

MENDIZ

USER'S GUIDE

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INTRODUCTION

This Mendiz Bicycle user manual contains all the necessary information so that you can enjoy your bicycle in a safe and correct way. Compliance with all warnings and indications contained in this manual will always depend on the end user. In the case of minors, the responsibility will fall on the legal guardian.

However, Mendiz is not responsible for external factors associated with the practice of cycling and that affect the safety of the user. The state of the terrain, the personal conditions of the cyclist or compliance with traffic regulations are variables that this manual does not cover. Zero risk in cycling does not exist and you must be aware that there will always be a risk of an accident.

Mendiz reminds you that the use of a protective helmet on interurban roads is mandatory, as well as the use of the corresponding protections and accessories.

This manual aims to cover the factors inherent to the state and use of the bicycle by the user, providing help and advice to the client on the correct use, maintenance, and good conservation.

Bicicletas Mendiz strongly recommends going to a brand dealer if you don't understand any explanation about the bike. Mendiz also recommends the use of professional and appropriate tools for handling its settings, as well as going to a professional for it.

Mendiz offers several ways of contacting the company to its suppliers and customers: Via e-mail through info@bicismendiz.com and also by telephone 945 29 05 00.

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SYMBOLOLOGY

In this User Manual specific symbology will be used to better understand the explanations. Special attention should be paid to correctly understand.



Indicates actions required to avoid imminent danger that may put physical integrity at risk.



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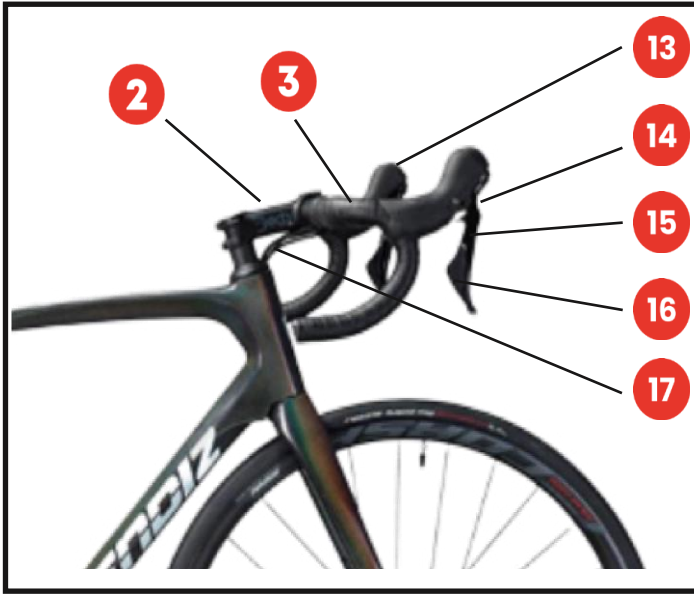
Indicates necessary info for the proper functioning of the product, but without affecting the safety of the user.

BIKE PARTS (ROAD BIKE)



- | | | | |
|----------|-----------|-----------|-------------|
| 1 | Frame | 7 | Chain |
| 2 | Stem | 8 | Gears |
| 3 | Handlebar | 9 | Cassete |
| ! | Fork | 10 | Wheel cover |
| 5 | Disc | 11 | Seat post |
| 6 | Wheel | 12 | Saddle |

BIKE PARTS (ROAD BIKE)



- 13 Left side levers
Front derailleur and front brakes.
- 14 Right side levers
Rear brakes and gears.
- 15 Brake
- 16 Gear shifter
- 17 Shift and brake cables



- 18 Wheel rim
- 19 Disc brakes
- 20 Brake caliper
- 21 Bushing
- 22 Valve
- 23 Spokes
- 24 Derailleur
- 25 Gears
- 26 Connecting rod

BIKE PARTS (E - MOUNTAIN BIKE)



27 Front triangle

28 Suspension fork

29 Battery

30 Electrical engine

31 Damper

32 Rear triangle

33 Tie rod

34 Telescopic seat post

35 Separadores

CATEGORIES OF USE

Every bike that leaves our factory is unique and different. But they all have things in common. Therefore, all bicycles are included in different categories depending on their optimal uses. There are some recommendations that are convenient to comply with for the proper functioning of each bicycle. Leaving these adaptation zones could endanger the user and his machine.

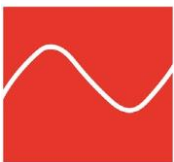
To define the categories of use, all bicycle manufacturers are subject to international standards ASTM F2043-13, approved by the American Society for Testing and Materials (ASTM International). According to this organization, there are five categories of use within the production of bicycles:



1ST Category: Bicycles in this category can only be used on paved roads and without jumping, so their wheels must always be in contact with the ground.



2ND Category: Bicycles in this category can be used on gravel or dirt roads without excessive inclination or difficulty technique. Due to the state of the pavement, jumps of up to 15 cm can be accommodated.



3RD Category: Bicycles in this category can be used on trails and/or rough terrain, as well as on routes where the user's technique must be good. Jumps of up to 61 cm can be made.



4TH Category: Bicycles in this category can be used on rough terrain where the maximum safe speed does not exceed 40 km/h. They allow jumps of up to 122 cm.



5TH Category : Bicycles in this category can be used on rough terrain and/or extreme jumps where the speed exceeds 40 km/h, also known as 'extreme riding'. Therefore, users are asked to be especially careful in this category.



All categories of use include in each of them those below them.



The conditions of use for minors require the constant supervision of an adult.



If the bicycle is made of carbon, it must not be exposed at any time to temperatures above 50°C.

ONE BIKE, SEVERAL TERRAINS

Giving continuity to the separation by categories, it should be remembered that any mount can be used in more than one terrain, except those included in Category 1. That is why it is convenient to explain in more detail the main characteristics of each of the categories.

1ST CATEGORY

In general terms, they refer to bicycles intended for exclusive use in the road mode.

Despite the possible similarities in their geometry or design with cyclocross or gravel frames, they are not designed to carry out these activities nor can they be modified to do so.

In search of greater comfort on their predetermined terrain, they are characterized by being light bicycles with an agile behavior to achieve the best possible performance. For this reason, its frames are also the ones that need to be taken care of the most and the ones that can be deformed the most in a crash.

2ND CATEGORY

This group includes all those bicycles intended for intermediate use between road and off-road cycling, such as cyclocross and/or gravel. Therefore, they could not be used on terrain that is too complicated and they admit paved sections.

To do this, they have a geometry that is different from road bikes and more robust wheels, although in no case do they reach the resistance capacity of specific mountain bikes, so they are not prepared to pass large obstacles on the frame.

3RD CATEGORY

From Category 3, bicycles fall into the broader group of mountain bikes. In this first case, there are those destined to compete in Cross-Country, both in circuit and in marathon. They are the lightest mountain bikes, especially when going uphill; although its biggest disadvantage is the lack of robustness compared to categories 4 and 5.

4TH CATEGORY

Broadly speaking, Category 4 could be considered an evolution of Category 3. Among the modifications that make them enter this new group are suspensions with longer travel and greater resistance, which allow them to expand their field of action on rough terrain. mountain.

5TH CATEGORY

Within this last category are included the most dangerous modalities of cycling (freeride, descent, gravity...), so they are intended for experts in these fields. With the necessary technical expertise, they allow their use on practically any terrain thanks to their resistance.

ROAD SAFETY

When it comes to going out on the road or riding our bikes on the roads, we are one more user within the ecosystem that is made up of other vehicles or pedestrians that circulate next to us. Therefore, it is necessary that whenever we carry out an outdoor activity we comply with current regulations.

These rules are not limited only to those that are normative after the approval of a law, but other guidelines must also be added so that the relationship with the rest of the people with whom we surround ourselves in these places is the most correct and safe possible.

The first step to comply with these rules is to always carry out defensive driving, which we do assuming that other users do not know of our presence. In this way, we will avoid creating unnecessary dangers.

This type of driving includes a series of details that require greater vigilance: vehicles entering or leaving the road, open vehicle doors, surprise appearances on the road, possible damage to the pavement that can cause imbalances or adverse weather elements (wind, rain...) that can complicate the proper handling of our bicycle.

As indicated in the different traffic regulations, the use of headphones or other systems that inhibit the user is totally prohibited. In addition, as long as there are no approved restraints for the transport of small children, it will not be possible to circulate with more than one person on any bicycle.

Regarding the direct relationship with other road users, it is mandatory not to hold on to other vehicles, as well as not to hinder normal circulation due to erratic and unpredictable driving.

When our activity is carried out in the different 'off-road' modalities, a greater concentration and knowledge of those places through which the route is carried out must be added to all the points mentioned above. It is also advisable to wear the specific clothing for each modality and try to ride in company.

BICYCLE TRANSPORT

As long as we want to take a trip with our bicycle, it is necessary to take into account the fragility of any of our frames in this type of action, since they are not prepared to be transported in other vehicles without the necessary measures.

In the case of the car, it is recommended to transport it in a bicycle rack, either on the upper rack or on other types of fastenings. Before purchasing any of these gadgets, it is mandatory to check that they are not contrary to the geometry of the bicycle, since a bad position could seriously deteriorate both the frame and other parts. In addition, once the new bike rack has been purchased, the manufacturer's instructions must be followed at all times. If in doubt, contact your trusted mechanic.

Regarding transfers in other types of transport (bus, plane...), it is recommended to purchase specific bags for bicycles instead of assembling them in any prefabricated box or

using other types of rudimentary packing methods.

LIFESPAN

Defining a bicycle can sometimes be complicated. For many of our users, a way of life. However, it must be clear that it is a machine. As such, various factors will cause problems to arise over time. Some unforeseen events that must be avoided with good care and, especially, with periodic reviews by the user. Even in those periods when less use is given to this travel companion, it is also convenient to have all its parts in good condition.

Every bike is different. Its materials, its design or its conditions of use will not be the same, although on some occasions they are similar. In turn, each user has their way of handling it or their routes can cause more wear than those of another user. That is why, in case of finding problems with our frame, however small they may be, the best option is to go to Mendiz or one of our distributors.

So in conclusion, there are many components that make up a bicycle, with different levels of sophistication. Even so, its useful life depends on the good joint condition of all of them. They are all related to each other. When one wears out, the rest can be damaged due to their connection. Therefore, the previously mentioned reviews must be as exhaustive as possible if we want the useful life of our machine to be long-lasting.

SETTINGS, TESTS & BIKE MAINTENANCE

BASIC SETTINGS PRIOR TO FIRST USE

We have already commented, in previous points, that a correct revision of the bicycle components will extend its last life. A useful life that will begin the moment we have this element in our hands. However, before making our first outing on any of the terrain that best suits our machine, it is convenient to make some initial adjustments.

All the recommended adjustments for the bicycle will be decisive for its correct use, affecting both its wear and the comfort of each user. These adjustments are one more detail in favor of safety on the road since a bad adjustment could be dangerous.

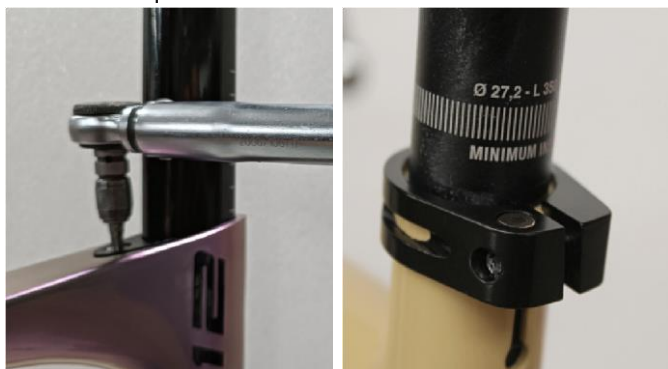
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CHOOSING THE SIZE

The first step to take into account when buying a bicycle is choosing the size. To avoid possible future inconveniences, both in the health of the user and in the proper use of the bicycle, it is a fundamental pillar of its acquisition. To do this, MENDIZ has a table that contains the basic measurements of the cyclist and their correlation with the size of the bicycle, which can be consulted on the website.

CHOOSING THE SADDLE

Once the size has been chosen, the first important point to adjust will be the bicycle seat. Without a doubt, it is one of the fundamental axes on which a good position is based, so it is essential that your position is ideal. To do this, once on top of our saddle, we must reach the point where our knee extension is almost complete at the moment of positioning the pedal at its lowest point. To do this, the saddle will have a screw closure system [Photo 1], which we must leave again in its locked position.



We must use a torque wrench, using the tightening marked on the stem in newtons/meters, respecting the maximum and minimum indicated on the part itself. If you need a height greater than the minimum insertion mark [Photo 2], it would be convenient to check that the size chosen is correct. For the rest of the seat adjustments (inclination, forward/backward...), you should contact the manufacturer of the seat to obtain its user manual.

ADJUSTING THE LEVERS

Although each type of bicycle will have the levers (both brake and shift) located in a different place, the basic axis on which their position is oriented is the same. For a correct use of them, it should be possible to reach them with some ease with our index finger [Photo 1]. If you need more confidence, you could also look for a position in which the middle finger meets the same requirement [Photo 2].



GENERAL RECOMMENDATIONS

All the above points in general will be definitively adjusted after a small number of uses in which the maximum of trial / error will be applied. Although they are basic adjustments aimed at all types of cyclists, each user will have to place all the elements of the bicycle in the best position for their handling and comfort.

In addition, in case of doubt about any of the points or if you feel physical problems that could be derived from a bad position, it is recommended to go to specialists in biomechanics to correct possible irregularities both in body position and in the position of the elements. that make up the bike.

BASIC SECURITY CHECKS

EVERYTIME IT IS USED

Adjustment of the wheels

One of the points to check is that the wheels are correctly fixed in the frame. To do this, we must use a torque wrench, using the tightening marked on the part itself in newtons/meters. As a general rule, there are two types of fixings: quick release [Photo 1] and nut/screw [Photo 2]. In the first case, the exact clamping point is the one where, once the nut is tightened, the lever on the opposite side closes with moderate force. As for the fixing by nut / screw, they work by screwing in a clockwise direction.



Alignment of the wheels

In addition to being correctly attached to the frame of your bike, the wheel must also be correctly aligned. In other words, it should not have any lateral oscillations when turning, a detail that can be checked by lifting the wheel off the ground and spinning it. In case of finding a fault, it would be necessary to check that the state of the radios is correct. If they have too much play, they should be adjusted with the specific keys for it or go to a trusted mechanic.

Adjustment of the wheel backlash

Another relatively common problem is wheel play. Contrary to their alignment, this inconvenience comes from the bushing or one of the components that make it up [Photo 1].

It is not convenient to try to solve it by yourself and it is advisable to go to a trusted mechanic.



Tire pressure

Depending on the type of route you want to take, the tire pressure may vary, as well as depending on the taste of each user. In spite of everything, it is imperative not to exceed the maximum pressure indicated in each tire or chamber, as well as inflate the wheel above the minimum pressure indicated in each chamber or tire. To do this, we will place the nozzle of the pump on the valve, once the closure of the same has been opened.



Tire condition

In the same way that this check is carried out in other vehicles, it is convenient to check the optimum condition of the tires every time we get on the bike. In summary, you have to make sure that there are no tears, cuts or other types of imperfections in any of them. Finally, it should be checked that the wear does not exceed the maximum recommended by the 'witness' [Photo].



Condition of the brakes

This review consists of two different parts, although verifiable in a single action. First of all, you have to make sure that the maximum stop of the brake levers is greater than 25 mm above the handlebars. On the other hand, once this limit is reached, you have to try to move the bike to confirm that both wheels are locked by the brakes.

Hydraulic system tightness

This is a check that only applies to those bikes mounted with disc brakes. With the same procedure as for checking the brake system, each of the levers must be fully activated and check that no fluid is lost in any of the ducts that go from there to the calipers. In addition, it should be checked that the cover does not have any imperfections.

Condition of the brake disc

Whenever there is any imperfection in one of the discs (break, deep friction, mechanical damage...) it will be necessary to replace it. In addition, they also lose part of their faculties due to the dirt that can accumulate on them. Its cleaning must be done with the wheel disassembled and using degreasing soap.

ONCE A MONTH

Front suspension slippage

This is a check that must also be carried out while stationary and with the front brake at maximum capacity. Once this movement has been carried out, the weight of the person carrying out the check must be dropped and lifted to make sure that the vertical movement of the suspension is fluid and without strange noises.

Front suspension looseness

As in the tires, the brake shoes have a witness that marks their wear over the kilometers and their use. In this case, it involves several vertical slits that must always be visible to the naked eye. When this gap is already minimal, it is recommended to change the shoes, since the braking capacity is not guaranteed.

Rear suspension looseness

This check is carried out in the same position in which the user gets on the bicycle. When stationary, the damping of the rear suspension must be sought with strong vertical movements caused by the body itself. The vertical movement of the suspension is fluid and without strange noises in any of its components.

TWICE A YEAR

Tire wear

This is a check that can be done with our touch and without removing the wheel from the rest of the frame. Each of the tires has wear indicators shaped like a slight indentation. If they are flat with respect to the rest of the tire, it is time to change the part.

Brake cables and housings

Whenever there is any imperfection in any of the elements that join the lever to the brakes (breakage, deep friction, mechanical damage...) it will be necessary to replace it. In addition, they also lose part of their faculties due to the dirt that can accumulate in or between them.

Fixing of the braking system

Whatever the brake system used on the bicycle, it must be correctly fixed in its position. In the case of shoe brakes, the check is made by pulling the brakes [Photo 1] forwards (front) or backwards (rear) and checking that they do not move. In the case of disc brakes, the brake calipers must be pulled in different directions [Photo 2], checking that they do not move.



Fixing of the handlebar and stem

The placement of the front wheel will be between the legs of the person. Once in this position, an attempt will be made to move the handlebar in all directions perpendicular to the fork [Photo 1]. This should not move or make strange sounds that could indicate some kind of failure in this area. As for the handlebar, you have to check that it does not rotate on the stem.



Steering looseness

This is a check that must also be carried out while stationary and with the front brake at maximum capacity. While holding the handlebars with both hands, you will have to try to move the bike with both hands, you will have to try to move the bike with sudden movements

both forwards and backwards. Everything will be correct if there is no play in the steering with respect to the frame and no strange sounds are heard that could indicate failures in the area.

Fixing of the pedals

It must be checked that the pedal is correctly attached to the cranks. The entire thread of the pedals must be used (which will be tightened with different wrenches depending on the supplier) without exceeding its limits.

ONCE A YEAR

Saddle and seat-post fixing

Check in which it must be ensured that the clamping mechanism works correctly, whatever its format (quick release or screw). Holding the saddle from its ends [Photo 1] and without applying excessive force, no element should rotate on the frame. On the other hand, using the same grip, the saddle cannot oscillate vertically on the post either. In case of not solving the problem by tightening the closing mechanisms, it is recommended to go to a mechanic.



MORE DETAILS TO REVIEW

GEAR ADJUSTMENTS

One of the aspects that must be taken into account for a correct use of our bike is the position of the parts that make up the change, since during the routes carried out it could be altered with relative ease.

First of all, the front derailleur would have to be adjusted. For its upper limit, the chain would have to be placed on the small chainring and the large sprocket; while the lower limit would be adjusted in the inverse position. In both cases, the chain should be 1-3mm away from the stops.

Once this adjustment is made, it will be time to make the necessary adjustments to the rear derailleur. Placing the chain on the large and small sprockets, we will tighten or loosen the two screws that are at the rear of the derailleur until a smooth path of the chain is achieved.

If you have any doubts about how to carry out these adjustments, contact your trusted mechanic and do not take risks.

BIKES WITH TRIATHLON PARTS/ADDITIONS

Within road bikes, you can find a subgroup referring to those dedicated to the practice of triathlon or, failing that, time trial. In any case, these should only be used by users with the necessary technical capacity and skills, never by beginners.

When conveniently adjusting the handlebar couplings, a position should be found in which the forearms are relaxed and the braking capacity is not visibly affected, since the levers will be far from our hands. In addition, it will try to find a comfortable position without excessively leaning the handlebars.

BIKE MAINTENANCE

GENERAL ISSUES

Maintenance is an essential aspect of a bicycle. This includes all preventive actions to ensure proper functioning of the bicycle in its entirety, increasing its durability and improving performance.

Incorrect maintenance or the absence of it will generate damage or breakage, thus causing a high risk to the integrity of the cyclist.

The following lines detail the basic maintenance instructions for a proper functioning of the bicycle. In any case, it is recommended to take the bicycle to a MENDIZ dealer to ensure correct maintenance.

The maintenance conditions that are set out in this manual are designed for appropriate conditions of use for each bicycle. In the event that the bicycle is used in extreme conditions of use (such as rain or snow), it is recommended to carry out more frequent and in-depth maintenance.

To replace any component or consumable of the bicycle, it is recommended to always use certified quality spare parts that are compatible with the model and specifications of the bicycle. For more information, any MENDIZ provider should be consulted.



CLEANING

There are different ways to clean a bicycle. From this manual we propose an effective cleaning system for bicycles with abundant accumulated dirt. With a soft water jet, the most encrusted dirt will be removed: sand, mud, etc.



We do not recommend the use of pressurized water. Pressurized water can penetrate the steering or other locations, removing grease from components and increasing their wear and likelihood of breakage.

Once the bicycle and its main components are wet, the entire bicycle is sprayed with a neutral detergent and rubbed with the help of a sponge.

You should not use any cleaning product. Some products can damage the bike. It is important to respect the manufacturer's instructions and use exclusive products for bicycles.



Disc brakes require special care. No degreaser or oil should fall on it. There is a risk of reduced braking power.



Rinse the bicycle with a gentle jet of water and dry it well with different rags or cloths or with pressurized air.

Rinse and dry tasks are essential to improve post-rinse lubrication.



For proper maintenance of the frame paint, it is necessary to carefully clean the parts where there is sweat or salt or other corrosive external agents.



LUBRICATION

The bicycle should always be cleaned before proceeding to lubricate it with oil or grease. And prior to lubrication, the bicycle must be completely dried, especially all the mechanical components that are going to be lubricated and greased.

The frequency of cleaning and lubrication will be proportional to the frequency of use of the bicycle and the environmental conditions.



It is necessary to pay attention to this section in coastal areas or in conditions of a lot of sweat.

The lubrication and greasing of the components has several objectives:

- Extend the useful life of these.
- Guarantee correct operation.
- Guarantee the best performance.

Regarding the type of lubricant recommended, the correct thing to do is consult the manufacturer's manual for each component to make sure you use the right one.

With internal bearings that require specific tools and skilled labor, it is recommended to go to a MENDIZ distributor.

Chain: It is the component that needs the most lubrication. Always on the side of the chainring, it is advisable to use lubricating oils and a rag to ensure that the oil does not fall on other components, move the pedals in reverse and apply oil along the entire length of the chain. Wrap the chain with the same rag and continue moving the pedals to evenly distribute the oil along the chain and to collect any excess oil.

Derailleur springs: At least once a year, it is recommended to lubricate the derailleur springs, being careful to not to contaminate other parts, such as the brake disc. It is recommended to use a lubricant in the form of a spray with extension to be able to reach the spring.

Suspensions: Both the fork and the rear suspension require that the surface of the bars be always clean and lubricated. It is advisable to lubricate whenever they are cleaned by applying a few drops of oil on the bars and spreading it over the entire surface with the

help of a cloth. The bars must be lubricated but without excess lubricant that contributes to the deposition of dust or dirt.



For proper suspension maintenance, it is advisable to consult the suspension manufacturer's user manual.

Stem and handlebars: To avoid seizing and increase friction between components, it is advisable to use friction paste or grease for the stem and handlebars, the stem with the steerer tube and the seat post in contact with the frame.



Cranks: To avoid blocking the fixing to the bottom bracket and the pedal thread, it is recommended to apply grease.

Seat post: To avoid seizing and increase friction between components, it is advisable to use specific friction paste or grease for each type of material (aluminum, carbon...) for the seat post in contact with the frame.



Pedals: Like the cranks, the thread that incorporates the most common pedal models must include a slight amount of grease to prevent thread wear or possible breakage of the material.



STORING THE BIKE FOR A LONG PERIOD OF TIME

For various reasons, there are times throughout a year when the user will not use the bicycle and will have to store it in conditions that do not affect its future use due to the degradation of its components.

The bicycle must be greased (chain and, if any, suspensions). It is recommended that the tire pressure, if the period of time is prolonged, be approximately 50% of the maximum.

It is recommended to cover the bicycle to prevent moisture or other factors of a similar nature from affecting its conservation.

It is recommended not to leave the chain or the derailleur under tension, so the best option is to leave the small chainring engaged with an intermediate sprocket.

MAINTENANCE SCHEDULE

ITEM TO REVIEW	DETAIL TO REVIEW	EVERYTIME ITS USED	ONCE A MONTH	TWICE A YEAR	ONCE A YEAR
WHEEL	FIXING THE WHEELS				
	ALIGNING THE WHEELS				
	WHEEL LOOSENESS				
TIRE	TIRE PRESSURE				
	TIRE CONDITION				
BRAKE SYSTEM	BRAKE SYSTEM CONDITION				
	BRAKE DISC CONDITION				
	BRAKE SHOES WEAR				
	BRAKE CASES AND CABLES				
	FIXING BRAKE SYSTEM				
	BRAKE SHOE POSITION				
	SYSTEM SEALING				
SUSPENSION	SUSPENSION SLIP				
	F. SUSPENSION LOOSENESS				
	R. SUSPENSION LOOSENESS				
RIMS	RIM WEAR				
HANDLEBAR AND STEM	HANDLEBAR & STEM FIXING				
STEERING	STEERING WEAR				
PEDALS	FIXING PEDALS				
SADDLE AND S. POST	FIXING SADDLE & POST				

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