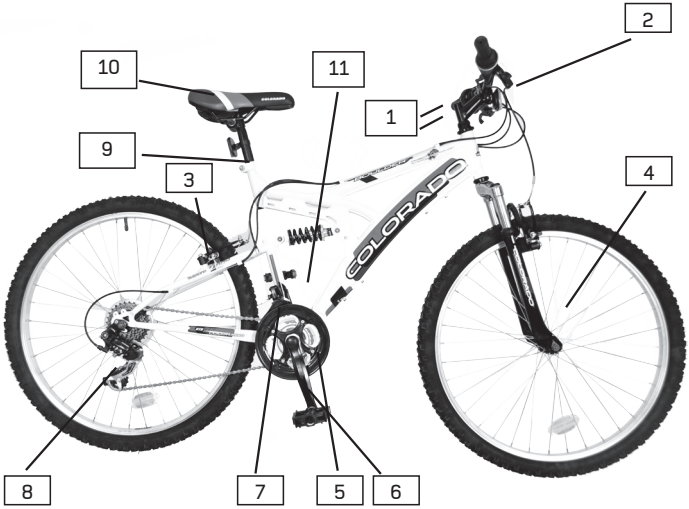
INSTRUCTION MANUAL

HELPLINE CALL FCSI LTD ON 01789 207419

TABLE OF RECOMMENDED TORQUE VALUES



	DESCRIPTION	TORQUE
1	A-Head Steerer Clamp Bolts (where fitted)	20Nm
2	Stem Binder Bolt	15Nm
3	Brake Fixing Bolt (non disc) Applies to both front and rear brake	5Nm
4	Axle Nut QR Axle	30Nm 5Nm
5	Chain Wheel Securing Bolt	38Nm
6	Pedal	40Nm
7	F/Derailleur Cable Fixing Bolt	4Nm
8	R/Derailleur Cable Fixing Bolt	4Nm
9	Seat Pin (Allen Head)	20-35Nm
10	Saddle Clamp Bolt	30Nm
11	F/Derailleur Clamp Bolt	5.5Nm

Warranty

COLORADO bikes are guaranteed against material defects or faults of manufacturing from the date of the original purchase as follows.

Frame & forks.

COLORADO frames and forks are warranted against failure or defects for a period of following years.

1 year on double suspension frames.
1 year on suspension forks.
Lifetime on alloy frame & forks.
5 years on rigid carbon frame & forks.

Component Parts

Component parts are warranted against failure or defects for a period of up to one year.

Note:

1. This warranty applies only to the original owner and is not transferable.
2. Claims under this warranty must be made through the original place of purchase or an authorised dealer. Proof of purchase is required.
3. This warranty does not apply to damage or failure due to accidents, misuse, abuse or neglect. Modification of the frame or components shall void this warranty.
4. This warranty does not cover normal wear and tear, improper assembly by a third party or poor maintenance or installation of parts or accessories not originally intended or compatible with the cycle.

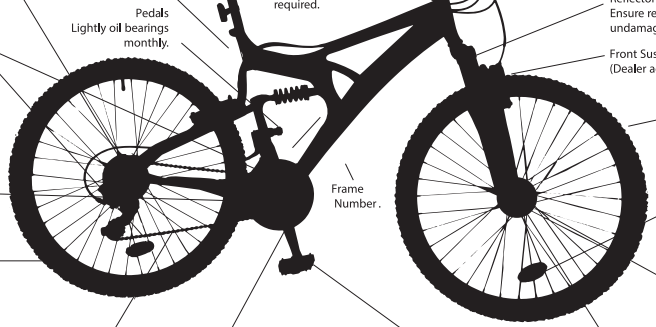
This bicycle has been designed to meet or exceed the requirements relevant to its intended use and categorization within the ISO4210 standard. As part of this process this bicycle has been assigned to one of the specific categories.
misuse, modification, or misunderstanding the intended purpose of the bicycle could result in component failure and potentially serious injury. For your safety and your warranty vaildation you must use your bicycle correctly and as intended by the manufacturer.
If you are in any doubt as to the intended use of your cycle you must clarify it with your retailer before riding.

We recommend a total rider + bike + luggage weight that does not exceed 120Kg. Although exceeding this may not necessarily be unsafe we do advise you to check your intended use with your retailer for clarification.

This warranty does not affect the statutory rights of the consumer, in itself this warranty does not cover incidental or consequential damage.

We recommend you record your cycle serial number stamped on the frame but a far

PARTS DESCRIPTION
ROUTINE MAINTENANCE CHECKS AND LUBRICATION OF TYPICAL BICYCLE



Handlebars
Check handlebar bolt is tight. Check brake levers securely mounted to bars and brakes stop smoothly and efficiently.

Stem Nuts
Ensure stem nuts and bolts are tight.

Seat and Stem Nuts
Be sure seat and stem nuts are tight.

Headset
Remove, clean and regrease bearings yearly, checking if replacements required.

Brakes
Lightly oil exposed cables monthly. Maintain adjustment and replace brake blocks when worn, brake cables when frayed.

Disc Brake if fitted
(Routine maintenance by your dealer recommended).

Reflectors (front & rear)
Ensure reflectors are secure and undamaged. Replace if necessary.

Gears
Front - Rear - Lightly oil moving parts. Maintain adjustments of front and rear derailleurs.

Pedals
Lightly oil bearings monthly.

Front Suspension unit
(Dealer adjustment only)

Half Yearly
Remove and clean, lubricate chain, derailleur gears and all cables. Check and replace as required.

Tyres
Check for cuts and wear. Maintain pressure indicated on tyre wall for maximum efficiency.

Bottom Bracket
Clean, regrease yearly checking for wear.

Frame Number.

Reflectors
Check monthly. Securely fixed.

Wheels
Check that axles are sealed and secured properly. Rims should be kept free from wax, oil, grease and glue. Check for loose or missing spokes.

Disc Brakes if fitted
(Routine maintenance by your dealer recommended.)

Chain
Keep lightly oiled, clean and lubricate regu - larly or as condition dictates (at least every 4th ride).

Cranks
Grease bearings monthly. Check that axle bolts or cotterpin bolts are tight. Check for free play in bottom bracket.
Yearly, remove, clean and regrease hub axles, bottom bracket set and headset.

Reflectors (pedal)
Check all fittings are secure.

Wheel Hubs
Grease bearings monthly. Adjust cones to avoid free play from side to side.

NB
Wash cycle weekly with warm soapy water and polish dry with a soft cloth

YOUR BICYCLE — OWNER'S RESPONSIBILITY

Owner's Responsibility and Important Points

Point 1 Carefully and thoroughly read this manual and follow the instructions.

Point 2 Any major service or adjustments on your bicycle should be carried out by a professional repairer; however if this service is not available and you wish to make adjustments yourself, this manual contains important tips on how to do it.

Point 3 **CAUTION:** Any adjustments you make are entirely your own risk. Caution: To use your bicycle for freestyle and stunt riding, competitive events, off-road use or any similar activities can be dangerous and you are warned that you assume the risk for personal injury, damages or losses incurred from such use. The Retailer shall not be liable to the purchaser of the bicycle or to third parties for consequential or special damages.

Point 4 Bicycles are built with a variety of equipment and accessories, and you should familiarise yourself with their function and purpose, to make sure you can operate them correctly.

This manual is not intended as a comprehensive service or maintenance manual, see your dealer for all service, repair or maintenance queries.

SAFE CYCLING AND SAFETY TIPS

Before you ride your bicycle at any time make sure it is in a safe operating condition. Particularly check that your:-

- Bicycle's nuts, bolts and parts are tight and not worn or damaged.
- Riding position is comfortable.
- Brakes are operating effectively.
- Steering is free with no excessive play.
- Wheels run true and hub bearings are correctly adjusted.
- Wheels are properly secured and locked to frame/fork.
- Tyres are in good condition and inflated to correct pressure.
- Pedals are securely tightened to pedal cranks.
- Gears are correctly adjusted.
- All reflectors are in position.
- Before riding please note that the right hand brake lever operates the front brake (in the U.K), and the left lever operates the rear brake (in the U.K).

After you have made any adjustments to your bicycle, check that all nuts, bolts are securely tightened and cables are free from kinks and fixed securely to the bicycle frame.

Every six months (more frequently if high mileage or subject to heavy use) your bicycle should be professionally checked to ensure that it is in correct and safe working order.

But remember, it is the responsibility of the rider to ensure all parts are in working order, prior to riding the bike.

When Riding:

- Be aware of and obey current traffic regulations.
- Always obey all traffic regulations.
- Know and observe all local laws and rules for bicycles.
- Give clear hand signals in good time to warn other road users of your intentions.
- Be aware of vehicles pulling in or out of traffic and for doors being opened on parked cars.
- Always keep both your hands on the handlebars and your feet on the pedals and also sit correctly on the seat at all times.
- Wear a protective cycling helmet and make sure no loose clothes can catch in your wheels or chain.
- Take care to ride at a speed to suit the conditions and extra care should be taken when riding on uneven surfaces, loose sand or gravel. Be alert and avoid potholes, drain covers and grates or other road hazards.

Do Nots

- Do not ride on same side of road as oncoming traffic.
- Do not ride two abreast.
- Do not carry a passenger unless cycle is equipped to do so.
- Do not swerve in and out of traffic.
- Do not hang items over the handlebars to impede steering or catch in the front wheel.
- Do not hold on to another vehicle.
- Do not ride too close behind another vehicle.

Caution: Wet Weather Riding

No brakes work as well under wet or icy conditions as they do under dry conditions. In wet weather special precautions must be taken to assure safe stopping. Ride slower than normal and apply your brakes well in advance of anticipated stops.

Caution: Night Riding

If you intend to ride on public roads, especially in the dark hours you should ensure that your cycle is equipped with any legally required parts such as reflectors and lights.

Check that the reflectors are firmly secured in their correct position and clean and not obscured. Damaged reflectors must be replaced immediately.

General Suspension Units Notes

Your cycle may be fitted with suspension units built into parts of the frame and forks We recommend these are serviced by your dealer as required. More information may be found in the suspension manufacturers details supplied with your cycle.

Riding Position

It is important that you and your bicycle are fitted to each other, not only for comfort and riding ease but for control and safety. Normally your Dealer will custom fit your bicycle to you but the following few pages should help you to find your most comfortable, safe and efficient position.

SEAT

Seat Adjustment

Loosen the nut on the seat-post clamp enough to allow the saddle to move forward and back. The seat can then be aligned forward and back and the angle can also be adjusted (it is recommended that the seat be parallel to the ground).

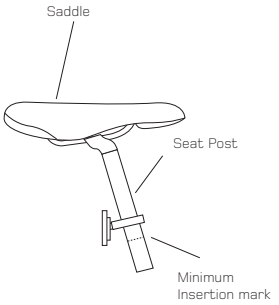
To adjust the seat up and down, loosen the binder-bolt on the seat tube, position the seat and re-tighten the binder-bolt.

To adjust the saddle height for comfortable, safe riding you should release the seat pin clamp mechanism with the tool provided and slide the seat post up and down to a position whereby the riders leg is not quite fully extended at the lowest point of the pedal stroke. This will give you the most efficient pedalling action. You may wish to tailor this to allow for, the use of various footwear, personal mobility, and the ease of mounting and dismounting. Retighten the seat pillar clamp mechanism so that the saddle is securely held in position before riding.

CAUTION

The seat pillar has a minimum insertion mark and this should not be visible. Always ensure this mark is within the frame. Component and /or frame failure can occur if the seat post is not inserted far enough and serious injury could result.

If in doubt contact your retailer.



Warning: Bicycle should not be ridden if seat adjustments are not properly tightened.

HANDLEBARS AND STEMS

As your cycle may be fitted with a standard 'quill' stem or an A-Head stem, you must always check that all the bolts are tight before cycling.

Standard Stem: Loosen expander bolt so that expander wedge is not tight in bottom of handlebar stem. Gently tap the top of the expander bolt to further loosen the wedge if necessary. When the expander wedge is loose, move the handlebars up or down until you find the optimum height at which you can easily reach the brake levers and comfortably grasp the handlebars. Usually this height is level with, or slightly lower than, the top of the saddle. Be sure the stem is in line with the front wheel.

When desirable height has been achieved, align the handlebar with the front wheel and securely tighten expander bolt.

Caution: It is extremely important to tighten the expander bolt sufficiently, so that when the wheel is held between your legs and the handlebars are twisted, the handlebars do not move. Do not over tighten, as it may increase risk of injury to the rider. Position grip portion of handlebars horizontally and securely tighten the binder bolt.

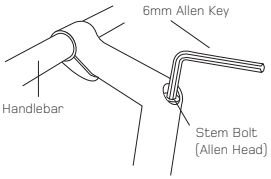
Note: Whenever the handlebar stem is removed from the head tube then the expander bolt should be lightly greased.
A-Head stem: The height of the extension on A-head systems can be altered in 2 ways either by disassembly of the bars and flipping the extension over. This gives a simple up or down position of the extension angle or move the position of the extension spacers.

1. Remove compression cap and bolt.
2. Loosen clamp bolts that secure the extension to the steerer.
3. Remove the extension from steerer fit extra spacer washers or remove them under the extension. This adjustment is limited as the compression bolt must be able to engage the thread inside the steerer. Also the clamp bolts must act onto the steerer directly.
4. If lowering the extension put the spacers you remove back on top of the extension and under the compression cap. this saves re cutting the steerer.
5. Re tighten the compression cap to take slack up from the headset bearings.
6. Re tighten the steerer clamp bolts to lock everything in position.

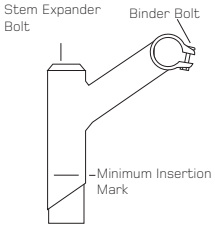
Caution: Do not over tighten the top compression bolt, this should be pre-set to eliminate bearing play, overtightening will cause premature wear.

If in doubt contact your retailer for service.

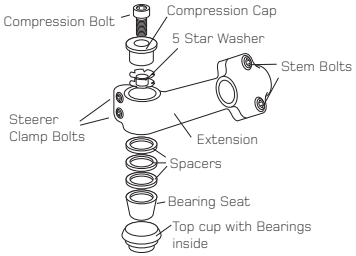
Recessed Type



Standard Stem



A-Head Type



BRAKES

WARNING

For safe riding it is important to completely understand the operation of your bicycle's brake system. Improper use of your bicycle's brake system may result in a loss of control or an accident, which could lead to severe injury. Because each bicycle may handle differently, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. This can be done by consulting your professional bicycle dealer and this owner's manual, and by practicing your riding and braking technique.

There are two brake mechanisms working independently. One on the front wheel and the other on the rear wheel. The brakes are operated by hand levers fastened to the handlebars. The right lever controls the front brake and the left lever controls the rear brake.

To stop with safety:

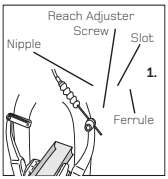
1. Operate the rear brake (left lever) slightly before the front brake (right lever).
2. Apply firm pressure to both front and rear brake levers.
   Caution: If the front brake is applied with too much pressure, the rider may be thrown off the bicycle.
3. Never apply the front brake on a turn. This is especially dangerous when cornering or riding on slippery or loose surface roads.
4. Brakes are less effective in wet weather. Ride slower and allow more distance for stopping.
5. Do not ride your bicycle if the braking system is not working correctly. If you are in doubt, take your bicycle to your dealer.

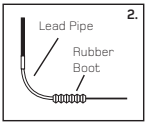
BRAKE MAINTENANCE

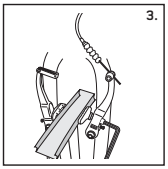
1. Check cables are corrosion free and lubricated to maintain smooth function.
2. Check all cables are free of kinks or frayed section, replace as necessary.
3. From time to time check all the retaining bolts are secure including those of the pads.
4. Replace lost cable end protectors to avoid cables fraying.
5. To assure smooth braking, wheels must run true and be correctly adjusted, with the rim brake tracks free from dents and kinks. The brake blocks should be in correct alignment with the rim brake track. See your dealer if you are in any doubt regarding wheel and brake adjustment.
6. We recommend that only genuine replacement parts are used for safety critical components like brake friction pads and cables. if in doubt consult your retailer.

'V' BRAKE ADJUSTMENT

Although every effort has been made to ensure the brakes are set in a manner that will ensure minimal re-adjustment prior to riding it is not possible to prevent transit movement or disturbance when unpacking. In addition to the 5mm and 6mm allen key wrenches and a multi metric spanner included with your cycle you will find the following tools useful for correct assembly and adjustment of your cycle; a small adjustable wrench (up to 20mm), a pair of pliers with wire cutting facility, a small cross cut screwdriver, and a small flat blade screwdriver. For certain maintenance and replacement work specific cycle tools are needed, if in any doubt contact your cycle supplier.





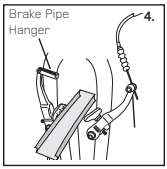


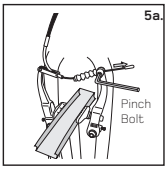
Below are simple instructions for general brake setting.

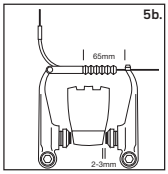
1. If the cable nipple is not located in to its housing in the lever then simply align the slots in the cable adjuster with the slot in the brake body and fit the nipple into the housing. Pull the cable into position through the slots and turn the adjuster sufficient to disrupt slot alignment (take care the ferrule is located into the cable adjuster.)

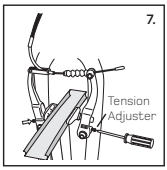
2. Ensure the fittings (lead pipe and rubber boot) are in position at the brake end of the cable.

3. Loosen the brake pad retaining nut so the pad can move freely then push the brake arm so that the pad can be positioned with its surface parallel to the rim to keep the pad away from the tyre (Take care to match the curve of the rim with any curvature along the length of the pads. Tighten the pad in position (6-8Nm). Repeat on the left and on the right side.









4. Locate the brake cable wire into position behind the pinch bolt (some have a hole to thread the wire through). Loosely secure the wire in position.

5. Locate the curved lead pipe into the brake lead pipe hanger. Loosen the pinch bolt and pull the wire through so that the pads come into contact with the rim surface (5a). Set the pads to have 2-3mm of clearance to the rim on both sides (5b). Tighten the pinch bolt securely (6-8Nm) and check that the wire is not damaged or cut through. The distance between the lead pipe tip and the pinch bolt should not be less than 65mm. You can exchange positions of the thick and thin washers behind the pads to achieve this.

6. Test the brake function, the brake lever should move through no more than approx 20% - 30% of its travel before the pads are firmly against the rim.

7. If you find when you pull the brake lever that one pad hits the rim before the other. You will need to alter the spring tension in the brake arms. You can increase spring tension by screwing the adjuster in clockwise and reduce by turning anti clockwise. The pad that hits first needs the tension reducing, or you can increase the tension in the opposing arm (judge this by the relative tension adjuster positions). It is wise to first check that the wheel is centrally located in the frame or forks before commencing with this adjustment.

8. New brake cables will stretch; this can be adjusted by pulling more cable through the pinch bolt or by using the cable adjuster at the lever. Take care if you screw the adjuster outwards to return the adjuster locking ring so it is firmly up against the brake lever body. IT IS NOT SAFE TO RELY UPON THE THREAD OF THE LEVER ALONE TO SUPPORT BRAKING FORCES.

9. It is possible to alter the rest position of the brake lever by screwing in the reach adjuster screw which pushes the lever nearer to the handlebars. If you utilise this function take care to perform all the adjustments from your preferred rest position. Be aware that this adjustment uses up brake lever potential travel and requires more regular maintenance and fine adjustment of the brake system.

10. After all the adjustments are finished cut the excess cable from the end of the outer wire and fit a cable end protector.

11. Before riding your cycle check for correct brake function.

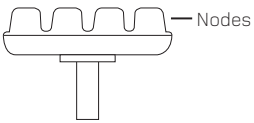
12. We strongly recommend if you experience any difficulty with these adjustments that you contact your supplier.

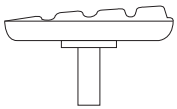
13. UNDER NO CIRCUMSTANCES SHOULD YOU RIDE YOUR CYCLE IF YOU SUSPECT THE BRAKES ARE NOT PERFORMING IN A SAFE CORRECT MANNER. Always seek professional advice from your supplier or cycle repairer should you have any doubts on this matter.

Brake systems that apply force through the direct action of friction material onto the rim will of course create wear of the rim wall..
A thin v shaped groove is often cut into the braking surface of the rim. As the rim wears away then this groove disappears indicating that the rim is becoming worn. You should replace your rim before the safety groove disappears.
Some rims employ other methods to show when they are becoming seriously worn. You should familiarise yourself with the method used on your bike. If in doubt consult your retailer.

PAD REPLACEMENT

As the brake pads wear in normal use you will find that lever travel increase before the pads are against the rim.
You can follow the adjustments outlined in point 7, 8 and 10 to take up this wear. Pads should be replaced when they are worn to the 'wear limit line'. If this is not indicated or not visible you should replace the pads when you are either; unable to meet the adjustment criteria above or the pad surface nodes are worn away over ANY of the pad area.





Replace when nodes worn out over any surface

CHAIN TENSION

If your cycle has a single rear gear sprocket (internal gears or single speed cycles). You may need to adjust the chain tension from time to time or after rear wheel removal. To adjust the chain tension correctly both wheel retaining nuts should be loose. Pull the wheel back into the frame dropouts to take up the chain slack. Keep the wheel central between the chainstays and alternately tighten the wheel retaining nuts, this will help maintain the central position. The chain is correctly tensioned if there is between 4-10mm total of vertical play, any less and you risk tight spots in the chain any more and the chain can become too loose and may lead to premature wear or failure.

BRAKE MAINTENANCE — Disc Brakes

You cycle may arrive with factory fitted disc brakes, the very latest in braking technology.
There are two types as referred to below,

Mechanical disc brakes
These are operated by a standard cable and brake levers to actuate the brake pads against the disc. These brakes will require periodical adjustment as the brake pads wear, for detailed instructions on this adjustment please consult the brake specific leaflet included with the cycle. If in any doubt please consult you dealer for further advice.
In addition you should always check brake function and adjustment regularly and ensure the brake lever and brake cable are in perfect condition before riding. Do not touch the disc brake rotor or calliper immediately after riding, as these may become hot!

Hydraulic disc brakes
These use dedicated brake levers, and brake fluid to actuate the brake pads against the disc. Some types of disc brakes are self adjusting for wear, but some however require periodical adjustment to compensate for pad wear. Please consult the brake specific leaflet included with the cycle for more information. If in any doubt please consult your dealer for further advice.
We recommend all maintenance is carried out by a competent mechanic at your local dealer.
Regulary inspect the brake pads to ensure they have suffiecient brake material available for safe braking and look for any signs of uneven wear that could comprimise brake function on your bike if in doubt consult your dealer.

GATES CARBON DRIVETM (GCD)

Crimping Twisting Back bending Inverting Zip tieing

Warnings:

1. The GCD products are exclusively OEM parts or replacement parts for manufacturers of bicycles!
2. The GCD may only be installed at a suitably manufactured, prepared and tested frame!
3. The manufacturer is responsible for the professional assembling of the product!
4. The manufacturer is required to upgrade his manuals with the GCD warnings and instructions.
5. Only use the tools of the UT GmbH or GATES for the assembly and testing of the belt tension!
6. The manufacturer is responsible for the selection of the required parts, according to the respective kind of use (applications)!
7. The GCD should not be used under extreme conditions (mud, clay, snow). This can lead to excessive wear, or also damage the belt!
8. The GCD can not be used above its wear limit!
9. The use of an idler pulley is forbidden!
10. The installation or replacement of worn parts is carried out by qualified personnel only!
11. Because of safety reasons, we can not take back a shipped belt for credit note!
12. An already installed GCD product can not be taken back for credit note!
13. Please check first the manuals here: http://manual.carbondrive.net (Rohloff-Manual)!
14. Please check our warranty here: http://manual.carbondrive.net !

If you have further questions concerning the Gates Carbon Drive after reading the information above, please contact your dealer or us.
http://manual.carbondrive.net

http://manual.carbondrive.net

DERAILLEUR GEARS INTRODUCTION

The derailleur gear is so named because it works on the derailing principle to move the chain from one sprocket to another. The number of gears is determined by multiplying the number of sprockets on the rear freewheel by the number of chainrings on the front crank set.

By using different combinations of sprocket and chainwheel sizes, a wide range of gear ratios are available. The highest gear is when the large chainwheel is coupled with the small sprocket and the lowest gear is when the small chainwheel is combined with the largest rear sprocket.

DERAILLEUR GEAR MAINTENANCE

To help ensure that your derailleur gear works efficiently and to prolong its life, it must be kept clean and free from excess dirt build up and should be properly lubricated.

GEAR CHANGING

The rider's left gear lever controls the front derailleur and chain wheels.

The right gear lever controls the rear derailleur and sprockets.

The large rear sprockets generate low gears for hill climbing. The small rear sprockets develop high gear ratios for speed work and downhill riding.

The small front chainring produces low gear ratios while the larger front chainrings produce higher gear ratios.

To operate your derailleur gear system efficiently and reduce damage, wear and reduce noise to a minimum, avoid using the maximum crossover gear ratios of large chainring/large rear sprocket, small chainring/small rear sprocket.

Caution: For positive gear selection, observe these four precautions:

1. Change only when pedals and wheels are moving in a forward motion.
2. Reduce pedal pressure while changing gears.
3. Never back pedal when changing gear.
4. Never force the gear levers.

Gear selection should be made in anticipation of need since forward motion of the bicycle is required when changing gear. It is advisable to change to a low gear before stopping in order to be in the proper gear when you start up. On hills, change gear early while still maintaining forward pedalling speed.

GEAR ADJUSTMENT

Follow the specific instructions for your cycle system included on a seperate leaflet. The following tips may be of assistance in diagnosis of the fault and will be useful information to pass on to whoever is adjusting the gears.

GEAR ADJUSTMENT

We strongly suggest that you return your bicycle to your dealer for gear adjustments. However, in case of emergency and for minor adjustments, the fault finding chart should help you.

Finding and Correcting Problems

REAR

Problem	Cause	Cure	WARNING
1. Changing from gear selected without touching gear lever	1. Improper tension on gear levers.	Tighten gear tension lever screws.	Do not tighten so tight you unable to change gear. Do not lubricate as levers work on friction.
	2. Cable slip	Tighten cable pinch bolt.	Ensure cable adjustment is correct before tightening. Ensure tension in gear cable is not acting as a stop.
2. Chain throwing off the small sprocket toward frame or not riding on sprocket or not reaching large sprocket.	1. Incorrect setting of high gear adjustment screw.	Readjust	Ensure tension in gear cable is not acting as a stop.
3. Chain throwing off the large sprocket toward wheel or not riding on sprocket or not reaching large sprocket	1. Incorrect setting of low gear adjustment screw	Readjust	Ensure that the chain never derails towards the wheel as extensive damage can be incurred.
4. Gear lever engages lever stop before low gear is obtained.	1. Too much slack in cable	Readjust cable	Ensure cable is not used as a stop

FRONT

1. Changing from large to small chainwheel sprocket without touching gear lever	1. Improper tension on gear levers	Tighten gear tension lever screws.	Do not tighten so tight you are unable to change gear. Do not lubricate as levers work on friction
2. Chain throwing off large chainwheel or not engaging chainwheel	1 Incorrect setting of outer chainwheel adjust screw	Readjust.	
3. Chainwheel throwing off small chainwheel or not engaging chainwheel	1 Incorrect setting of inner chainwheel adjust screw	Readjust.	

TYRE CARE AND WHEEL ADJUSTMENTS CONTINUED

QUICK RELEASE FRONT WHEEL

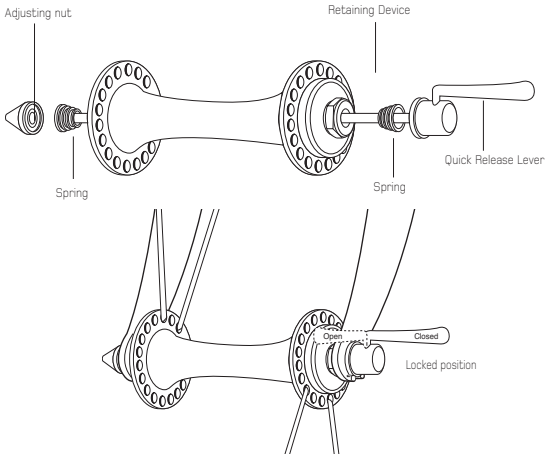
1. To remove the front wheel, first release the front wheel brake. The release the quick-release lever on the axle and pull the wheel from the forks.

2. To install, fit wheel into forks with quick release lever on the left side. Close quick-release, and tighten adjuster until snug. Release quick-release lever and further tighten adjuster approximately 3/4 of a turn. Lock and check that the quick-release has embossed the fork ends. It may be necessary to tighten or loosen the adjuster slightly. Make certain to reset the quick-release front brake to ensure proper operation.

3. Wheel must be clear frame and fork by at least 1/16".

4. The wheel should turn freely and have very little side-play.

5. Check quick-release lever is correct and fully locked position before each ride.



***Warning! Do not attempt to ride the cycle until you are absolutely sure that the quick release lever is fully closed and securely tightened.**

QUICK RELEASE REAR WHEEL

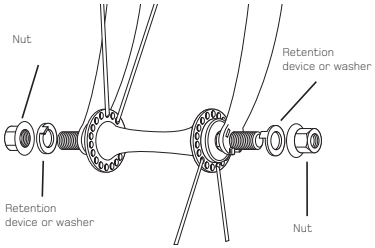
Operation and adjustment is as the rear but we recommend that you select the smallest chainring and rear freewheel sprocket as this will give you the most free chain and allow you to manouvere the wheel out of the rear of the frame with minimum interference from the drive system.

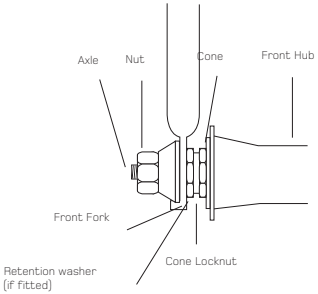
STANDARD WHEEL ADJUSTMENT & REMOVAL

To Remove Rear Wheel
Move the chain onto the smallest rear sprocket. Disengage the brake quick release lever if your bicycle is so equipped. Loosen both axle nuts by turning in a counter clockwise direction. Pull the derailleur mechanism gear for additional clearance. Remove the rear wheel by sliding forward and out of the frame.
To install wheel, locate the top section of the chain on the small sprocket and replace the wheel into the frame by pushing back and centralising between the chainstays. While holding the wheel in this position, tighten the axle nuts in a clockwise direction. The wheel should turn freely and have very little side play.
Reset rear brake quick release mechanism and check brake for proper operation.

To Remove Front Wheel
Remove axle nuts, washers, and axle retention device if fitted. The axle cone bearing adjustment should permit smooth rotation of wheel. Cone locknut should be securely fastened against axle cone to prevent loosening. Place the front wheel between the fork blades with axle retention device and the projecting prongs of the retention device securely fitting the slot in the fork or with standard washers securely placed in position on to the wheel axle in the place of the retention washer. Replace locking washers and nuts at both ends gradually and alternately in order to keep the wheel centered.
Caution:

Front wheel must be installed with retention devices securely placed into slots of fork blades or washers if fitted. This will ensure positive locking of front wheel to front fork.





COTTERLESS CRANKS ADJUSTMENT
IMPORTANT

It is strongly recommended that the tightness of the nuts be checked after the first two weeks of use and a maximum of three monthly intervals thereafter. Failure to do so may cause permanent damage to the precision made components.

The adjustment should be made using a torque wrench fitted with a suitably sized spanner having first removed the dust cap. Torque setting 38Nm (320 lbs./ ins.) (30 lbs./ ft.)

BIKE CARE

GENERAL MAINTENANCE

WARNING: As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatique in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injuries to the rider. Any form of crack, scratched or change of colouring in highly stressed areas indicate that the life of the components has been reached and it should be replaced. We recommend that only genuine replacement parts are used for safety critical components.

CHAIN MAINTENANCE

When you hear the disconcerting scrunch of "chain sucking" and it feels as if a stick has been jammed through your chainrings, stop pedalling immediately. Get off and turn the crank backward to free the chain. Otherwise, you risk damage to the chain, chainring, and chainstay.

Extreme chain angles , such as combining the largest rear cog with the large chainring (or smallest cog with the small chainring), may never run quietly or smoothly, which is one reason they shouldn't be used. Another reason not to use these gear combinations: It could cause additional wear on your drivetrain.

If possible, lube your chain 24 hours before riding. This will allow the lube's liquid carrier to evaporate and keep your drivetrain cleaner. We recommend to lube the chain after every 4th ride.

Hose your bike after riding in the rain to remove most of the grit. Then dry it with a towel, and spray lubrication into derailleur and brake pivot points and where cables enter or exit their housings.

The most important rule of mountain bike maintenance is frequent cleaning. Dirt acts as a grinding compound when it gets between moving parts. In muddy or sandy conditions, hose down the bike after every ride.

WHEELS AND TYRES

Carry a patch kit and a spare tube, so you're not hopelessly stranded if you have two flats on a ride. Also, carry a spare tube in the rain. Flats occur more frequently, and it's difficult to apply patches when it's wet.

The patches in most tire repair kits have foil on one side and plastic on the other. the surface under the foil goes against the tube(after glue has been applied) and then the plastic is peeled off.

When a tire is properly installed, its bead (the thin line molded into the rubber just above the rim) should not bob when the wheel spins. However, if the line between the tyre's side wall and black tread wobbles, don't worry-most tires have some irregularity and it won't affect performance.

At least once a month, inspect each tyre's tread for embedded glass or other debris. Potential puncture producers can often be removed before they work through the tire casing to the tube.

When fixing a flat, carefully feel around the inside of the tire. Whatever caused the puncture may still be lodged through the tread, ready to strike again.

TYRE CARE

To obtain maximum life and full benefit from your tyres, it is essential to maintain the recommended pressure indicated on the tyre sidewall.
Unnecessary hard braking and skidding greatly reduces tyre life. Make sure your tyres do not come into contact with oil, petrol, paraffin or other rubber solvents.
Make sure that your wheels run true and are in correct alignment to avoid chafing the tyre sidewall against the bicycle frame or fork tubes.
Tyres should regularly be inspected for wear and cuts. Check that the tyre tread pattern is clearly showing all around the outside edge of the tyre. Check there are not any breaks, cuts or uneven wear in the tyre. Tyres should be replaced if damaged.
Tyre punctures can be caused by careless riding over sharp stones, holes in the road, or by hitting curbstones
If you are storing your bicycle for a long period of time, it is advisable to store the machine with the tyres off the ground to prevent them from becoming distorted.
To inflate tyres, a foot pump or normal bicycle inflator fitted with a suitable valve connector should be used along with an accurate tyre pressure gauge.
Wheels should be checked regularly for spoke tension. Perform this check more frequently if the bicycle is used on rough roads.

If a spoke breaks, stop right away and remove it or twist it around its neighbours. A flapping rear-wheel spoke can snag the derailleur and cause lots more damage.

Presta valves may stick closed preventing your pump from working. The solution is simple. Before inflating a tire, unscrew the valve and fully depress it twice, releasing a small amount of air. This frees the valve and allows easy inflation.

RAINY WEATHER

Wear bright yellow or orange to be visible to motorists.

Put a visor or cap under your helmet to keep rain out of your eyes.

Install lightweight plastic or aluminium fenders to keep dirty road water off you and your bike.

Keep your frame waxed and your drivetrain well lubricated.

When you end your rainy day ride, immediately wipe your bike down with a towel, the lubricate the chain and use a water-dispersing spray, such as WD-40, on all cables, housings, and the pivot points of the brake and gear systems.

LOCKS

U-locks are easy to carry and hard to bust. Lock the frame and both wheels to a fixed object and make sure the bike can't simply be lifted over it.

TEST RIDES

After making the necessary adjustments to your position, minor aches and pains may develop before your body adapts to its new riding posture. resist the temptation to keep fiddling for four or five rides.

BICYCLES STANDARDS

Roux bikes are manufactured to comply with ISO 4210 -2 this covers city and trekking, young adult, mountain and racing bicycles. This part of ISO 4210 does not apply to specialized types of bicycle, such as delivery bicycles, recumbent bicycles, tandems, BMX bicycles, and bicycles designed and equipped for use in severe applications such as sanctioned competition events, stunting, or aerobatic maneuvers.
Electricaly assited cycles (pedalecs) having electrical components comply with EN 15194 in this respect