to its inner structure. The tube might burst. Risk of accident!



f

psi	bar	psi	bar	psi	bar
50	3.4	80	5.5	115	7.9
55	3.8	85	5.9	120	8.3
60	4.1	90	6.2	125	8.6
65	4.5	95	6.6	130	9.0
70	4.8	100	6.9	135	9.3
75	5.2	105	7.2	140	9.7
		110	7.6	145	10.0





⚠ WARNING

- Tyres allowing an inflation pressure of 5 bars or more have to be mounted on hook bead rims, identifiable by the designation "C". If you are in doubt or if you have any questions, contact your Passoni dealer.
- Mounting a new tyre of another size might possibly cause the tip of your shoe to touch the front wheel while steering. Risk of accident!
- Treat your tyres with care. Never inflate your tyres beyond the maximum permissible pressure, otherwise they might burst or come off the rim during the ride. Risk of accident!
- If you mount wheels with carbon rims ^(a) on your Passoni road racing bicycle, it may be possible that you have to change the brake pads, as conventional brake pads often do not provide the desired braking effect. Be sure to observe the instructions of the wheel manufacturer.

SAFETY INSTRUCTIONS

- Always ride your Passoni bicycle with the prescribed tyre pressure and check the pressure at regular intervals, at least once a week ^(b).
- Observe the maximum pressure value of the rim. The pressure is dependent on the tyre width. You will find the values in the enclosed instructions of the rim or wheel manufacturers.



Rim Trueness and Spoke Tension

For the true running of the wheel it is imperative that the tension exerted by the spokes is distributed evenly around the rim (c+d). If the tension of a single spoke changes, e.g. as a result of riding fast over a kerb or of a loose nipple, the tensile forces acting on the rim become unbalanced and the wheel will no longer run true. The functioning of your Passoni bicycle may even be impaired before you notice the wobbling appearance of a wheel that has gone out of true.

With rim brakes the sides of the rims also serve as braking surfaces. An untrue wheel can impair the braking effect. It is therefore advisable to check the wheels for trueness from time to time. For this purpose lift the wheel off the ground and spin it with your hand. Watch the gap between the rim and the brake pads. If the gap varies by more than a millimetre, you should ask an expert to true up the wheel.

⚠ WARNING

- Do not ride with untrue wheels. In the case of extreme side-to-side wobbles, the brake pads of rim brakes can miss the rim and get caught in the spokes! This normally instantly jams the wheel and throws you off your Passoni bicycle.
- Loose spokes must be tightened at once. Otherwise the load on the other spokes and the rim will increase.



TYRE PUNCTURE

Flat tyres are the most common cause of puncture during cycling. However, as long as you have the necessary tools and a spare tube or a repair kit, this need not mean the end of your cycle ride. If your wheels are attached with quick-releases to the frame and the fork, you only need two tyre levers and a pump (e).

SAFETY INSTRUCTIONS

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

Wheel Removal

Open the quick-release lever at the brake (**Shimano, SRAM**) (f) or shift the pin in the brake lever/shifter unit on the handlebar (**Campagnolo**) (g).

If your Passoni bicycle has **cantilever and V-brakes** you first have to unhook the brake cable from the brake arm. To do this, grip the rim with one hand and press the brake pads and/or arms together.

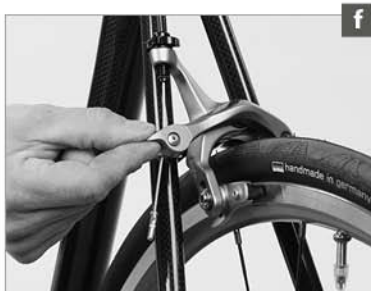
In this position the usually barrel shaped nipple of the lateral brake cable or the brake hose (of V-brakes) can easily be disengaged.

If you have **disc brakes**, you should first check the exact position and condition of the brake pads and/or wear indicators (ear or nose-shaped metal protrusions). In this way you will be able to tell after the removal whether the brake pads are still in their correct position. Read the brake manufacturer's operating instructions. Do not actuate the brake lever when the wheel is removed.

If you have **derailleur gears**, you should shift the chain to the smallest sprocket before removing the rear wheel. This shifts the rear derailleur right to the outside where it does not interfere with the removal of the wheel. Open the quick-release of the wheel, as described in chapter "How to Use Quick-Releases and Thru Axles".

If you cannot remove the wheel after releasing the nuts, this is due to the drop-out safety tabs. They are metal catches which engage with recesses in the drop-outs. Just release the quick-release adjusting nut a little and slip the wheel past the tabs.

You will find it easier to remove the rear wheel, when you pull the rear derailleur slightly backwards (h). Lift the Passoni bicycle off the ground and give the wheel a gentle tap with your hand so that it drops out.





⚠ WARNING

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

⚠ CAUTION

Brake discs/rotors can become hot, so let them cool down before removing a wheel.

NOTICE

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

SAFETY INSTRUCTIONS

Read the operating instructions of the brake and the gear manufacturer.

Clincher and Folding Tyres

Tyre Removal

Remove the cap and the fastening nut off the valve and deflate the tyre completely (a). Press one tyre side from the rim sides towards the centre of the rim. This will ease the removal.

Apply a plastic tyre lever to one bead of the tyre about 5 cm beside the valve (b) and lever the tyre out of the rim in this area. Hold the tyre lever tight in its position. Slip the second tyre lever between rim and tyre at a distance of about ten centimetres on the other side of the valve and lever the next portion of the bead over the edge of the rim (c).

After levering a part of the tyre bead over the edge of the rim you should normally be able to slip off the whole tyre on one side by moving the tyre lever around the whole circumference. Now you can remove the inner tube (d). Make sure the valve does not get caught in the rim, as this can damage the inner tube. If necessary you can remove the whole tyre by pulling the other tyre bead off the rim. Repair the puncture according to the instructions of the repair kit manufacturer or replace the inner tube.





When you have removed the tyre, you should also check the rim tape (e). It should lie squarely in the rim trough, covering all spoke nipples, and should neither be damaged nor brittle. In the case of double wall rims the tape must cover the entire rim base, but it should not be so broad as to stand up along the inside edges of the rim trough. Rim tapes for this type of rim should only be made of fabric or durable plastic. If you are in doubt or if you have any questions, contact your Passoni dealer.

⚠ WARNING

If the fabric of the tyre is destroyed by the perforating object, replace the tyre to be on the safe side.

Replace spoilt rim tapes immediately.

NOTICE

If you get a puncture en route, inflate the inner tube and bring it close to your ear. In most cases you can hear the air coming out. At home you can help yourself with a bucket of water where you can locate the hole by the bubbles. When you have found the hole, look for the corresponding place on the tyre and check it. Remove the foreign body, otherwise another puncture can occur.

Tyre Mounting

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

Slip one bead of the tyre onto the rim. Using your thumbs, press one bead over the edge of the rim and then around the entire circumference. This should normally be possible without using tools.

Stick the valve of the inner tube through the hole in the rim (f). Inflate the inner tube slightly so that it becomes round and push it into the tyre all the way round. Make sure not to leave any folds in the inner tube.

To finish mounting the tyre, start at the opposite side of the valve. Using your thumbs, press as much of the second bead of the tyre over the edge of the rim as you can (g).

Make sure the inner tube does not get pinched and squashed between the tyre and the rim. You can prevent this by pushing the inner tube into the hollow of the tyre with a finger as you work along (h).





Work the tyre into the rim by approaching the valve symmetrically from both sides. Towards the end, you will have to pull the tyre vigorously downwards (a) to make the already mounted portion of the tyre slip towards the deepest part of the rim well. This will ease the job noticeably on the last centimetres.

Before fitting the tyre completely on the rim check again whether the inner tube lies properly inside the tyre and press the last stretch of tyre over the edge of the rim using the balls of your thumbs.

If this does not work, you will have to use the tyre levers (b). Make sure the bent ends point towards the inner tube and the inner tube does not get damaged.

Push the valve a little into the tyre so that the inner tube does not get caught between the rim and the tyre beads. Check whether the valve stands upright. If not, dismount one bead again and reposition the inner tube.

To make sure the inner tube does not get pinched between the rim and the bead, move it sideways back and forth between the sides of the rim. While doing so, also check whether the rim tape has shifted.

Inflate the inner tube to the desired pressure. The maximum pressure is indicated on the side of the tyre.

Check whether the tyre is properly seated by inspecting the fine indicator line (c) just above the rim edge. This line should be even to the rim all around the tyre. Starting from the maximum tyre pressure you can now reduce the pressure through the valve to suit your needs. Observe the recommended tyre pressure range (d).





Tubeless tyres (UST tyres)

Tubeless tyres (e) are also referred to as “tubeless ready”. The rims are provided with specific valves, have an entirely enclosed rim base and partly also a specific rim shape. There is no inner tube.

Tyre Removal

Deflate the tubeless/UST tyre completely (f). Press the tyre from one side towards the centre of the rim, until the tyre bead is loose in the rim base.

Start removing the tyre close to the valve and lift one tyre side over the edge of the rim with your fingers.

After you have pulled the entire tyre side over the rim edge press, if necessary, the other tyre side into the rim base and remove this side also from the rim.

NOTICE

Do not use tyre levers (g) in order to avoid damage to the sensitive sealing lip on the tyre bead!

It is recommended that you use the tools of the respective tyre manufacturer for removal as they are designed to be used together.



Puncture Assistance – Repair

In case of a puncture, tubeless tyres can also be used with inner tubes. Remove any available perforating object from the tyre first and remove the valve from the rim. Insert a slightly inflated new inner tube into the tyre. Mount the tyre as described in chapter “**Clincher and Folding Tyres**”. You may need tyre levers for this purpose.

WARNING

Improper mounting can lead to malfunctioning, tyre damage or even brake failure. Therefore, strictly observe the instructions of the component manufacturer.

NOTICE

There are also repair sprays available. You find more details on these repairs further below in this chapter.

SAFETY INSTRUCTIONS

There are specific patches (h) available for tubeless tyres which are applied inside. If need be you can also use a conventional repair patch. Always observe the operating instructions of the repair kit manufacturer.



Tyre Mounting

Before you start mounting make sure the inside of the tyre and the tyre bead are free of dirt and lubricant.

NOTICE

Do not use tyre levers to avoid damage. Press the tyre on the rim by exclusively using your hands to avoid damage to the tyre bead.

It is recommended that you use the tools of the respective tyre manufacturer for mounting as they are designed to be used together.

Insert the valve from the inside through the valve hole and slide the rubber seal as well as the plastic washer matching the shape of the rim on the valve stem. Screw on the valve nut with its flat side first until the valve fits reliably and is tight (a).

Observe whether the running direction of the tyre is indicated. Mounting tubeless tyres is like mounting clincher tyres. Start in the area opposite the valve and press the tyre into the rim base, as far as possible, without tool and by using your hands (b). Work yourself around until you reach the valve (c). Align the tyre equally.

Observe the position of the valve between the sides of the tyre. Apply some assembly liquid provided by the tyre manufacturer to the tyre bead and the inside of the rim edges (d). This makes the tyre slide easier into its position. Press the tyre to the side so that you reach the bottom with the sponge.

Check the seat of the tyre at the valve once again. Press from above on the tyre and work yourself around (e); make sure the tyre is equally seated all around and in contact with the tyre base.

The first air blast is crucial for the mounting (f). The tyre must inflate and be in contact with the rim immediately to make sure no air escapes. It is therefore recommended that you use a compressor or a powerful track pump. Inflate the tyre with quick blasts.





Once there is contact and the tyre is seated tightly continue inflating until you hear two pops. This noise indicates that the tyre is correctly seated. If there had been no popping noise when you have reached the maximum tyre pressure deflate the tyre and carefully apply mounting liquid once again.

Once the tyre is seated check along the indicator line (g) whether the tyre is seated equally around the entire circumference on both sides of the rim. Spin the wheel slowly and observe the course of the indicator line along the top edge of the rim. If necessary, deflate the tyre a little and align it.

When everything fits deflate the tyre and unscrew the valve from the valve stem. Shake the latex milk bottle strongly so that the ingredients mix up evenly. Fill about 30 ml of the sealant approved by the tyre manufacturer into the tyre (h).

Clean the area inside and outside the valve by using an absorbent cloth. Screw in the valve again. Inflate the tyre as described above. Spin the wheel slowly for a few rotations to make sure the liquid spreads inside the tyre.

Grasp the wheel with both hands, continue turning it gradually and shake or tilt it in both directions. This will spread the sealant inside reliably in all areas.

Finish by adjusting the air pressure to your needs or weight and the tyre width. Do not exceed the permissible maximum pressure. Tubeless tyres can be used with about half a bar to one bar less than clincher or folding tyres.

⚠ WARNING

Tubeless tyres have to be mounted together with a UST rim/UST wheel or a tubeless ready rim.

⚠ CAUTION

Tubeless tyres are often also tight without latex milk, but the latex milk significantly increases the puncture protection and should therefore be applied.

SAFETY INSTRUCTIONS

It is not only possible to ride with UST/tubeless tyres, but also with typical folding tyres without inner tube and filled with latex milk, if necessary. Read and observe the instructions of the supplier.





CAUTION

The valve nut of tubeless tyres must be checked regularly for a tight seat (a). With a loose valve air will quickly escape from the tyre.

When mounting tubeless tyres the tyre bead and the rim edges must be moistened with a special solution on both sides (b). Normally you can also use detergent diluted with water. This is the only way to make the tyre slip into its bed (c) and become air tight.

NOTICE

You can also inflate the tyre with the repair spray actually designed for a repair during the ride. The spray provides an integrated puncture protection. To do so slide the spray head on the valve. Align the bottle in a way that the opening of the head is flush with the valve. Keep the top of the head tight with one finger and press the bottle for about two minutes against the head. Pull the bottle from the valve with a jerk. Then set off on your bike for a few miles to make the latex milk spread inside the tyre.

NOTICE

In case of a puncture in your tubeless tyre you can repair the tyre inside as you would usually repair an inner tube. If you have filled latex milk inside beforehand the milk must be removed thoroughly in the area of the puncture, otherwise the patch will not stick. Inflate the tyre with the spray subsequently (d). Minor damage can also be repaired by only using the spray.

SAFETY INSTRUCTIONS

Inflating with a cycle or track pump is difficult. The sudden pressure increase which is necessary to make the tyre slip neatly and tightly into the rim seat can typically only be achieved with an electric compressor. The tight seat is indicated by one clearly audible pop per tyre side.





Tubular Tyres

The inner tube of a tubular tyre is sewed into the tyre and the entire tyre must be glued on a specific tubular tyre rim (e).

Tyre Removal

Deflate the tyre completely (f). For tyre removal press the tyre a little to one side in the area opposite the valve until there is a gap and the tyre starts to detach (g). If the tyre remains tight insert a tyre lever into the gap and lever the tyre off the rim (h).

Replacing an individual inner tube is not possible. You have to mount a complete tubular tyre on the rim instead. During the ride the tyre cannot be glued and is therefore not secure on the rim even after having been inflated.

For this reason ride back very slowly and carefully by taking the shortest way possible. Back home, you have to glue the tubular tyre as described in the following.

Tyre Mounting

A careful mounting which makes the tubular tyre stay durably on the rim must be performed step by step and can take some time. Some practice and experience with the tyre glue used and the respective tubular model can speed up the work.

SAFETY INSTRUCTIONS

In general, mounting tubular tyres is a job for your Passoni dealer. Perform the mounting by yourself only when you are sufficiently experienced and skilled. Read the mounting instructions of the tyre manufacturer before you start mounting.

There are two options of gluing the tyre: either by using an adhesive tape or liquid tyre glue (a, p. 66). The positive thing with adhesive tapes is that the tubular is mounted rather quickly. The tyre seat is, however, not sufficient for all cases. In case of a puncture during the ride, the tape often remains on the removed tyre and the spare tyre is no longer securely seated on the rim.

For this reason we recommend a solid bed consisting of several layers of liquid tyre glue (tyre cement). Glue not only provides a better hold of the tyre, but usually also remains on the rim when removing the tyre.





It is nevertheless necessary also in this case to remove the spare tyre once again after the ride. The existing bed as well as the tyre (b) are then treated once again with tyre glue (tyre cement) and re-mounted to stabilise the seat.

If you have wheels with very deep rim edges unscrew the valve insert with the specific mounting tool before the first mounting and mount a valve extension in its place (c). Screw the valve insert into the lengthened valve. Now you can inflate and deflate the mounted tyre through the extended valve as you are used to.

Inflate the tyre just to the point where it starts to become round and insert the valve into the rim hole. Start at the valve and press the tyre evenly into the rim base by working your way around. If you do not succeed in pushing the tubular tyre completely on the rim or if you only succeed by using excessive forces a clean mounting may be impossible at a later date.

Spin the wheel with the tubular tyre mounted and check whether the tyre runs true. The area where the valve comes out of the tyre is often thickened which leads to a vertical runout and makes the wheel jolt during the ride.

Deburr or countersink the valve hole of an aluminium rim by using a big drill (d), a triangular scraper or a round file.

If you have carbon rims deburr the hole edge carefully by using a round file. Insert the file only from the outside to the inside and not vice versa, otherwise the fibres of the synthetic matrix might fray out. Seal the area with instant glue subsequently. This pretreatment will make the valve fit more snugly against the rim.

If time permits you can leave the inflated tyre on the rim for a few days which will also ease the mounting at a later date.

Subsequently, clean the rim base of possibly adhering grease or oil by using a rag soaked with acetone, spirit or benzine.

Wait until the solvent has completely evaporated before you start gluing the tyre. The easiest way of applying the glue (e) is by mounting the wheel in a truing stand or a disused fork clamped in a vice.





Several layers of glue are necessary to create a well-adhering base with liquid tyre glue. Spread the tyre glue evenly and as thinly as possible around nearly the entire circumference of the rim.

With a little practice you can apply the glue directly from the tube. If you do not succeed a paintbrush with stiff bristles will ease this work. If you use tyre glue from a can a paintbrush is necessary anyway. Let the tyre glue (tyre cement) dry until it is no longer sticky and liquid when you touch it. This time span can last several hours.

Continue by applying two further thin layers following the same principle and let them dry once again. Also apply glue to the base tape of the tubular tyre. Leave the rim and the tyre as they are at least overnight.

Before mounting the tyre also apply glue to the base tape of the tubular tyre (f). Complete the bed of glue with one last layer of tyre glue. If necessary, you can leave an area of five to ten centimetres opposite the valve without glue when applying the last layer to have a point where you can start to remove the tyre at a later date.

Once the top layer has shortly dried but still feels viscous place the rim on the ground with the valve hole facing upward. Insert the valve of the slightly inflated and thus round tyre into the valve hole of the rim and press it firmly against the rim (g).

Make sure the tyre sides do not get in contact with the glue bed, otherwise your tyre looks dirty right away.

If you have left the area opposite the valve hole free of glue you need not be concerned to soil the ground or that the glue might collect dirt from the ground when you put down the rim.

Grasp the tyre with both hands on the right and left side of the valve, pull it forcefully downward and work it bit by bit into the rim base (h). Continue evenly until there are about 20 centimetres left.

Start at the valve and pull the tyre once again downward until your hands reach the area that has not yet been mounted.





Keep the tyre under tension by pressing the fingers against the rim and the thumbs against the tyre and place the wheel against your hip. Press the tyre with both thumbs over the edge of the rim (a).

When the tyre is seated in the rim base it has to be trued as it is only very rarely that the tyre runs true immediately. Mount the wheel once again on the mounting stand and spin it. If the tread is misaligned or if the tyre wobbles lift it up in this area, twist it slightly and let it down again.

When the tyre spins without lateral runout take the wheel from the mounting and inflate the tyre to about half of its nominal pressure. Apply load to the wheel over the ends of the axles and quick-releases and roll the wheel a few metres over the ground (b). As you roll the wheel, vary between pressing it vertically downward and inclined to either side.

If the tyre runs true during the final check inflate it to its maximum pressure, deflate until you have reached two thirds of the pressure and wait eight hours at least or even better a whole day, before setting off for the first time. Before cycling adjust the tyre pressure of the newly mounted tyre according to the recommendations of the tyre manufacturer and your needs.



WARNING

- A poorly performed gluing of the tyre can make the tyre detach from the rim. Risk of an accident!
- Use benzine and the highly flammable tyre glue (c) in well-ventilated spaces only. Store these products properly and out of the reach of children.

NOTICE

- Keep in mind that tyre glue not only adheres to rims and tyres, but also to fingers and clothes. It is therefore recommended that you wear old clothes.
- When mounting the tyre to an already used rim make sure to carefully remove possibly available old glue remnants and dirt by using sand cloth. Make sure that you do not damage the carbon material. Finish by wiping the rim with a soft cloth and acetone (d).

SAFETY INSTRUCTIONS

- Before removing a wheel read chapters "Wheels and Tyre Equipment" and "How to Use Quick-Releases and Thru Axles".



Wheel Mounting

Mounting the wheel is done in the reverse order of dismounting. Make sure the wheel is correctly seated in the drop-outs and accurately centred between the fork legs or the seat and chainstays. Make sure the quick-release and the drop-out safety tabs are correctly seated. For more information see chapter “How to Use Quick-Releases and Thru Axles”.

Close the quick-release lever at the brake (**Shimano, SRAM**) (e) or shift the pin in the brake lever/shifter assembly on the handlebar (**Campagnolo**) (f).

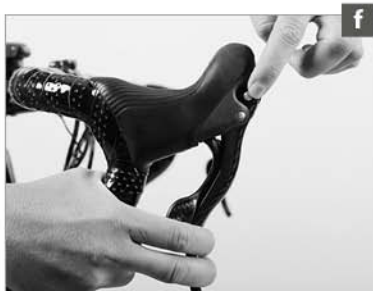
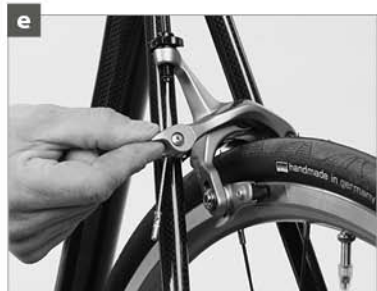
If you have **disc brakes**, check before mounting the wheel whether the brake pads rest snugly in their seats in the brake calliper body. The gaps between the brake pads and the wheel should be parallel and the wear indicators in their correct position. Make sure you guide the brake disc/rotor carefully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

If you have cantilever brakes (g) hook up the brake cable at the brake arm. To do this, grip the rim with one hand and press the brake pads and/or the brake arms together. In this position the usually barrel shaped nipple can easily be engaged.

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

⚠ WARNING

- *After mounting the wheel pull the brake lever (several times, if you have disc brakes). You must reach a precise positive braking response.*
- *If you have rim brakes, make sure you hook up the brake cable immediately after the wheel mounting!*
- *Before setting off again check that the brake surfaces and/or rotors are still free of grease or other lubricants after the wheel mounting (h).*
- *Check whether the brake pads hit the rotors or brake surfaces of the rims. Make sure the wheel is properly seated and firmly fixed in the drop-outs. Always do a brake test as described in chapter “Before Every Ride”!*





HEADSET

The headset connects the fork to the frame, but allows it to move freely. It must turn with virtually no resistance, if the Passoni bicycle is to run straight, stabilising itself as it travels. Shocks caused by uneven road surfaces expose the headset to considerable levels of stress. In this way it can become loose and go out of correct adjustment.

⚠ WARNING

Riding the Passoni bicycle with a loose headset increases the loads on fork and bearings. This can lead to damage to the fork. Risk of accident!

Checking and Readjusting

Check the headset for play by placing your fingers around the upper headset cup (a).

Bring your weight to bear on the saddle, pull the front brakes with your other hand and push the Passoni bicycle firmly back and forth with the wheel remaining on the ground (b). If the bearing has play, you will feel the upper head tube race moving in jerks relative to the lower head tube race – visible as a small gap in between the head tube races.



To check whether the headset runs smoothly, lift the frame up until the front wheel no longer touches the ground. The handlebar should turn from far left to far right without feeling roughness or tightness at any point. With a gentle tap on the handlebar the fork should turn easily from the middle position (c).

If you face any problems during the test, contact your Passoni dealer.

⚠ WARNING

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

SAFETY INSTRUCTIONS

Adjusting the headset requires a certain amount of experience and should therefore be left to your Passoni dealer.



Threadless Headset – Aheadset®

(Aheadset® is a registered trade mark of Dia-Compe)

The distinct feature of this system is that the stem does not sit within the fork steerer tube, but rather slips over the fork steerer tube, which in this case is threadless. The stem is thus an important part of the headset, as the stem clamping fixes the adjustment (e). Instead of special tools you need in most cases only one or two Allen keys as well as a torque wrench to adjust the Aheadset®. Release the clamping bolt(s) located on the side of the stem by one to two turns (f). Gently tighten the countersunk adjusting bolt on top a little, e.g. by a quarter turn (g), by using an Allen key.

Realign the stem to ensure that the handlebar is at right angle to the wheel. Make sure the front wheel is in line with the top tube and the stem. Tighten the clamping bolts of the stem. Use a torque wrench and never exceed the maximum torque values (h)! You find the torque values on the components themselves, in the chapter “**Recommended Torque Values**” or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers. Check the headset for play as described above. Do not to overtighten the headset. **Risk of headset failure!**

⚠ WARNING

Bear in mind that by overtightening the bolts the stem can crush the steerer tube. In particular forks with carbon steerer tubes are highly sensitive to overtightening the steerer tube clamping at the stem. Risk of breakage! Follow the adjusting instructions of the carbon fork manufacturer, when you want to change the headset or stem adjustment.

Check the secure seat of the stem by taking the front wheel between your legs and trying to turn the handlebar and stem relative to the wheel. A loose stem can cause an accident.

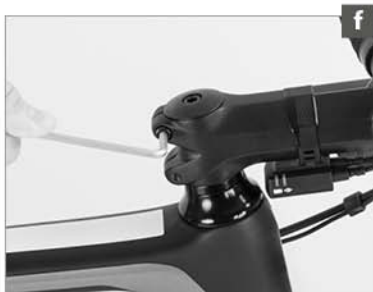
Never change the preload mechanism inside the fork steerer tube. Never install a star nut in carbon fork steerer tubes.

NOTICE

Do not overtighten the upper bolt, it only serves to adjust the headset play.

SAFETY INSTRUCTIONS

If you do not succeed in adjusting the headset, this can have several reasons. If you are not absolutely sure, ask your Passoni dealer for help.





THINGS WORTH KNOWING ABOUT PASSONI BICYCLES AND CYCLING

Cycling Helmets and Glasses

Cycling helmets are a must when riding a Passoni bicycle. Your Passoni dealer has a variety of styles and sizes (a). Verify that the helmet complies with the European standard EN 1078. Cycling helmets are only approved for use during cycling. Observe the manufacturer's instructions.

⚠ WARNING

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

Apart from a cycling helmet and suitable clothing, cycling glasses (c) are absolutely essential when you set off on your Passoni bicycle. They do not only protect your eyes from the sun and the wind, but also keep out flies and other impurities that may impede your vision when they fly into your eyes. **Risk of accident!** Good cycling glasses should fit tight on your face not allowing any wind to affect your eyes. Cycling glasses come in a wide range of models, such as glasses with clear lenses and without UV protection for cycling in the dawn and at night or glasses with maximum UV protection for cycling under extreme sunlight conditions.



Clothing

⚠ WARNING

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

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

Pedals and Shoes

Cycling shoes (d) should be made of solid material to provide firm support for your feet. In addition, they should have a stiff sole so that the pedal cannot press through. The sole should not be too wide in the area of the heels, as the rear stays or the crank will otherwise get in the way of your pedalling. This will prevent your feet from assuming a natural position when pedalling and may cause knee pain in the long run.

Special cycling shoes are obligatory if your Passoni road racing bicycle is equipped with clipless pedals. With these shoes small cleats are fixed to the sole. They give you a firm connection between shoe and pedal and allow depending on the model an acceptable walking position.



The main advantage is that these clipless pedals (e) prevent your feet from slipping off when pedalling fast. They enable you not only to push but also to pull the pedals. This makes your pedalling more smooth and increases the power transmission compared to normal pedals.

The usual way to engage with the pedal is to turn it from the lowest position of the crank to the horizontal using the tip of the cleat and push down on the back of it. Normally, the shoe engages with the pedal with a click which you will hear and feel clearly.

The release force of clipless pedals is adjusted by means of an Allen key (f). If there are any creaking or squeaking noises occurring, some grease will solve the problem in most cases. These noises as well as lateral play of the shoe on the pedal can, however, be also signs of wear. Check the cleats at regular intervals.

⚠ WARNING

- **Make sure the fastening bolts of the cleats are properly tightened, as you will find it almost impossible to disengage your shoe from the pedal, if the cleat is loose. Risk of accident!**
- **Taking up the pedals, engaging and disengaging the shoes should first be practised in standing (g). Later you can refine your technique in a place clear of traffic.**



⚠ WARNING

- **Only use clipless pedals allowing you to engage and disengage smoothly. A defective pedal or a badly worn cleat can make the shoe disengage from the pedal. Or unclipping the shoe from the pedal is sometimes very difficult or even impossible. In both cases, there is the risk of an accident!**
- **Make sure pedals and shoe soles are always clear of mud and other impurities (h) and grease the lock-in mechanism with lubricant at regular intervals.**

⚠ CAUTION

- **Most cycling shoes with cleats are only suitable for walking to a limited extent. As the cleats, in particular when mounted to road bike shoes, are thicker than the sole, they provide less grip even on a non-slip ground.**

SAFETY INSTRUCTIONS

- **Ask your Passoni dealer to inform you about the various shoe models. Cycling shoes come in various styles for specific uses.**
- **Read the operating instructions of the pedal manufacturers. If you are in doubt or if you have any questions, contact your Passoni dealer.**



Accessories

In purchasing this high quality Passoni bicycle (a) you laid the foundation for many years and miles of enjoyable cycling. Whatever you are planning to do with your Passoni bicycle, be sure to have proper equipment and to keep a few tips in mind. Your Passoni dealer has a variety of useful accessories on offer enhancing both your safety and convenience. Your Passoni bicycle can be equipped with various kinds of accessories. Make sure to observe the requirements according to the traffic regulations in your country and the EN standards. Any retrofitted part must be compatible with your Passoni bicycle. If you are in doubt or if you have any questions, contact your Passoni dealer.

⚠ WARNING

Improper accessories may change the qualities of your Passoni bicycle and even cause an accident. Therefore, before fitting any accessories contact your Passoni dealer and observe the instructions regarding the intended use of your Passoni bicycle.

Bicycle Locks

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



Puncture Kit

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

SAFETY INSTRUCTIONS

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

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

Cycle Computers

There are electronic computers that show your current and average speed, your daily and annual mileage as well as the duration of the present ride (d). Real de luxe models also give the highest speed achieved, differences in elevation, your cadence or your heart rate.





Transporting Luggage – Bikepacking

There are various ways of carrying luggage on a Passoni bicycle. Your choice depends primarily on the weight and volume of the luggage. Using a specific bicycle rucksack is a convenient way of transporting luggage on a Passoni bicycle. But for longer tours it is recommended that you carry your luggage in special packing bags.

There are various options for what is called bikepacking, i.e. loading your Passoni gravel bike with luggage, which is described in the following.

On most Passoni gravel bikes you can attach additional bags (e) at the frame (1), the saddle (2), the handlebar (3) or the fork. If you are not absolutely sure about the packing bags allowed on your Passoni gravel bike, contact your Passoni dealer.

Rucksack

A special bikepacking rucksack is suitable for carrying e.g. large-volume items of clothing. Waist and chest straps ensure a secure fit. Different models provide additional back padding and lumbar support.

Frame Packs

Frame packs are usually attached to the top tube with Velcro fasteners or special adapters: smaller models on top of the top tube (f), larger packs within the frame triangle (g). It is advisable to pack items for that you need easy access in the packs attached on top of the top tube. Heavy items of luggage, on the other hand, should be placed as far down as possible, i.e. in the packs attached within the frame triangle.

When attaching the pack within the frame triangle, make sure you still have enough space for your water bottles. Furthermore, you should consider the width of the pack during packing. A too wide pack impedes pedalling. With larger frame packs it can also make sense to carry the water bottles in special holders at the fork.

Saddle Packs

Saddle packs (h) are usually attached to the saddle rails and the seat post with Velcro fasteners. The saddle pack should be strapped tightly so that it does not wobble during the ride. It is advisable to pack those items into the saddle pack that you do not need within easy reach during your tour and are relatively lightweight.





When getting on your Passoni gravel bike make sure you do not get caught on the saddle pack with your swinging leg (a).

Make sure the rear light and reflector are not covered when the saddle pack is attached.

Handlebar Packs

Handlebar packs are usually attached to the handlebar and the head tube with Velcro fasteners. The pack, also referred to as "roll pack" attached transversely to the direction of travel, should be attached in a way that it does not wobble during the tour.

In addition to the "roll pack" you can stow your luggage in standard handlebar bags at the handlebar that are usually attached with a quick-lock fastener. These handlebar bags are particularly suitable for valuables etc. that should be within easy reach during the tour.

When attaching the handlebar packs and bags make sure not to pinch the cables or hoses. Check whether your grip positions (b) are restricted by the handlebar bags and, if necessary, make yourself familiar with them in an area free of traffic before setting off. Also make sure the headlamp and reflector are not covered by the handlebar bags (c).

Fork Packs

Some Passoni gravel bikes allow the attachment of packing bags to the fork. Fork packs are attached either with specific adapters or an additional holder to the fork (d) and, if necessary, additionally secured with Velcro fasteners (e).

You should not pack too heavy items into the fork packs to prevent negative effects on the steering behaviour.

It is advisable to attach one fork pack respectively on either side of the fork to distribute the load evenly. This facilitates cycling as well as steering and parking.

If you are not absolutely sure whether fork packs are allowed on your Passoni gravel bike, contact your Passoni dealer.





Packing Bags on Rear Rack

Some Passoni gravel bikes are suitable for mounting rear racks. There are models which can be mounted to the seat post as well as to the rear stays. On these rear racks you can attach your luggage in additional packing bags.

When buying packing bags, make sure they are watertight so that you do not face unpleasant surprises during the first rain shower.

When loading your Passoni gravel bike observe the permissible load capacity of the rear rack and the packs and make sure the load is evenly distributed. Heavy pieces of luggage should be packed as far down as possible. Lightweight items should be packed in the packing bags attached in the top and, if approved for your model, on the rear rack.

⚠ WARNING

Be sure to read in any case the possibly enclosed instructions of the packing bag suppliers before attaching packing bags of any type to your Passoni gravel bike, loading them and setting off. If you are not absolutely sure or have any questions, contact your Passoni dealer.

⚠ WARNING

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

Your Passoni bicycle is designed for a maximum permissible overall weight including rider, luggage, Passoni bicycle and child seat or trailer load, if permitted. The maximum permissible overall weight is specified on the type plate on the Passoni bicycle or in the bike card in these operating instructions. If you are in doubt, contact your Passoni dealer. Do not overload your Passoni bicycle and also observe, if available, the maximum load capacity marked on or impressed on your rear rack (f). Under certain circumstances the maximum permissible overall weight can be further limited by the component manufacturers' recommendations for use.

Make sure the packing bags are closed and securely attached and the straps or buckles are fully closed and secured. Inadequately fastened packing bags can come loose during the ride or get caught in the rotating components.

Make sure the fastening straps are securely closed. If necessary, shorten too long straps before your first ride (g). Too long straps can get caught in the spokes and suddenly jam the front or rear wheel.

If necessary, adjust the tyre pressure to the additional weight (h).



**NOTICE**

Protect the areas of the frame where you attach packing bags, e.g. the top tube, from damage caused by abrasive attachments with stickers (a). You can get them from your Passoni dealer. Before mounting the stickers you should clean these areas of the frame (b).

SAFETY INSTRUCTIONS

Before attaching packing bags to your Passoni gravel bike, check that it is designed to be fitted with them. If you are not absolutely sure or have any questions, contact your Passoni dealer.

You find precise information on how to attach your packing bags in the possibly enclosed instructions of the respective packing bag manufacturer.

Taking Children with You**SAFETY INSTRUCTIONS**

Passoni road racing and triathlon bicycles do not allow the mounting of child carriers (c). This applies in particular to extremely lightweight frames. Ask your Passoni dealer for advice and have a look at the bike card. Also read the instructions of the child carrier manufacturer.

Towing a trailer (d) or a kids' tandem bicycle/trailer system with your Passoni bicycle, is not allowed. Have a look at the bike card or ask your Passoni dealer for advice.





PASSONI BICYCLE TRANSPORT

By Car

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

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

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

Whatever system you opt for, make sure it complies with the relevant safety standards of your country!

Read the operating instructions of your bicycle carrier (f) and observe the maximum load capacity and recommended or prescribed driving speed.

Observe the necessary drawbar load, if available.

⚠ WARNING

- Make sure the lights and the number plate of your car are not hidden from view. For some carriers, a second exterior rear view mirror is required by the road traffic regulations.**
- Always secure the Passoni bicycle or bicycle components when putting it/them into the interior of your car (g+h). Parts shifting around can impair your safety.**
- Make sure to remove all parts of your Passoni bicycle (tools, pannier bags, etc.) which may come loose during transport. Risk of accident!**



**WARNING**

- Do not buy a carrier on which the Passoni bicycle has to be mounted upside down, i.e. with the handlebar and saddle fixed face down to the carrier. This way of fastening the Passoni bicycle exposes handlebar, stem, saddle and seat post to extreme stress during transport. Do not opt for a carrier system with crank arm fit. Risk of breakage!
- Check whether your Passoni bicycle is properly fastened before and at regular intervals during the ride. A Passoni bicycle that detaches from the roof carrier may endanger other road users.
- Pull the brake levers and secure them with a strong elastic band (a), when transporting a cyclocross bicycle or Passoni gravel bike in lying position or suspended.

NOTICE

- Most clamps are a potential source of damage to large-diameter frame tubes (b) that are not designed to be fixed in such clamps! Do not use such systems with carbon frames!
- Secure the Passoni bicycles on the bicycle carrier with an additional lock (c) e.g. during a halt.
- If your Passoni bicycle has disc brakes, be sure to mount the safety locks (d) before transporting your cyclocross bicycle or Passoni gravel bike with the wheels dismounted.
- Bear in mind that your car may have a greater overall height. Measure the overall height and place a sign stating the height somewhere in the cockpit or on the steering wheel so that it can be easily seen.





By Rail/By Public Transport

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

In some countries regional trains have special spaces for the storage of bicycles and other things. This is an option to take your Passoni bicycle with you. They are often at the front or end of a train and marked with a bicycle sign.

When taking a high-speed train check whether you can take your Passoni bicycle with you.

SAFETY INSTRUCTIONS

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

By Plane

If you want to take your Passoni bicycle with you when you go on a trip by plane, pack it in an appropriate bicycle suitcase (g) or in a bike cardboard box that you can obtain from your Passoni dealer. Special bicycle bags often do not provide sufficient protection for your Passoni bicycle.

Pack the wheels (in particular carbon wheels) in special wheel bags (h) to protect them inside the suitcase or the cardboard box. Do not forget to take the necessary tools, a torque wrench and bits and these operating instructions with you to be able to assemble the Passoni bicycle and to get it ready for use at your destination.

NOTICE

If your cyclocross bicycle or Passoni gravel bike has disc brakes be sure to mount the safety locks before transporting the Passoni bicycle with the wheels dismantled.





GENERAL NOTES ON CARE AND SERVICING

Maintenance and Servicing

Your Passoni dealer will have assembled and adjusted your Passoni bicycle ready for use when you come to collect it. Nevertheless, your Passoni bicycle needs regular servicing (a). Have your local Passoni dealer do the scheduled maintenance work. This is the only way to ensure that all components function safely and reliably for many kilometres/miles.

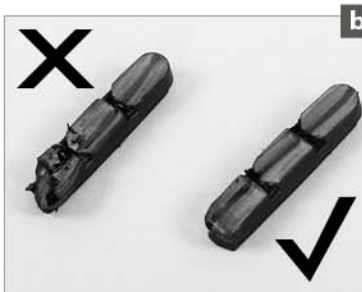
The Passoni bicycle will be due for its first service after 100 to 300 kilometres/60 to 180 miles (category 2 "Sports") or 300 to 450 kilometres/180 to 270 miles (category 1 (ASTM) / 6 (EN)) already or 4 to 12 hours of initial use (category 2 "Sports") or 10 to 15 hours of initial use (category 1 (ASTM) / 6 (EN)) or four to six weeks. The "break-in" period typically involves spokes slightly losing tension or gears becoming out of adjustment, so there is every reason to have your Passoni dealer service the Passoni bicycle at this stage. This "break-in" period is unavoidable. Therefore, remember to make an appointment with your Passoni dealer for the first inspection of your new Passoni bicycle. The first service is very important for both functioning and durability of your Passoni bicycle.

The intended use of the Passoni bicycle includes regular servicing and the replacement of worn out parts in time, e.g. brake pads (b) or Bowden and brake cables (c), and therefore has an influence on the liability for material defects and the warranty, as well.

It is advisable to have your Passoni bicycle serviced regularly by your Passoni dealer after the "break-in" period. If you ride a great deal on poor road surfaces, it will require correspondingly shorter service periods.

⚠ WARNING

- **Servicing and repairs are jobs best left to your Passoni dealer. If you have your Passoni bicycle serviced by anyone else than an expert, you run the risk that parts of your Passoni bicycle will fail. Risk of accident! When working on your Passoni bicycle restrict yourself to jobs for which you are equipped e.g. with a torque wrench including bits and have the necessary knowledge.**
- **If a component needs to be replaced, make it a rule to only use original spare parts (d). Wearing parts of other manufacturers, e.g. brake pads or tyres that are not of identical size, may cause harm to the safety of your Passoni bicycle. Risk of accident!**
- **For your own safety, bring your category 2 "Sports" Passoni bicycle to your Passoni dealer for its first inspection after 100 to 300 kilometres (60 to 180 miles), 4 to 12 hours of initial use or four to six weeks, at the very latest, however, after three months.**
- **For your own safety, bring your category 1 (ASTM) / 6 (EN) Passoni bicycle to your Passoni dealer for its first inspection after 300 to 450 kilometres (180 to 270 miles), 10 to 15 hours of initial use or four to six weeks, at the very latest, however, after three months.**





Cleaning and Caring for the Passoni bicycle

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

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

A much more gentle way of cleaning your Passoni bicycle is with a low pressure water jet or a bucket of water and a sponge or a large brush. Cleaning your Passoni bicycle by hand has another positive side-effect: you may discover defects in the paint (e) as well as worn or defective components at an early stage.

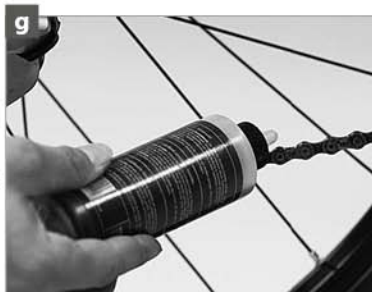
Inspect the chain after you have finished cleaning (f) and oil it, if necessary (g) (see chapter "Chain – Care and Wear"). Apply a coat of standard hard wax on painted, metal and carbon surfaces (except for brake surfaces) (h). Polish the waxed surfaces after drying to give them a nice shine.

⚠ WARNING

- While cleaning, watch out for cracks, scratches, dents as well as bent or discoloured material. Have defective components replaced immediately and touch up paint defects. If you are in doubt or if you have any questions, contact your Passoni dealer.
- Keep cleaning agents and chain oil free of the brake pads, brake discs/rotors and rim sides (brake surfaces). This could render the brake ineffective (see chapter "Brake System")! Never grease or lubricate the clamping areas of a frame made of carbon, e.g. handlebar, stem, seat post and seat tube. Once greased, carbon components may never again ensure reliable clamping.

NOTICE

- Do not clean your Passoni bicycle with a high-pressure water or steam jet and if you do, be sure to keep it at a distance.
- Only use petroleum based solvents for cleaning tough oil or grease stains from paint and carbon surfaces. Never use degreasing agents containing acetone, methyl chloride or the like, or solvent-containing, non-neutral or chemical cleaning agents that could attack the surface!





Sheltering and Storing the Passoni bicycle

If you regularly service your Passoni bicycle during the year, you will not need to take any special precautions when storing it for a short time, apart from securing it against theft. It is advisable to store the Passoni bicycle in a dry and airy place.

There are some things to bear in mind, when putting the Passoni bicycle away for the winter: Inflated tubes tend to gradually lose air when the Passoni bicycle is not used for a long time. If the Passoni bicycle is left standing on flat tyres for an extended period, this can cause damage to the structure of the tyres. It is therefore better to hang the wheels or the entire Passoni bicycle or to check the tyre pressure regularly (a).

Clean the Passoni bicycle (b) and protect it against corrosion. Your Passoni dealer offers a variety of care products, such as spray wax etc. (c).

Dismount the seat post and let dry away possibly penetrated humidity. Spray atomized oil into the seat tube in the case of metal frames only. Shift the gear to the smallest chainring and the smallest sprocket (d). This relaxes both cables and springs.

⚠ WARNING

Never apply grease or oil into a seat tube of a frame made of carbon, unless an aluminium sleeve is inside the frame. If you mount a carbon seat post, do not put any grease on it, even if the frame is made of metal. Once greased, carbon components may never again ensure reliable clamping.

SAFETY INSTRUCTIONS

There is usually minimal waiting time for repairs and servicing at your Passoni dealer during the winter months. What is more, many dealers offer annual checks at a special price. Use the off-season to take your Passoni bicycle to your Passoni dealer for inspection!





SERVICE AND MAINTENANCE SCHEDULE

You should have your Passoni bicycle serviced regularly after the "break-in" period. The schedule given in the table below is a rough guide for cyclists who ride their bike between 2,500 and 3,000 km (1,500 and 1,800 miles) or 60 to 100 hours of use a year.

If you consistently ride more or if you ride a great deal on poor road surfaces, the maintenance periods will shorten accordingly. This applies in particular to cyclocross bicycles and Passoni gravel bikes.

Component	What to do	Before every ride	Monthly	Annually	Other intervals
Lighting	Check function	■			
Tyres	Check pressure	■			
	Check tread and side walls		■		
Brakes (rim brakes)	Check lever travel, wear of brake pads, position of pads relative to rim, if necessary, test brakes in standing	■			
Brakes, brake pads (rim brakes)	Clean		■		
Brake cables, pads, hoses	Visual inspection		■		
Brakes (disc brakes)	Check lever travel, wear of brake pads, check seals, test brakes in standing	■			
Rims (of rim brakes)	Check thickness, replace if necessary				✗ After second set of brake pads at the latest
Fork (rigid)	Check and replace, if necessary				✗ At least every two years
Bottom bracket	Check for bearing play		■		
	Dismount and regrease (cups)			✗	
Chain	Check and grease, if necessary	■			
	Check wear, replace, if necessary				✗ After 1,000 km (600 miles) or 40 hours of use
Crank	Check and retighten, if necessary		■		



Component	What to do	Before every ride	Monthly	Annually	Other intervals
Painted/anodized/carbon surfaces	Polish				■ At least every 6 months
Wheels/spokes	Check for trueness and tension		■		
	True or retighten				✗ If necessary
Handlebar and stem (aluminium and carbon)	Check and replace, if necessary				✗ Every 2 years at the latest
Headset	Check for bearing play		■		
	Regrease			✗	
Metal surfaces	Polish (except: rim sides of rim brakes, rotors)				■ At least every 6 months
Hubs	Check for bearing play		■		
	Regrease			✗	
Pedals (all)	Check for bearing play		■		
Pedals (clipless)	Clean and grease locking mechanism		■		
Seat post/stem	Check bolts		■		
	Disassemble and regrease			✗	
	Carbon: new assembly paste (no grease!)				
Front/rear derailleur	Clean and grease		■		
Quick-releases	Check seat	■			
Bolts and nuts	Check and retighten		■		
Valves	Check seat	■			
Cables gears/brakes	Dismount and regrease			✗	

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

Jobs marked ✗ are best left to your Passoni dealer.



RECOMMENDED TORQUE VALUES

All bolted connections of the bicycle components have to be tightened carefully and checked regularly to ensure the safe and reliable operation of the Passoni bicycle. This is best done with a torque wrench that disengages as soon as the desired torque value is reached or a click-type torque wrench. Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Never exceed the maximum torque value indicated by the manufacturer!

Where no maximum torque value is given start with 2 Nm. Observe the indicated values and follow the enclosed manuals of the component manufacturers.

⚠ WARNING

Always use a torque wrench and do not exceed the maximum torque values! You find the torque values on the components themselves, in the chapter "Recommended Torque Values" or in the possibly enclosed instructions of the component manufacturers. Alternatively, you find them in the download area on the websites of the respective component manufacturers.

Component	Bolted connections	Shimano ¹ (Nm)	SRAM/Avid ² (Nm)	Campagnolo ³ (Nm)
Rear derailleur	Mount (on frame/derailleur hanger)	8–10	8–12	15
	Cable clamp	5–7	4–5	6
	Pulley wheels	2.5–3		
Front derailleur	Mount on frame	5–7	3–7	5 (clamp) 7 (direct mounting)
	Cable clamp	6–7	5–7	5
Brake levers/shifter units	Mount on handlebar	6–8	3–5.5	10
	Flatbar			6
Hub	Quick-release lever	5–7.5		
	Locknut for bearing adjustment of quick-release hubs	15–17		
	Sprocket cluster lock ring	30–50	40	40 (11-speed) 50 (10-speed)
Crank	Crank mount (grease-free square-head)			32–38
	Crank mount (Shimano Octalink)	35–50		
	Crank mount (Shimano Hollowtech II)	12–15		
	Crank mount (Isis)		31–34	
	Splined			42
	Axle fastening bolt Ultra Torque			42–60
	Chainring mount	8–12	8–12	8



Component	Bolted connections	Shimano ¹ (Nm)	SRAM/Avid ² (Nm)	Campagnolo ³ (Nm)
Sealed cartridge bottom bracket	Shell (square-head)	50–70		70
	Shell (Shimano Hollowtech II)	35–50		
	Octalink	50–70		
Pedal	Pedal axle	35–55	47–54	40
Shoe	Cleat	5–6		
Brake	Brake body fastening	8–10		10
	Cable clamp	6–8	6–8	5
	Brake shoe mount	5–7	6–8	8
	Brake pad fixing	1–1.5		
Seat post	Patent clamping (saddle at seat post)	20–29		18–22

These values are reference values of the above-mentioned component manufacturers. Observe the values given in the enclosed manuals of the component manufacturers. These values do not apply to the components of other manufacturers.

¹ <https://si.shimano.com>

² www.sram.com

³ www.campagnolo.com



LEGAL REQUIREMENTS FOR RIDING ON PUBLIC ROADS

In **Great Britain** (as of January 2024)

According to the **Highway Code** in Great Britain your Passoni bicycle must be equipped as follows:

1. Lighting, rear lights, reflectors:

At night your bicycle must have:

- a white front light (e)
- a red rear light
- a red rear reflector
- four amber pedal reflectors (if manufactured after October 1, 1985)

In addition, it should be equipped with:

- a white front reflector
- spoke reflectors
- flashing lights are permitted, a steady front lamp is however recommended.

(Law RVL R regs 13, 18 & 24)

It is not required that the prescribed lighting is mounted upon sale of the bicycle. If it is, however, it must comply with these regulations. Bicycles that are only used with good daylight visibility, such as e.g. road racing bicycles, are exempt from the lighting regulations.



2. Brakes

Every bicycle must be equipped with at least one braking system (f).
(Laws PCUR regs 6 & 10)

3. Signalling devices

It is recommended that a bell be equipped.

4. Cycle helmets

Wearing a cycle helmet which conforms to current regulations in the correct size and securely fastened is recommended.

5. Child transport

There are no rules as to the transport of children with bicycles.

6. Bike trailer lighting

Cycle trailers must be equipped with a red rear light as well as a triangular rear reflector with an ECE mark III or IIIA.

7. Hand held mobile phones

Cycling with a hand held mobile phone is not illegal as such. You could, however, commit an offence of "careless riding" or "riding without due care and consideration". For safety reasons, you are strongly advised against using a mobile phone during cycling.

8. Other issues

Using cycle lanes is not compulsory, but can make your journey safer. You must not cycle on a pavement.

(Laws HA 1835 sect 72 & R(S)A 1984, sect 129)

SAFETY INSTRUCTIONS

For more important information on cycling, see chapter "General Safety Instructions".

For further information see:

www.direct.gov.uk

www.dft.gov.uk

www.ctc.org.uk



WARRANTY AND GUARANTEE

Your Passoni bicycle was manufactured with care and delivered to you by your Passoni dealer fully assembled.

As direct purchaser you have full warranty rights within the first two years after purchase. Contact your Passoni dealer in the event of defects.

To ensure a smooth handling of your claim, it is necessary to present your receipt, your bike card and the handover report. Therefore, be sure to keep these documents in a safe place.

To ensure a long service life and good durability of your Passoni bicycle, use it only for its intended purpose (see chapter **"Before Your First Ride"** and **"Intended Use"**). Observe the permissible weight specifications indicated on the type plate on the Passoni bicycle or in the bike card in these operating instructions. If you are in doubt, contact your Passoni dealer. In addition, you have to follow the manufacturers' mounting instructions of the (above all, the torque values of the bolts) as well as the prescribed maintenance schedule.

Observe the checks and routines listed in this manual or in any other manual enclosed with this delivery (see chapter **"Service and Maintenance Schedule"**) as well as any instructions as to the replacement of safety-relevant components, such as handlebars, brakes etc.

SAFETY INSTRUCTIONS

This warranty law is only valid in the countries that have implemented the EU Directive into national law. Inform yourself about the regulations in your country. In the United Kingdom, see the respective regulations in the Consumer Rights Act 2015 (CRA 2015).

A Note on Wear

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

The components below require regular care and maintenance. Nevertheless, sooner or later they will reach the end of their service life, depending on conditions and intensity of use. Parts that have reached their limit of wear must be replaced.

This concerns:

- Drive chain
- Brake pads
- Brake fluid
- Brake discs/rotors
- Brake cables
- Brake cable housings
- Rims of rim brakes
- Rubber grips
- Chainrings
- Handlebar tape
- Illuminants
- Tyres and inner tubes
- Sprockets
- Saddle covering
- Bowden cables
- Bowden cable housings
- Pulleys
- Lubricants

SAFETY INSTRUCTIONS

Ask your Passoni dealer about any additional guarantee given by the manufacturer of your Passoni bicycle and insist on having it as printed version.



SERVICE SCHEDULE – STAMP FIELDS

1st service

Category 2 “Sports”: After 100–300 kilometres (60–180 miles) or 4–12 hours of use or after three months from date of purchase at the latest

Category 1 (ASTM)/6 (EN): After 300–450 kilometres (180–270 miles) or 10–15 hours of use or after three months from date of purchase at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

2nd service

Category 2 “Sports”: After 2,500 kilometres (1,500 miles) or 100 hours of use or after one year at the latest

Category 1 (ASTM)/6 (EN): After 3,000 kilometres (1,800 miles) or 100 hours of use or after one year at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:



3rd service

Category 2 "Sports": After 5,000 kilometres (3,000 miles) or 200 hours of use or after two years at the latest

Category 1 (ASTM)/6 (EN): After 6,000 kilometres (3,600 miles) or 200 hours of use or after two years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

4th service

Category 2 "Sports": After 7,500 kilometres (4,500 miles) or 300 hours of use or after three years at the latest

Category 1 (ASTM)/6 (EN): After 9,000 kilometres (5,400 miles) or 300 hours of use or after three years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

**5th service**

Category 2 "Sports": After 10,000 kilometres (6,000 miles) or 400 hours of use or after four years at the latest

Category 1 (ASTM)/6 (EN): After 12,000 kilometres (7,200 miles) or 400 hours of use or after four years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

6th service

Category 2 "Sports": After 12,500 kilometres (7,500 miles) or 500 hours of use or after five years at the latest

Category 1 (ASTM)/6 (EN): After 15,000 kilometres (9,000 miles) or 500 hours of use or after five years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

**7th service**

Category 2 "Sports": After 15,000 kilometres (9,000 miles) or 600 hours of use or after six years at the latest

Category 1 (ASTM)/6 (EN): After 18,000 kilometres (10,800 miles) or 600 hours of use or after six years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

8th service

Category 2 "Sports": After 17,500 kilometres (10,500 miles) or 700 hours of use or after seven years at the latest

Category 1 (ASTM)/6 (EN): After 21,000 kilometres (12,600 miles) or 700 hours of use or after seven years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

**9th service**

Category 2 "Sports": After 20,000 kilometres (12,000 miles) or 800 hours of use or after eight years at the latest

Category 1 (ASTM)/6 (EN): After 24,000 kilometres (14,400 miles) or 800 hours of use or after eight years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:

10th service

Category 2 "Sports": After 22,500 kilometres (13,500 miles) or 900 hours of use or after nine years at the latest

Category 1 (ASTM)/6 (EN): After 27,000 kilometres (16,200 miles) or 900 hours of use or after nine years at the latest

Order no.: _____

Date: _____

Mileage: _____

☐ All necessary maintenance work carried out (see service and maintenance schedule); replaced or repaired parts:

Stamp and signature of the Passoni dealer:



“PASSONI” LEGAL WARRANTY

WHO GUARANTEES THE BICYCLE FRAME

Passoni bicycle frames are guaranteed by Passoni Titanio Srl Benefit Company, (“Passoni”), via Po 2, 21871 - Vimercate (MB) - Italy

WHAT AND WHO COVER THE WARRANTY AND FOR THE TIME

Each bicycle frame sold by Passoni to a “consumer” buyer is assisted by the legal guarantee on consumer goods, which covers the lack of conformity which becomes apparent within 24 months from the date of delivery of the goods.

The legal guarantee is the guarantee on the sale of consumer goods provided for by the European Directive 1999/44 / EC, also called “guarantee of conformity”, which protects the consumer in the event that the frame that purchases has defects of conformity with respect to the contract of sale (“Legal Guarantee”).

This legal guarantee covers only those Passoni bicycle frames purchased directly from Passoni or authorized Passoni dealers in Europe.

If you purchased your Passoni bike outside Europe, the specific warranty will be governed by the law of the country in which it was purchased. Passoni guarantees the original owner of this new Passoni bicycle frame that the frame must be free of defective materials and / or work as follows for the entire life of the original owner. This does not mean that these frames are indestructible and will last forever.

It simply means that these frames are covered by the specific terms of this legal warranty.

Important note: to the extent permitted by law, this legal warranty is not in effect unless you are the original owner.

This legal guarantee is not transferable.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY

This legal guarantee will be void in the event of, and does not cover: (1) normal wear and tear (including fatigue results), (2) defects, breakdowns or malfunctions resulting from (a) abuse, misuse, alteration, modification, accident, negligence, descent or acrobatics, (b) improper assembly, installation or maintenance, or (c) other anomalous or improper conditions or uses. If there are other documents that have been included with the purchased Passoni bicycle frame, there may be additional restrictions on what this limited warranty covers.

Please read these documents carefully.

WHAT PASSONI WILL DO TO CORRECT THE PROBLEMS

If Passoni determines that the purchased Passoni bicycle frame is defective and the defect is covered by this legal warranty, Passoni will, at its sole discretion, repair or replace it at Passoni's expense with the same model or a comparable model.

HOW YOU CAN GET THE SERVICE FOR A DEFECTIVE BICYCLE CHASSIS

You must (1) deliver the defective bicycle frame to an authorized Passoni dealer or (2) send the defective bicycle frame to Passoni at the above address.

Caution: warranty repair. In both cases, you must provide the original purchase receipt dated with the serial number of the bicycle frame printed on it. The shipping costs associated with the repair or replacement of the Passoni bicycle frame, both ways, are the responsibility of the user.

EXCLUSIONS FROM THIS LIMITED WARRANTY

The only remedies you have against Passoni for a defective bicycle frame are those described in this legal guarantee (ie repair or replacement of the bicycle frame, as chosen by Passoni).

Any other claims for damages including, but not limited to, incidental or consequential damages, are expressly excluded from this warranty.

This is the only guarantee that Passoni makes on its frames. Any warranties that may be implied by law, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, is limited to the duration of this legal guarantee. No Passoni dealer, agent or employee may extend or modify this legal guarantee and Passoni does not provide other guarantees than those indicated in this legal guarantee.

FRAMES FOR BICYCLES PASSONI EU LEGAL WARRANTY. WARRANTY LAWS OF OTHER STATES.

As a consumer, you may have other legal rights, which may differ from state to state. The laws of some states may not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of implied warranties. Depending on where you live or buy the bicycle frame, some of the exclusions and limitations contained in this legal warranty may not be applicable.

WARRANTY EXTENSION TO 36 MONTHS

The legal guarantee can be extended free of charge from 24 to 36 months if, and only if, within 4 weeks from the date of purchase complete and send the Passoni bicycle frame registration form that you find on the Passoni website: www.passoni.it

If you are unable to register online or do not receive an email confirming registration, you must contact Passoni at the references found on the company website www.passoni.it

IMPORTANT INFORMATION ON THE BICYCLE GUIDE

Cycling, especially mountain biking and / or group riding, is an inherently dangerous activity and the cyclist takes this risk. Proper care and maintenance of the Passoni bicycle frame is the responsibility of the user and may reduce the risk of injury.

AFTERMARKET PRODUCTS

Passoni designs and builds high-end stocks and frames and custom components according to strict specifications. Passoni does not test components made by other manufacturers to determine compatibility or safety when used in combination with Passoni frames. Passoni frames and components may not be compatible with all third-party products or accessories.

The customer assumes all risks associated with the use of third party products with all Passoni frames or components. Passoni, its agents, employees and owners assume no responsibility for personal injury, illness, death, property damage or loss incurred or caused as a result of the Customer's use of third party products with Passoni frames or components.



BIKE CARD

Manufacturer PASSONI TITANIO SRL

Model _____

Frame no. _____

Frame type _____

Frame size _____

Size of wheels and tyres _____

Colour _____

Special features _____

Intended Use

Use in accordance with

- ☐ category 2 "Sports"
☐ category 1 (ASTM F2043-13) / category 6 (EN 17406:2021-11)

Maximum permissible overall weight

Bicycle, rider, luggage and child seat
 or trailer load, if permitted

category 2: 120 kg
 category 1 (ASTM) / 6 (EN): 110 kg

Pannier rack allowed ☐ yes ☐ no

Permissible load _____ kg

Child carrier allowed ☒ no

Trailer allowed ☒ no

Brake levers – Brake assignment

Right lever: ☐ front wheel brake
☐ rear wheel brake

Left lever: ☐ front wheel brake
☐ rear wheel brake

⚠ WARNING

Read at least chapters "Before Your First Ride", "Intended Use" and "Before Every Ride" in these operation instructions.

Stamp and signature of the Passoni dealer

(Hint to the Passoni dealer: Copy the bike card and the handover report and keep one copy in your customer file. Send another copy to the bike manufacturer, if necessary. Make sure the customer confirms by his signature on the handover report that his personal data are made available to the manufacturer.)



HANDOVER REPORT

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

- ☐ Lighting
- ☐ Brakes front and rear
- ☐ Wheels (trueness/spoke tension/tyre pressure)
- ☐ Handlebar/stem (position/bolts with torque wrench)
- ☐ Pedals (adjustment of release force, if necessary)
- ☐ Saddle/seat post (saddle height and position of saddle adjusted to suit customer, bolts with torque wrench)
- ☐ Gears (limit stops!)
- ☐ Bolted connections of add-on parts (with torque wrench)
- ☐ Other routines performed _____
- ☐ Test ride carried out _____

Name
Passoni dealer _____

Street _____

ZIP code/city _____

Phone/Fax _____

E-mail _____

**Delivery date,
stamp,
signature of
Passoni dealer** _____

The customer confirms with his signature that he received the bicycle in proper condition along with the accompanying documents specified below and that he was instructed on the proper use of the bicycle.

- ☐ Manual/operating instructions

Additional instructions

- ☐ Brake system ☐ Seat post, stem ☐ Pedal system
- ☐ Gear system ☐ Others
- ☐ Supplementary instructions "E-bike/EPAC"

Name customer _____

Street _____

ZIP code/city _____

Phone/Fax _____

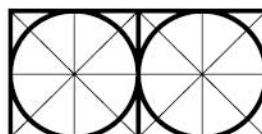
E-mail _____

City, date _____

**Signature of
customer** _____

- ☐ I hereby expressly consent that my above-mentioned data are stored by the Passoni dealer and made available to the manufacturer so that I can be contacted directly e.g. in the event of a recall. The data will not be transmitted to third parties or used otherwise.

**Signature of
customer** _____



PASSONI TITANIO SRL SOCIETÀ BENEFIT
VIA PO 2 – 20871 VIMERCATE MB
CF/P.IVA 03348500137
CAP. SOC. 103.000,00
INFO@PASSONI.IT