PREMIUM

SCO USER MANUAL

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DEAR CUSTOMER

Congratulations with your new SCO Premium bicycle!

This manual contains not just a guide that will help you on how to assemble your new bike, but also some good advice and guidance on how you best maintain your bike and minimize the risk of damage. We recommend that you read the manual and go through the checklist on page 38, so you get off to a good start with your new bike.

Please note that this is a universal manual, and it may therefore contain extra elements, besides those which are relevant for your model.

ENJOY!

SCO Premium

SCO is a traditional Danish brand that started in Odense. SCO Premium bikes are more focused on quality and design. Our bicycles are built for daily use and the normal Danish whether, so you are promised a good bike of good and classic SCO quality. We give ten years frame warranty on all SCO bikes and you are always welcome to contact us and get help at the place the bike was bought if any problems should arise.

YOUR NOTES

Place of purchase:

Date:

Purchase price:

Serial number:

Lock number:

Key number:

SERIAL NUMBER AND RECEIPT

IMPORTANT INFORMATION

It is important to note down the serial number of the bike, in case the bike gets stolen or so. As it is the owners own responsibility to note this down, we have attached a formula on the previous page, so you can easily save the essential information about your new bike. The serial number can be found under the crank or seat tube. The number is engraved in the frame. It is a good idea to save the receipt for the purchase of the bike, as it must be provided on the complaint.

Most insurance companies require a security approved lock to cover theft. If your bike has such a lock, you should save the lock certificate and note down the number of both your lock and your key.

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OVERVIEW OF THE BIKE

WITH INTERNAL GEAR

1. Luggage carrier
2. Back guard
3. Tire
4. Spokes
5. Fork
6. Front mudguard
7. Rim
8. Gear
9. Head tube
10. Chain
11. Blade
12. Chain guard
13. Pedal
14. Pedal arm
15. Bell
16. Saddle
17. Seatpost
18. Seattube
19. Down tube
20. Top tube
21. Mudguard
22. Handlebar
23. Handlebar stem
24. Kickstand
25 Valve

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12

OVERVIEW OF THE BIKE

WITH EXTERNAL GEAR

1. Rear derailleur
2. Brake cable (front)
3. Tire
4. Eger
5. Front brake
6. Fork
7. Front dereailleur
8. Freewheel cassette
9. Rim
10. Head tube
11. Chain
12. Chainring
13. Pedal
14. Pedal arm
15. Saddle
16. Seat post
17. Seat tube
18. Frame
19. Handlebar
20. Handlebar stem
21. Training wheels
22. Valve

ASSEMBLING

TIGHTENING OF BOLTS

You should never over tighten bolts and screws, as it may weaken them. The recommended tightness for the bicycle parts has the following intervals.

TORQUE

Wheels front	20,3 Nm	-	35,0 Nm
Wheels back	27,0 Nm	-	39,2 Nm
Handlebar	13,6 Nm	-	19,6 Nm
Stem	17,0 Nm	-	20,3 Nm
Seat post	6,8 Nm	-	9,0 Nm
Saddle	16,0 Nm	-	24,5 Nm
Cranks	37 Nm	-	40 Nm
Pedals	10,5 Nm		

The torque is measured in Nm (Newton meter) and describes how tight a given bolt is tightened.

FRONT MUDGUARD AND REFLEX

If your bicycle does not already have the front mudguard installed this must be installed. Place the guard between the two arms of the fork and attach it with the corresponding bolt.
Note that for some bicycles the white front reflex must be attached with the same bolt. This is done by first placing the reflex on the bolt, so the reflected surface faces forward. After that it can be continued. The bolt should face forward in the bike's direction.

The washer and the nut are mounted on the back and tightened with appropriate strength.
Please note that there is a legal requirement that the bike must be fitted with reflexes. Look on page 37 to see which reflexes shall be installed as a minimum.

ASSEMBLING

FRONT WHEEL

To mount the front wheel, first loosen the nuts on the shaft so that it can be mounted on the front fork. Place the safety washers in the holes in the fork and tighten the nuts.

There may be certain things to consider depending on which front brake your bike is fitted with. This is described for each brake type in the following sections.

After mounting the front wheel, it may be necessary to adjust the front brake as described under "brake maintenance" from page 44.

V-BRAKES AND CANTILEVER BRAKES
For bicycles with v-brakes or cantilever brakes it may be necessary to lower the brake pipe hanger to be able to mount the wheel.

DISC BRAKES
In case the bicycle has disc brakes, the wheel must be turned so the rotor mounted on the wheel is on the same side as the brake caliper mounted on the front of the bike. If it is a hydraulic disc brake it is important that the brake is not used until the rotor is mounted in the brake caliper.

ROLLER BRAKES
For bicycles with roller brakes, push the brake arm up while placing the wheel in the hub and then tighten the nuts. The brake arm is pushed up again and the brake wire is clicked into the wheel in the brake arm.

ASSEMBLING

WHEELS WITH QUICK RELEASE

If the wheel is mounted with a quick release, this is done by passing the quick release through the wheel hub, so that there is a spring on each side of the front fork. It is important that these springs are placed on the outer side of the fork's arms so that the narrow end of the spring faces the wheel.

Mount the clamping arm by placing it at a 90-degree angle from the front fork and tighten the screws with your fingers. Then the clamping arm is pulled up along the fork.

The quick release must be mounted so the clamping arm is on the left side of the bike when you sit on it.

ASSEMBLING

HANDLEBAR AND STEM

For bicycles with adjustable or normal stem the handlebar is already mounted on the stem, so the only thing you need to do is to mount the free end of the stem into the head tube at the desired height.

To do this first remove all protective packaging. Be aware that the plastic cap can be attached to the free end of the stem which is also removed. If the center expander bolt on the handlebar is protected by a rubber stopper this is also removed temporarily.

Insert the stem into the head tube and tighten the center expander bolt with an Hex key. If the bolt was protected by a rubber stopper reinsert them so the bolt is being protected against the weather. Make sure the minimum mark is not visible over the edge of the head tube.

SETTING

To adjust a handlebar with either adjustable or normal stem loosen the center expander bolt. This is done in order to raise or lower the handlebar to the desired height. The bolt is tightened again when the handlebar has the desired height. It is important that the handlebar is not set higher than the mark on the stem as this may weaken the stem.

The angle of the handlebar can be adjusted by loosening the handlebar's side bolt and the safety bolt on the underside of the angle stem. When the angle is as desired all bolts are tightened again.

BEFORE MOUNTING

If the stem is lubricated with grease before mounting it will be easier to loosen it again, if it is necessary to adjust the height later on.

ASSEMBLING

AHEADSET HANDLEBAR

Some racing bikes and mountain bikes comes with a handlebar with an aheadset stem. On these kinds of bikes, the stem will most often be mounted on delivery, so you only have to adjust, so it faces in the direction you drive.

Make sure the stem is centered and aligned with the front wheel. To secure the stem, then tighten the two screws found on the side near the head tube.
The handlebar itself is mounted by unscrewing the four angular bolts of the stem and placing the handlebar in the fitted bracket. When the handlebar is centered, it is tightened to the desired position by tightening the bolts alternately a little at a time.

SETTING

To set the height of a handlebar with an aheadset, spacers must be used, which should be mounted by an expert. The bolt found on the top of an aheadset stem is not the same as the center expander bolt found on the standard stem. Therefor you should consult an expert when the handlebar height of this type needs adjusting.

However, you can easily set the angle of this type of handlebar simply by loosening the bolts on the front of the stem. In order to achieve the optimum driving position for this kind of handlebar it should be angled so it faced slightly downwards. Remember to tighten the bolts securely once the handlebar has the desired angle. These bolts should be tightened slightly alternately at a time.

ASSEMBLING

SADDLE

For bicycles where the saddle is not pre-mounted on the seat post, this must be done first. The saddle must be mounted in one of the following ways;

SADDLE with bracket
Tighten the saddle bracket to the narrow end of the seat post by tightening the bracket nut.

SADDLE WITH sled
Place the two metal legs of the saddle between the top and bottom parts of the seat posts sled, so that the narrow front of the saddle faces forward. Tighten the sled with the included Hex key.

Loosen the bolt on the seat tube and insert the seat post (with attached saddle). Adjust to the desired height and tighten the bolt again. Make sure that the minimum mark is not visible over the edge of the seat tube.

QUICK RELEASE SADDLE

In case the saddle has quick release, this must be loosened, before you start mounting the saddle. This is done by opening the clamping arm. Now the saddle is mounted and tightened by closing the arm on the quick release again.

The clamping arm must be closed entirely and extra tight when it is being closed. If this is not done sufficiently the saddle may fall down when it is being used. To tighten or loosen the quick release you open the clamping arm.

BEFORE MOUNTING

If the stem is lubricated with grease before mounting it will be easier to loosen it again if it is necessary to adjust the height later on.

ASSEMBLING

SETTING OF SADDLE

To adjust the height of the saddle, loosen the bolt on the side of the seat tube. Now the height can be adjusted as desired. It is important, that the saddle is not raised above the mark on the seat post, as this can damage the frame under load.

To test if the saddle is adjusted at the right height, you can sit on the saddle with one foot on the pedal. Push the pedal to the bottom if not already. If your saddle is adjusted correct your knee will be slightly bent.

If your knee is entirely extended or you cannot reach the pedals, then the saddle must be lowered. If your knee on the other hand is too bent, when your foot is on the pedal, then the saddle must be raised.

Now test if you can reach the ground with the front of your shoe, while sitting on the saddle. It is important to secure that you have the best control of the bike when you get off and on or stop in traffic. On the other hand, if it is a child's bicycle, the child must be able to reach the ground with the hole foot to help with the balance.

It is also possible to adjust the angle of the saddle. It is recommended that the saddle is placed in a horizontal position. To adjust the angle on the saddle with brackets the nut on the side of the saddle bracket is loosened. For saddles with pre-mounted sled, the bolt on the middle of the sled is loosened to adjust the angle.

Remember to tighten all the bolts securely again after adjusting. Also make sure that the minimum mark is not visible over the edge of the seat post.

ASSEMBLING

PEDALS

The pedals are mounted on the pedal arm by just screwing them on. **But be aware that there is a right and left pedal.** This is marked on the pedals with a R for Right and L for left.

Always screw forward in the direction you drive when the pedals are being mounted. If the pedals are mounted on the wrong side the thread is destroyed. If the pedals are mounted incorrectly by the consumer, this is not covered by the warranty.

If the thread of the pedals is lubricated with grease before mounting it is easier to adjust or disassemble the pedals later on.

BRAKES

The brakes are usual pre-mounted on PUCH bicycles. Should it become necessary to disassemble or mount the brakes on your bicycle this is written in the section "Maintenance" from page 44 and onwards.

It can be necessary to adjust the brakes when mounting the front wheel or due to wear. On page 44 and onwards. you can read how simple brake-types are adjusted.

KICKSTAND

If the support leg is not mounted entirely on your bike, this is done easily by mounting the outer loose part of the leg on the pre-mounted part. When the outer part on the support leg is getting screwed on this is done in a clockwise direction.

ASSEMBLING

HUB BRAKE

A hub brake also called a footbrake is often pre-mounted on regular everyday bicycles. This brake-type is pre-mounted from the factory and acquire very little maintenance because of a closed system.

The hub brake works from the rear wheel and is activated by pushing the pedal in the opposite direction and place weight on rear pedal on the braking time. You should not apply all your force at once as blocking the brakes at once can be dangerous. Instead, you should brake lighter first and then gradually put more weight backwards.

GEAR

Your bicycle has pre-mounted gears. Therefore, you only have to maintain them. This is written in section "Maintenance" on page 59 and onwards.

THIS IS HOW YOU USE YOUR GEAR SYSTEM

A gear system makes it easier to ride a bike. Shift gear as early as possible, to keep your natural rhythm.

External gears can handle switching under full load. This is not the case for internal gears. Therefore, you must not shift internal gears while you turn the pedals.

ASSEMBLING

GEAR PROTECTOR

For bicycles with gears it can be a good idea to mount a gear protector. If this is not already mounted it is done this way:

EXTERNAL GEAR:
First unscrew the hub nut. Then place the gear protector in the middle of the washer and nut. Screw on the hub nut again and tighten.

SRAM 7 GEAR

To unmount a gear of this type then loosen the little screw on the side of the click box with your fingers and take it off. Make sure not to twist the box off, as it can damage the push pin.

Remove the red plastic boss and then the pushrod and its sleeve.

Unscrew the hub nut, and the gear protector is mounted so the free end rests on the horizontal part of the frame. The nut is tightened on the rear axle and (push pin, sleeve and boss) is mounted again. Make sure that the (tap of the boss) is turning out. Finally mount the click box and the screw of the box is tightened again.

ACCESSORIES

TRAINING WHEEL

Some children bikes come with training wheels, which can be fitted as needed.

Start by mounting the wheels on the arms. Then screw the outermost rear axle nuts on both sides of wheel off. Let the inner nuts sit, as they hold the wheels in place. Mount the training wheel armon the shaft and the outer nut is tightened again.

For safety reasons, you should regularly tighten the nuts as it minimizes the risk of the training wheels turning unintentionally.

WARNING

Note that a bicycle with training wheels behaves a little differently. As they keep the bike vertical, it is not possible for the bike to tilt in turns as usual. Therefore, please do not turn sharply at high speed on a bicycle with training wheels.

SETTING

When the bike stands upright, the training wheels should not touch the ground. Set the arms so the wheels are 5-6mm above ground. The distance should be the same on both sides of the bike.

ACCESSORIES

CHILD SEAT

To mount a child seat, please refer to the manual that follows with the specific child seat. It is important that you pay attention to the structure of your bicycle, when mounting a children seat.

If your saddle has open and easily accessible springs on the underside, there is a risk that the child may have fingers or toes pinched. If you have a saddle with easily accessible springs these should be shielded.

Rear light
Bell
Front light
Front reflex
Rear Reflex
Reflex in tire
Rear reflex spoke
Reflex in pedal

LEAGAL REQUIREMENT

There are certain legal requirements that your bike must adhere to. It is important to be aware of these things before using your bike. Here are some of the legal requirements that you as a consumer should know about.

1. Your bike must have two working brakes (in the Maintenance section on page 45, you can read how to make sure your brakes are set correctly, also in the long term).

2. It is not allowed to ride more than one on a bike, unless one or two children are under 8 years in seats designed for children. Your local department store can help you to find an approved child seat.

3. Your bike must have a bell and all statutory reflexes (reflexes on the front of the bike, on the back of the bike, on the pedals and on the side of the wheels, either in the spokes or on the tire itself).

4. When riding your bike in the darkness the bike must be equipped with both an approved front light and an approved rear light to ensure that others in traffic can see you. All lamps must be visible at a distance of 300 meters.

CHECK LIST

Before your first bike ride, it's a good idea to review this checklist:

- Are the pedals screwed in correctly?
- Are all bolts and screws on the handlebar and the handlebar stem tightened?
- Are all bolts and screws on the saddle and seat post tightened?
- Are the tires undamaged and properly inflated?
- Are rims and brake pads free off grease, oil and dirt?
- Are the brakes set correctly? (see pages 14-16)
- Does the front wheel sit straight in the front fork, and is it properly clamped?
- Is the chain sufficiently tight? (An overly slack chain can be dangerous as it can jump off and therefore the hub brake will no longer work)
- Are all statutory reflexes intact and clean and are they properly attached? (Statutory reflexes: front and rear, on pedals and on the wheels, either in the spokes or on the tire)

- Is the bike equipped with, or have you brought any lights that work for possible driving in the dark or fog?

- Does the bike have a working bell?

- Check that the load on the bike does not exceed the recommended maximum total weight of 120kg for an adult bike and 60kg for a children's bike. Look at the model leaflet, to see how much of the total weight is the weight of the bike itself.

- Do not load the mounted luggage carrier with more than the maximum load capacity of 25 kg for adult bicycles and 10 kg for children's bicycles.

MAINTENANCE

EXTEND THE LIFE OF YOUR BIKE

Even the best bike needs maintenance to remain in good condition. If you take good care and make sure to store it securely in periods when you do not use it, you will be able to enjoy your new bike for a long time.

To make sure you also get the best out of it in the future, we have made a short guide below for maintenance.

In case of major damages and some forms of adjustments it is necessary to seek help from an expert, but many problems can be prevented by taking good care of the bike. If possible, you should use original spare parts to ensure the quality of the components. This applies especially for safety-critical components such as for example brakes.

MAINTENANCE

CLEANING

You can extend the life of your bike by regularly cleaning and lubricating the bike parts. This should be done by hand, as machines such as high-pressure cleaners, amongst others, can damage the paintwork.

Use a sponge with a suitable detergent instead. Be sure to lubricate all joints and moving parts after cleaning, to reduce the risk of rust. It is recommended that the chain is lubricated with chain oil to increase lifespan and make it run effortless.

POST-TIGHTENING

It is important to check that bolts and screws have not loosened after use. You should regularly tighten them to make sure your bike is safe and that no problems are encountered because of loose components.
To retighten the bolts and screws also gives you the opportunity to inspect parts of the bike.

MAINTENANCE

BRAKES

All bicycles must be equipped with minimum two functional brake systems according to the law. Therefore, it is important that you keep your bikes brakes in good condition.

A hub brake is a closed system, so it does not require the same regular maintenance as the hand operated braking systems. To adjust or repair a hub brake it is recommended that you contact an expert.

It is recommended for rim brakes (cantilever and v-brakes) that the brake joints are regularly lubricated for optimal functionality.

For grip-operated handbrakes, the tightness of the brake cable is usually adjusted using the handle's external adjustment screw. To tighten the cable further adjust the adjusting screw in the direction away from the handlebar, and opposite to loosen the cable.

Be sure to tighten the hub nut afterwards. The cable tightness must be sufficiently tight to ensure full braking performance. It should not be possible to press the brake lever fully down, if it is, the cable tightness must be increased.

See more about the individual brake types in the following sections.

MAINTENANCE

CANTILEVER BRAKES

A cantilever brake works by squeezing a set of brake pads against the rim. The friction that this causes, makes the bike slow down. If the brake pad is worn or if the parts are not set correctly, it lowers the brakes function. Therefore, it is important to ensure that your cantilever brake is in good condition. Always check your brakes before riding your bike, to ensure that the brake pads are not too worn and is correctly adjusted (height and direction) in relationship with the rim. This is adjusted by loosening the angle bolt, and then placing the pads straight on the rim.

Remember to tighten the bolt again afterwards. When pulling the brake lever, it should not be possible to pull it all the way to the handlebar. If so, the brake must be tightened / adjusted.

There are two types of cantilever brakes; side pull brakes and center pull brakes. These should be generally adjusted in the same way.

DISTANCE OF BRAKE PADS

If the brake pads do not sit at the same distance from the rim on both sides, it can be adjusted. To adjust an side pull brake, the centering bolt located on the side where the brake arms meet, is adjusted.

On brakes with center drag, this is done by adjusting the small centering screw found in the bottom of one or both brake arms.

MAINTENANCE

CANTILEVER BRAKES

CABLE TIGHTENING

There are two methods to adjust the cable tightness on the brake.

One for larger coarse adjustments and one for fine-tuning adjustment. Most often it is enough to make use of the fine-tuning method.

Fine tuning: Turn the adjusting screw to fine tune the cable tightness.

For larger adjustments: Loosen the clamp and press both brake pads towards the rim. If there is both a wire clamp on the brake arms and between the main cable and the pull cable, the last mentioned should be used. Pull the brake cable lightly so it tightens or push it further in to loosen the cable. Tighten the cable clamp again and fine tune as described above.

DISC BRAKE

First, check if the brake disc is firmly attached to the hub, and tighten the bolts.

The brake is adjusted using the brakes two mounting bolts. The bolts are attached so they align direction of travel (see picture). Then loosen these bolts enough, so the brake caliper can be moved from side to side by hand. Then clamp the brake lever and gently tighten the two bolts again. If the inner brake pad is dragging on the brake disc, this can be adjusted using the bolt that is placed on the side of the bracket facing towards the wheel.

If the brake pads need to be replaced on your disc brake it is recommended that you seek out for a bike mechanic.

MAINTENANCE

V-BRAKES

V-brakes work by squeezing a set of brake pads against the rim. The friction that results from this, is what causes the bike to slow down in speed. If the brake pad is worn or the parts are not set correctly, it lowers the brake function. It is therefore important to ensure that your V-brake is in good condition.

Always check your brakes before cycling, ensuring that the brake pads are properly adjusted (height and direction) in relation to the rim. Also check that the distance from the brake pad to the rim is same on both sides of the wheel.
When pulling the brake lever at the handlebar, it must not be able to pull all the way into the handlebar. If so, the brake must be adjusted.

There are two parameters that you can adjust your brakes: Cable tightening and the brake pads distance. Each of these parameters also has two adjustment methods: one for larger coarse adjustments and the one to fine tune with. Often it will be enough to use the fine-tuning method.

CABLE TIGHTENING

Fine tuning: The cable tightness can be fine-tuned by tightening the adjusting screw on the handlebar brake levers.

For larger adjustments: Loosen the clamp, press the brake arms together and pull the wire so it slightly tightens. Tighten the wire clamps a bit, but not fully. Squeeze the brake lever on the handlebars to the bottom and then release it again. Now the wire clamp is fully tightened.

MAINTENANCE

V-BRAKES

DISTANCE OF BRAKE PADS

Fine adjustment: The distance from the brake pads to the rim can be adjusted individually by tightening or loosen the adjusting screw at the bottom of the brake lever.

For larger adjustments: Loosen the angle bolt brake arm side. Put a piece of cardboard (1-2mm) thick) between rim and brake pad and pressure the brake arms together. Check that the brake pads sit straight on the rim and tighten the bolt again. You can then release the brake arms and remove the cardboard. Repeat this for the second brake pad.

ROLLER BRAKES

Don't worry about the roller centering on a roller brake. You can adjust the cable both via the grip adjusting screw and via the adjusting screw on brake hub.

If the brake is too tight, simply turn the handlebar adjusting screw clockwise. This is how the cable is loosened.

If the brake is too loose, you should just adjust the screws counterclockwise.

MAINTENANCE

FORK

Bikes with shock absorbing fork, FX mountain bikes, you should make sure to keep the front leg clean and lubricate the joint between the upper tube and the lower legs once or twice a week.

You should give your fork a thorough overhaul a couple of times during the season. You can possibly seek out a professional for this.

MAINTENANCE

CHAIN

The chain of the bike should be lubricated regularly with chain oil to increase life of the chain and make sure that it runs effortlessly.
Failure to lubricate the chain increases the risk of rust, and the chain link can rust, causing that the chain gets harder to ride and wears off more on the gears.

Failure to lubricating the chain it will also become more fragile and the risk off cracking gets higher. Also, make sure the chain is not slack. The maximum it must move is a couple of centimeters up and down from the middle, where it is stretched between the gears. If the chain is too slack, you should seek out a professional to get it customized.

TIRE, TUBES & WHEELS

If you find that the bike has flat tires for a longer period of time, you should check them and make sure that they have not been damaged. It is important, that the wheels of the bike are pumped correctly and are not damaged when you ride your bike.The correct tire pressure is on the side of the tire, the unit Psi or bar. On some tires there are mentioned two different tire pressures, this is usually for driving on an even surface (the highest pressure) and for off-road driving (the lowest pressure).

Please note that some manufacturers also indicate the minimum pressure. Remember to check regularly that there is enough air in the tires, as tires will lose air over time.
You should also make sure to keep the rim clean and regularly check the spokes and make sure they have the same tightening.

MAINTENANCE

ON AND OFF MOUNTING

For easier disassemble or mounting of the wheels, the bike can be turned upside down and balanced on the saddle and handlebars.

See also page 14 that describes how to mount a front wheel.

To disassemble a front wheel, you must loosen both hub nuts and the wheel can then be removed.

If your bike has a rim brake, it could be necessary to lower the brake pipe hanger to be able to mount the front wheel.

If the front wheel is fitted with a quick release, this should simply be loosened, and then the wheel can be disassembled.

For some gear types, the gearbox must be removed before you can remove the rear wheel. This is described for simple gear types from page 58. If there is a bicycle with a rear brake, the bolt on the brake arm must be fully unscrewed. When this is done the hub nuts can be loosened and the wheel removed.

To install a rear wheel, first loosen the hub nuts. Then place the wheel in the chain stay. Pull it as far back as possible, to tighten the chain and tighten the hub nuts.

It is important to check that the rear wheel is mounted straight, before tightening the hub nut. If your bike has a rear brake, the brake lever has to be reassembled. Remember to tighten the bolt on the brake.

MAINTENANCE

TIRE SIZE

If you need to change the tire, you can see the tire size at the side of the tire. Here it is stated in inches and millimeters. You can switch to tires that are wider or narrower than your old tires, but the diameter should fit the rim. The tire size also determines which bike tube to be used.

RIMS WEAR

Be aware that the rim brakes wear out the rim, over time, it can become so thin that it collapses if the rim is not replaced in time. You should therefore, be aware if your rim is worn. If a recess has occurred in the rim, the brake track is a clear sign of heavy wear, and the rim should be changed as soon as possible.

GEAR

There are two main types of gear: Internal and external gears.

Internal gears are all most maintenance-free, because the gear itself is protected from wind and weather, which means no need to adjust them as often.

External gear requires more maintenance than the internal gears as it is an open system and the gear itself is not protected from wind and weather. Maintenance and adjustment of both gear types are described on the following pages.

MAINTENANCE

SRAM 3T GEAR

Start by switching to third gear on the handlebar and turn the pedals a couple of times, to make sure that the bike has gone into gear.

Near the rear wheel's hub, you will find a cable sleeve and a regulating stick. To tighten the gear cable, push the gear pin further into the cable sleeve. Not much force is needed. To loosen the cable, press the metal bracket while adjusting the stick pulled out further. Test all gear positions; switch to each gear and turn the pedals a few times.

If cables are set too tight or too loose, you will hear crackling sound from the chain, or jerky may be experienced while riding your bike. To disassemble this gear type, separate control pin from the gear cable lightly on the metal bracket of the casing.

SRAM S7 GEAR

Start by switching to the fourth gear on the handlebar and turn the pedals to make sure that the bike has gone into gear.

At the gearbox on the hub behind on the rear wheel you will find a "pane". The box shows one red coil. Check that the pane follows the groove that is in the coil. If it does not, it can be adjusted by using the small adjusting screw, which is located where the gear cable and gear box meet. Turn the screw until the two lines aligns.

Test all gear positions; change to each gear and turn the pedals a few laps to make sure all gear works.

MAINTENANCE

To disassemble an SRAM S7 gear (for example for changing the rear wheel) Set the bike in first gear, remember to turn the pedals to be sure it has gone into gear. Then loosen the small screw on the side of the click box with your fingers and the click box is being removed. Make sure not to turn the box off as this can damage the push pin. Remove the red plastic boss and then the push pin and its sleeve.

To reassemble the gear, press pins and sleeve into the hole and the red boss is pushed inward (sounds off a click when its placed).
Make sure the boss pin is facing out. Finally, the click box is mounted, and the box screw is tightened again. Then check if the gear is working properly as described on the previous page.

SHIMANO NEXUS 3 GEAR

Start by switching to another gear on the handlebar and turn the pedals to make sure that the bike has gone into gear. At the gearbox on the hub behind on the rear wheel you will find a sticker with two white markings and a yellow marking unit. Check that the yellow mark is between the two white markings, if not, it can be adjusted by help of the small adjusting screw that is near, where the gear cable and gear box meet. Turn until the yellow mark is between the two white markings.

Test all gear positions; change to each gear and turn the pedals a few laps to make sure all gear works.

MAINTENANCE

To disassemble a Shimano Nexus 3 gear(for example, for changing the rear wheel), set the bike in first gear. Remember to turn the pedals to make sure it's gone in gear. Then loosen the bolt at the back of the gearbox with an Hex key and the gearbox is removed.

Remove the push pin if necessary. To install the gear, insert the push pin first and re-install the gearbox without overloading it too much. Check to see if the gear is functioning as described on the previous page.

SHIMANO NEXUS 7 & 8 GEAR

Start by switching to the fourth gear on the handlebar and turn the pedals a couple of times to make sure that the bike has gone into gear.
At the gearbox by the hub on the rear wheel you will find a sticker with two yellow marks. Check that these two are aligned. If they are not, it can be adjusted by using the small adjusting screw that is mounted on the handlebar where gear cables and shifter meet.

Turn the screw until the yellow marks are aligned. Test all gear positions; change to each gear and turn the pedals a few times to make sure that all gear works.

MAINTENANCE

To disassemble a Shimano Nexus 7/8 gear (for example, for changing the rear wheel) The bike must be set in first gear, remember to turn the pedals to be sure it has gone into gear.

Pull the gear cable near the rear hub. Pull the cable forward in the direction of the handlebar, so it is released from the slide on the frame. Then remove the metal part which is in front of the gear cable of the gearshift units cable holder.

To mount the gear, the metal part of the gear cable must go into the gearshift unit cable holder, which is shaped like a horseshoe. Make sure that the nut is facing out. Insert the cable into the slide and pull it forwards in the direction of the handlebar. Then check whether the gear is working properly.

EXTERNAL GEAR

This gear type has 1-3 gears at the front and 6-11 rear. The outer positions of these are set from the factory side, so it is not necessary to adjust the two screws marked H and L on the rear derailleur.

To adjust an external gear, the chain in front must lie on the center gear if there are three, or the smallest one if there are fewer.

Test how the chain runs for each of the rear gears. If there is a noise, the gear must be adjusted. If not, it is set correctly. The gear is adjusted by using the adjusting screw, which is located where gear cable and rear derailleur meet. When adjusting this screw, it must be done while turning the wheel using the pedals.

MAINTENANCE

The screw is adjusted against the clock, if the chain has trouble shifting to a lower gear. Adjust until the chain change to a larger gear wheel on the rear derailleur.

The screw is adjusted clockwise if the chain has problems shifting to a higher gear. Adjust until the chain changes to a smaller gear on the rear derailleur.

If this adjustment cannot resolve the issue, the cable must be tightened (if the gear does not change to one larger gear wheel) or loosened (if the gear does not shift to a smaller gear wheel). This is done by loosening the nut (wire clamp) holding the gear cable fixed to the rear derailleur and adjust the length. Then tighten the nut again. If you need to replace the gear cable, you should consult a bike mechanic.

REFLEXES

Your bike should have all the necessary reflexes. You can see which reflexes your bike needs to be equipped with on page 37 – Legal requirements

All reflexes must be fully visible and should be cleaned regularly to ensure they can be seen optimally.

If a reflex falls off or is damaged, it should be replaced immediately. It is your responsibility to ensure that your bike complies all legal requirements.

MAINTENANCE

STORAGE

If you do not use your bike for a period of time, you should do following:

- Thoroughly clean the bike before putting it away.
- Chain, wheel hub and other moving parts should be lubricated.
- All chromed and galvanized parts should be treated with corrosion remedy (korrosionsmiddel).
- If you have the opportunity, you should hang your bike on the wall. If this is not an opportunity, you should then check the air pressure in the tires know and then. If a tire is kept in flat condition, it can be damaged.

TRANSPORT

If you have to transport your bike by car, it is a good idea to use either bike carriers or roof mounted bike carriers. Remember to make sure that your bike is securely clamped.

To protect your bike, you should cover it under transport in rainy weather, especially if it is an electric bicycle.

Be aware that if you apply a bike carrier that is mounted on the back of the car, the you must use a lightboard.

SAFE USE OFF YOUR BIKE

It is important to be aware of the condition of the bike when you need it. In addition to having the bike properly assembled as instructed here in the manual, you should also check the bike before each ride, to make sure the bike is ready to use.

Always be aware of your surroundings when you ride your bike, and never use the bike while being influenced by liquor or similar. It is against the law to ride in an affected state.

Be aware that fluttering clothing or accessories can get stuck in the parts of the bike and passing objects along the road may get caught in the wheel while riding your bike.

Also, loose objects on the carrier or in the basket can be caught in the wheels of the bicycle. You should always take precautions when riding your bike and make sure there are no fluttering clothes or items.

SAFETY EQUIPMENT

For your own safety, wear a bicycle helmet, as it reduces the risk of serious injury if you have an accident. It is important that your bicycle helmet is safety approved and fits you. All our shops can help you to find a suitable bicycle helmet for both kids and adults.

WARNING

Like all mechanical components, a bike will be worn. Different components and materials respond differently to abrasion and tightening. There is a risk that a component will suddenly fail near the end of its lifetime. This can cause injury to the cyclist. You should therefore pay close attention to any kind of scratch, crack or discoloration in areas that has been subject to excessive wear or tightening. If you notice such a change, it may be a sign that a components life is about to expire, and you should replace the component.

CHILDREN

It is the parent's responsibility to instruct on how you use the bike most responsibly and how you behave in traffic. Specifically, it is important to teach the child how to use the brakes.

STEERING

If your handlebar is loose, it may reduce your ability to steer the bike effectively. This is dangerous and can lead to accidents in traffic. You should therefore make sure that your handlebar is securely tightened. If the stem has loosened, it can be fixed by simply tightening the bolts as described on page 18 (standard handlebar) and page 21 (aheadset handlebar).

If the stem has loosened in the head tube, this can be improved for ordinary handlebars by tightening the expander bolt. If there is a handlebar with an aheadset, which has loosened at the head tube, you should consult a specialist to have it repaired before using the bike again.

BRAKES

Pay attention to the functioning of the brakes. Your brakes should be able to slow down the bike effectively in traffic.
The brakes will be worn over time, so it is important that you check your brakes regularly.

You can read from page 44 on how to maintain your brakes. Also, be aware that the weather and the condition of the road can have an impact on how your bike responds. A Slippery or wet surface can result in increased braking distance.
The rear brake of the bike works best when the center of gravity is above the rear wheel, A hilly terrain for example can affect braking performance.

The same goes for the front brake. However, you should be aware that a sudden brake with the front brake can result in the driver being thrown over the bike. The bike can also slip the road, if the rear brake is blocked on its way into a turn on the road. You must therefore be aware of which of the brakes you are using in each case.