THANK YOU AND CONGRATULATIONS

We appreciate your trust in Mondraker. This bicycle is the result of work done with the most advanced technology and assembled with the best components for its use. The Mondraker bicycle range can cover all your needs, from a great means of transport to a reliable competition bike or just for leisure.

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GENERAL WARNING:

Obviously bicycling involves risk of falling and injury. By choosing to ride a bicycle you assume the responsibility for that risk, so you need to know and follow the rules of safe and responsible riding and proper use and maintenance. Although riding a bike will never be entirely risk-free because there are always external factors you cannot control, proper use will reduce that risk considerably.

This manual contains a number of “Warnings” and “Cautions”. If you do not follow them you will be using your bike unsafely or it will not work as it should and that might expose you to danger.

⚠️ WARNING: indicates a potentially hazardous situation which if not avoided could result in serious injury or death.

⚠️ CAUTION: indicates a situation with less serious consequences but which should also be avoided. It is an alert against practices that are unsafe and which could result in damage to your bike or the voiding of your warranty.

Many of the Warnings and Cautions say things like “you may lose control and fall”. Because any fall can result in serious injury or even death, we do not always repeat the warning of possible injury or death and assume you are aware of it.

It is impossible to anticipate every situation or condition which might occur while riding, so this Manual cannot warn you or advise you about how to handle all of them. Anyone who rides a bike must accept the risk and be ready to cope with a wide variety of situations. Dealing with these situations or avoiding them is the sole responsibility of the rider.
1. IMPORTANCE AND PURPOSE OF THIS MANUAL

This manual will help you to adjust the bike to your body shape and size to increase riding comfort, enjoyment and safety.

It is very important that you know about your bike’s parts and safety features and how to adjust the parts in order to achieve maximum enjoyment and safety during your ride.

**Note:** the purpose of this manual is not to give you in-depth knowledge of the mechanics and operation of your bike. Instead it is designed to show you how to carry out the essential checks before going for a ride as well as basic maintenance. For your safety Mondraker recommends that if your bike does not work properly you should take it to the Mondraker dealer where you bought it before trying to fix the problem yourself.

1.1 Why should you read this manual?
Riding a bike can be a high-risk activity for you if you do not do it with due caution and safety. So we recommend you read this manual carefully.

1.2 Bicycle parts
Below are the names of all the different parts of your bicycle. This will help you to understand this manual more easily.
1.3 Bicycle types

Bicycles can be used in a great variety of ways so it is increasingly important to tailor the bike’s geometry and parts to its intended use. It is important that you know the different bicycle types so you can use your bicycle properly. Ride safely by knowing your bike’s limits. Your dealer will be able to advise you about which bike is best based on what you are going to use it for.

1.3.1 Road bikes

They are also known as racing bikes as they were used in the first road and triathlon competitions. These bikes are used for fast rides, tough training and competition, especially on paved roads. They are the lightest, most aerodynamic and fastest bikes. Their frames are made of very light and heavy-duty materials to take full advantage of pedalling strength. Their geometry is designed so the rider can adapt to the bicycle for more effective pedalling while keeping a more aerodynamic position. The wheels of this type of bicycle have a wider diameter (28") than standard mountain bikes and their tyres are very narrow to reduce friction with the ground.

1.3.2 Mountain Bikes

These bicycles are designed for use on every kind of surface. They give the rider greater comfort and safety on irregular surfaces such as forest trails or mountain paths. Their components are very resistant to stone impacts and adverse weather conditions. The geometry of the frame ensures the rider is in a more upright position with greater freedom of movement for better control over the bike on winding terrain. There are two kinds of mountain bikes depending on whether the frame has a suspension system or not.

1.3.2.1 Rigid frame bike

This type of bike is designed for riding on trails and mountain paths which are not very rough. Sometimes these bikes are equipped with light front suspension and disc brakes. These are normally 20- or 30-speed bikes to adapt pedalling rhythm to the track you are riding on.

Note: These bikes are not designed for fast downhill riding or jumping. You are putting your safety at risk.

1.3.2.2 Full suspension bike

The evolution of mountain bikes has led to the manufacture of full suspension bikes. They enable riders to travel over rough terrain in greater comfort and also make descents easier by absorbing bumps and potholes. Full suspension frames have been developed for more aggressive riding or steeper descents. They normally have thicker tyres than rigid frame bikes for greater safety and stability. They are made with tougher components and have longer front suspension travel. The important thing is not weight but the reliability and strength of the materials that are exposed to greater wear and fatigue. As a general rule, the geometry of this kind of bikes is designed to provide more comfort and riding control rather than an effective position for pedalling.

1.3.3 Urban bikes

These bikes are used as a means of transport and come with 28" or 26" wheels. The rider’s position on these bikes is very comfortable. They have to be nimble and fast and equipped with everything needed for travelling about town. They share many features with mountain bikes although their frames are not as reinforced and they have components that are more suitable for their purpose.

1.3.4 BMX bikes

This category encompasses all bikes with 20" diameter wheels which are not exclusively designed for children. The BMX category includes bikes exclusively for competition which are designed with much lighter and heavy-duty components in order to withstand the high accelerations that occur in these competitions. The other type of BMX bikes is Freestyle bikes used in urban skateparks or bikeparks.
1.4 Intended use of your bicycle

WARNING: Understand your bike and its intended use. Choosing the wrong bicycle for your purpose can be hazardous because using your bike the wrong way is dangerous.

No one type of bicycle is suited for all purposes. Your authorised dealer can help you pick the right one for your intended use and also understand its limitations. However, small changes can change performance or extend the range of intended uses. For example the tyres or suspension.

Below is a general outline of the uses of various groups of bikes. The Mondraker range does not include all these groups but we wanted to show them to you so you have more information.

If you have any questions about specific uses or the information shown in the tables, check with your authorised Mondraker dealer.

TO BE RIDDEN ON PAVED ROADS ONLY. HIGH-PERFORMANCE ROAD

Group 1: Bikes designed for riding on paved roads. Not intended for use with racks or panniers, let alone on tracks and trails.

FOR RIDING ON ROADS AND IMPROVED TRAILS. NOT FOR JUMPING

Group 2: Unlike the bikes in the previous group, they can also be used on smooth gravel roads and improved trails where the tyres do not lose ground contact.

FOR RIDING ON UNIMPROVED TRAILS WITH SMALL OBSTACLES

Group 3: In addition to the uses in Groups 1 and 2, they can also be used on rough trails with some technical difficulty but not for extreme use with jumping and aggressive descents. They can be used to compete in Rally and Long Distance but not in Freeriding or Downhill. They are lighter bikes for faster reaction speed with average suspension travel delivering efficiency rather than absorbing the impact of bumps and potholes. Hence they are not recommended for extreme uses. Bikes in this group in the Mondraker range are in the XC sport, XC Pro, Trail and Fatbike categories.

FOR RIDING ON UNIMPROVED TRAILS WITH SMALL OBSTACLES

Group 4: In addition to the uses in the above groups, these bikes are also for rough technical areas, moderately-sized obstacles and small jumps. They are halfway between groups 3 and 5, i.e. their parts are heavier duty and stronger than group 3 bikes but you can go uphill quicker because the suspension is designed not to interfere with pedalling. We do not recommend them for use in extreme forms with large drop offs, jumps, walls or launches requiring long suspension travel or heavy-duty components. Mondraker All Mountain and Enduro bikes would come into this group.
FOR EXTREME RIDING

Group 5: Bikes designed for more extreme use in jumping, drop offs, launches and competitive downhill. Very long suspension travel and very wide wheels as required for this use. Should only be attempted by expert riders with the ability and experience to cope with these extreme situations. In addition to having this skill, riders should also wear comprehensive safety equipment (full-face helmet, body armour, knee and elbow pads etc.) to protect the body in case of a fall.

These bikes are very rugged but not unbreakable so you need to be aware of their limitations and that you cannot do everything that comes to mind with them. If you do this kind of riding you accept the risk of hurting yourself and damaging your bike. And remember that just using a bike in this way does not make you into an expert. The only Group 5 bikes in the Mondraker range are Freeride and Downhill.

FOR CHILDREN

Group 6: Bikes designed to be ridden by children. Parental supervision is required at all times. Avoid areas involving cars and obstacles or hazards including inclines, kerbs, stairs, sewer grates or areas near drop offs or pools.

⚠️ WARNING: All adult Mondraker bicycles are designed and tested for a maximum combined rider/cargo/bike weight of 120 kg.
2. ADJUSTING YOUR MONDRAKER BIKE

It is very important before your first ride your new Mondraker bicycle that you read the following basic points to fit the bike to your body shape and size to increase riding comfort and safety. We will also show you how to check that the parts of your bicycle are ready to be used safely. Both of these things are normally done and checked by the Mondraker dealer where you bought your bike.

2.1 Riding position and bike assembly
As in any sport, your body position is very important to ensure proper and effective performance and avoid injury. When riding you use all your joints to perform a rhythmic movement during a considerable period of time, so it is essential to adopt a correct riding position on the bike.

2.1.1 Size
The first step in adapting the bike to your body shape and size is to choose the right bike size. A bicycle which is too small or too big can make you lose control and you will be uncomfortable while riding. Your Mondraker dealer will suggest the most convenient size based on the information you provide. The first measurement is the height of the bicycle which is the distance from the ground to the upper part of the top tube. The distance will determine the bike’s size. For best measurement you should stand between the saddle and the handlebar straddling the top tube. Once in this position there should be a clearance of about 25 mm between the top tube and you for road bikes, and between 50 and 75 mm for mountain bikes. These numbers could vary for latest generation mountain bikes depending on the slope of the top tube so we recommend you ask your Mondraker retailer for advice about choosing the right size.
2.1.2 Saddle adjustment
Correct saddle adjustment is an important factor in getting the best performance and comfort from your bicycle. You can adjust the saddle in two directions. First you have to get the correct height. To do that you have to pull the seatpost upwards until you reach a position where you are seated on your bike with your heel on the pedal with the crank in its lowest position and parallel to the seatpost with your leg almost completely straight. Remember that you should not pull the seatpost out beyond the indicated limits. If you still cannot get a comfortable riding position, please contact your Mondraker dealer for help.

⚠️ WARNING: If the seatpost is not inserted far enough into the seat tube it might bend and even break. This could cause you to lose control and fall.

You should also adjust the saddle angle. You can move the saddle nose up and down by using the bolt under the saddle. The most common position is to have the saddle horizontal to the ground.

You can also adjust the saddle forward and backward by sliding it along the rails. Move it until you find the most comfortable position. Remember that moving the saddle forward and backward will mean you are closer to or further away from the handlebar.

The bolts on latest generation seatposts might be in a different place or arranged differently, but you can still adjust your saddle in both of the ways described above.
2.1.3 Handlebar adjustment
You can adjust the angle of the handlebar by loosening the bolts attaching it to the stem. With this adjustment you can get a more upright or downward position on the bike. You can also raise or lower the handlebar by a few centimetres. To do this you need to change the spacers between the stem and the headset. We suggest you take your bike to your Mondraker dealer to make this adjustment.

![Handlebar adjustment](image)

> **WARNING:** Incompatible accessories or those that have not been properly mounted can adversely affect the performance of your bike and be unsafe.

2.1.4 Shifter and brake levers
The levers on the handlebar allow you to change the speed and brake. You can place them according your preferences. You can slide them away from or towards the grips on the handlebar using the Allen bolt.

Mondraker bikes come with the rear brake mounted on the right side of the handlebar and the front brake on the left side of the handlebar as standard.

> **WARNING:** The shorter the brake lever reach, the more critical it is to have correctly adjusted brakes so that full braking power can be applied within available brake lever travel. Brake lever travel insufficient to apply full braking power can result in loss of control, which may lead to serious injury or death.

2.1.5 Pedal adjustment
If your bike has automatic pedals you can adjust the minimum pressure required to release your foot from the pedal. You can do that by tightening or loosening the bolts on the ends of the pedals. There are two bolts per pedal; if you loosen them you can remove your shoe more easily and if you tighten them it will be more difficult. This depends on the preferences of each rider. Some riders prefer a loose pedal to be able to get their shoe out very easily to react quickly to problems, whereas others prefer to have their shoe tightly held so it does not come out due to an unintentional leg movement or a bumpy surface.

2.1.6 Mounting accessories
Ask your authorised Mondraker dealer to mount all the accessories on your bike. Make sure that any accessories you or your authorised dealer mount on the bike do not block or interfere with the proper functioning of any other part of the bike putting your safety at risk. Also make sure that the accessory you want to mount is compatible with your Mondraker bike. Find out whether accessories such as bells, horns or lights are allowed and approved and if they are authorised in terms of road safety.

> **WARNING:** Incompatible accessories or those that have not been properly mounted can adversely affect the performance of your bike and be unsafe.
**Child seats and racks or panniers**
If you decide to mount a child seat or rack or pannier, make sure you have it done by an authorised Mondraker dealer and a professional bicycle mechanic. Only mount it on a compatible bike with the features specified by the manufacturer of the child seat or rack or pannier.

**Bar ends**
Mondraker recommends that its customers do not install bar ends on its bicycles. Some handlebars are designed to withstand the additional stress of bar ends whereas others are not. Some very light handlebars are especially poor at withstanding bar ends. If you want to fit bar ends, ask your authorised Mondraker dealer about the options available, read the instructions and warnings that come with the handlebars and bar ends and examine them on a regular basis.

**2.1.7 Suspension setting**
The forks and rear shocks used in Mondraker bikes consist of several adjustment systems. When fine-tuning them please follow their manufacturers’ updated instructions. You can find this detailed and updated information on the manufacturers’ websites.

⚠️ **WARNING:** Never use your suspension bike with insufficient or excessive pressure in damping elements as this could be harmful for them and even for you and your bike.

**Basic settings**
The rider’s weight and their position on the bike determine the settings for the fork and the rear shock. When you sit on the bike, both the fork and the shock are compressed by a percentage of their total travel; this percentage is called “sag”. Different levels of sag are recommended depending on how the bike is to be used. Between 25%-30% of sag is recommended for Enduro and all-mountain bikes and between 30%-40% for freeride and downhill bikes. Sag values can also be set according to the riding style of each user. To do this it is recommended to carry out several tests and adjust both rebound and compression to a more customized taste.

⚠️ **WARNING:** Your bike’s handling is directly affected by each and every one of the adjustments made to the suspension elements, so it is advisable to be careful and cautious in the first few tests to prevent possible crashes. Avoid making adjustments to the suspension that can cause it to bottom out (end of travel) very often; this will lengthen the service life of the suspension elements.

**2.1.8 Chain adjustment**
The chain is a fundamental and very important part of the bike, so you have to make sure it is lubricated at all time and tense at each of the possible chainwheel-sprocket combinations. The chain’s tension is adjusted using the rear derailleur. It requires specific technical knowledge and we recommend you take your bike to your authorised Mondraker dealer to make this adjustment.

To extend the service life of the chain and prevent deterioration of the mechanism as far as possible, we recommend light pedaling without applying excessive force on the pedals when changing gear. Therefore avoid shifting gears when applying maximum force on the pedals.

We also recommend you avoid extreme chainring-sprocket combinations: the small chainring with the two smallest sprockets, large chainring with the two largest sprockets. These combinations leads to lateral deformation of the chain that may affect the performance of the derailleurs and premature wear of the drivetrain.
2.2 Bike safety testing

⚠️ WARNING: Technological advances have made bicycles and their components more complex, and the pace of innovation is increasing. This constant evolution means it is impossible for this manual to provide all the information required to properly repair and/or maintain your bicycle. In order to minimise the chances of an accident and possible injury, it is essential that you have any repair or maintenance which is not specifically described in this manual performed by your Mondraker dealer. It is equally important to remember that your individual maintenance requirements will be determined by everything from your riding style to geographic location. Consult your dealer for help in determining your maintenance requirements.

Before riding your bike it is essential that you quickly check its safety systems and releases. They may have come loose on your previous ride or you might have forgotten to tighten them after taking the bike apart to transport it.

Every bolt and nut mounted on the bike has its specific torque value. The correct tightening force or torque cannot be generalised for all these parts. Normally the manufacturer indicates the recommended torque values on its component. Nevertheless, below are the standard torque values of every component.

⚠️ WARNING: Correct tightening force on fasteners – nuts, bolts, screws – on your bicycle is important. Too little force and the fastener may not hold securely. Too much force and the fastener can strip threads, stretch, deform or break. Either way, incorrect tightening force can result in component failure which can cause you to lose control and fall.
<table>
<thead>
<tr>
<th>PART</th>
<th>MAXIMUM (NM)</th>
<th>INCH LBS (LB/IN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear derailleur bolt</td>
<td>9 Nm</td>
<td>80 lb/in</td>
</tr>
<tr>
<td>Rear derailleur cable-bolt</td>
<td>5 Nm</td>
<td>45 lb/in</td>
</tr>
<tr>
<td>Front derailleur bolt</td>
<td>5 Nm</td>
<td>45 lb/in</td>
</tr>
<tr>
<td>Front derailleur cable-bolt</td>
<td>5 Nm</td>
<td>45 lb/in</td>
</tr>
<tr>
<td>Shifter bolt-handlebar</td>
<td>7 Nm</td>
<td>60 lb/in</td>
</tr>
<tr>
<td>Casette</td>
<td>40 Nm</td>
<td>355 lb/in</td>
</tr>
<tr>
<td>Cranks bolt fix BB spline</td>
<td>45 Nm</td>
<td>390 lb/in</td>
</tr>
<tr>
<td>Cranks bolt Hollowtech II + Megaexo</td>
<td>12 Nm</td>
<td>105 lb/in</td>
</tr>
<tr>
<td>Bottom bracket sealed cartrige</td>
<td>60 Nm</td>
<td>530 lb/in</td>
</tr>
<tr>
<td>Bottom bracked Hollowtech II + Megaexo</td>
<td>45 Nm</td>
<td>390 lb/in</td>
</tr>
<tr>
<td>Disc brake caliper/fork</td>
<td>7 Nm</td>
<td>60 lb/in</td>
</tr>
<tr>
<td>Disc brake, lever-handlebar</td>
<td>7 Nm</td>
<td>60 lb/in</td>
</tr>
<tr>
<td>Disc brake, disc-hub Torx</td>
<td>3 Nm</td>
<td>25 lb/in</td>
</tr>
<tr>
<td>Disc brake, disc Shimano hub, Centerlock</td>
<td>40 Nm</td>
<td>355 lb/in</td>
</tr>
<tr>
<td>Bolts Stem Headset, assembly fork tube</td>
<td>5 Nm</td>
<td>45 lb/in</td>
</tr>
<tr>
<td>Bolt seatpost to adjust the saddle with just one bolt</td>
<td>17 Nm</td>
<td>150 lb/in</td>
</tr>
<tr>
<td>Pedals</td>
<td>40 Nm</td>
<td>355 lb/in</td>
</tr>
<tr>
<td>Wheels through axe</td>
<td>40 Nm</td>
<td>355 lb/in</td>
</tr>
<tr>
<td>Wheels quick release</td>
<td>7 Nm</td>
<td>60 lb/in</td>
</tr>
</tbody>
</table>

**WARNING:** These values are recommendations only; as a rule you should check the technical documentation for each of the components to make the adjustments correctly. This documentation is included with your bike or is available on the manufacturers’ websites.

**Torque in frames**
The maximum torque of the bolts and axles in Mondraker frames are shown in specific tables for each of our models. These adjustments should be made at an authorised Mondraker dealer by a professional mechanic. Please check with yours for any adjustments of this kind you need to make to your Mondraker frame.

**2.2.1 Wheel check**
Lift up the front part of your bike and spin the wheel. Make sure that the wheel is running in a uniform circular movement and does not make any sideways or up-and-down movements. You also need to check the pressure of the tyres. The correct pressure is indicated on the side of the tyre.

It is also very important to check the tension of the spokes by simply touching them. All of them should be firm and tight.

**WARNING:** Never inflate a tyre beyond the maximum pressure marked on the tyre’s sidewall. Exceeding the recommended maximum pressure may blow the tyre off the rim, which could cause damage to the bike and injury to the rider and bystanders.
2.2.2 Brake check
Make sure that the brake pads are inside the braking flanges of the rims. When the brake is in action the complete pad surface should be supported on the rim. Check that the brake cables are undamaged and that there are no faults in the cables or their sheathing that could cause them to break. In case of disc brakes, it is very important to check that the pads are not worn out and are completely supported by the disc. The brake lever should never touch the grip when it is being used. Remember that it will be more difficult to stop the bicycle when riding due to the rider’s weight and during a descent.

Bear in mind that the braking distance will increase considerably in wet or rainy conditions, so we recommend you take extreme caution in such conditions.

⚠️ CAUTION: If your bike has a disc brake, learn how to put on and take off the wheel without touching the discs or callipers. They can get very hot during use and you might burn yourself.

⚠️ CAUTION: If your bike is equipped with a rear disk brake, be careful not to damage the disc, calliper or brake pads when putting the wheel back on. Never activate a disc brake’s control lever unless the disc is correctly inserted in the calliper.

2.2.3 Wheel and seatpost quick releases check
Most bikes use quick releases on their wheels and the seatpost. You should check that the quick releases are completely closed to ensure that the wheels are properly fixed to the frame and fork to avoid serious accident.

The quick release is used by tightening the nut on the opposite side of the lever until the lever can be closed with a degree of resistance. You should never leave the lever loose or try to close it by turning it in the same direction as tightening a nut.

If your bike does not have quick releases and uses normal nuts instead, make sure these are also duly tightened.

Check the quick release of the seatpost in the same way as for the wheels.
2.2.4 Check the handlebar, stem and seatpost
Over time the condition of these parts could deteriorate due to impacts or simply because of usage. It may be you find signs of fatigue and wear in these parts such as deformations or cracks in the materials. If you do, you should immediately go to your Mondraker dealer to have them repaired or replaced.

2.2.5 Regular checks of your bike
Every bike in general and its parts in particular have a useful life. Its length depends on the material they are made of and how they are used and maintained. Using your bike in competition, at high speed, carrying a lot of weight, going over very rough terrain, jumping or any other kind of aggressive cycling reduces its useful life and increases the risk of breakdown or breakage. As a result Mondraker suggests you carry out regular routine checks including the following:

CHECK BEFORE EVERY RIDE:
1. All bolts and nuts are tightened to the manufacturer’s recommended torque value, in particular the wheel quick releases.
2. Handlebar, stem and seatpost looking for visible damage or any cracks in them.
3. Front and rear brake systems.
4. Air pressure of the tyres.
5. Fastening of the grips on the handlebar.
6. Correct functioning of the fork and rear shock.

ADDITIONALLY ONCE A MONTH:
1. Welds of all tubes, links and all the moving parts of the frame looking for deep scratches, cracks or deformation.
2. Operation of the front and rear derailleur.
3. Adjustment and play in the headset.
4. Travel and condition of the shift and brake cables and hydraulic tubes.

ADDITIONALLY ONCE A YEAR AT YOUR MONDRAKER DEALER:
1. Check the condition of the chain.
2. Adjustment and play of the bottom bracket cartridge.
3. Adjustment of the turn and bearings of the pedals.
4. Alignment and operation of the front and rear derailleur.
5. Handlebar, stem and seatpost.
6. Brake system, replacing cables or hydraulic tube if needed.
7. Alignment of the rims and tension of the spokes.
8. Condition of the tyres, replacing them if necessary.
9. Condition of the grips.
10. All the parts related to the rear suspension system.
11. Structure and functioning of the fork.

⚠️ WARNING: Do not ride a bicycle or component with any crack, bulge or dent, even a small one. Riding a cracked frame, fork or component could lead to complete failure and falling, with risk of serious injury or death.

⚠️ WARNING: Bicycles and their accessories are designed for aggressive use but do have their limitations. Exceeding these limitations could lead to breakdown or breakage with serious consequences for the rider.
2.3 Safety equipment

⚠️ WARNING: The area in which you ride may have regulations about using bicycles. It is your responsibility to familiarise yourself with these regulations about using bikes and their equipment. Observe all local laws and regulations about bicycle identification and lights, wearing a helmet, riding on verges, pavements, bike paths and trails, and carrying children in seats or towing them. It is your responsibility to obey the laws and be aware of penalties for breaching them.

2.3.1 Helmet
Mondraker recommends all riders should wear a helmet irrespective of their type of riding. You will need a helmet if you want to feel safe on your bike. Make sure you wear your helmet properly and the strap is well fastened. Your dealer will recommend the helmet that best suits your conditions. There is a great variety of models and all of them are approved to ensure your safety.

⚠️ WARNING: Failure to wear a helmet when riding may result in serious injury or death.

2.3.2 Reflectors
Reflectors are another essential safety feature for your bike. They help other vehicles see you on poor visibility roads. All bicycles have two reflectors per wheel, a front reflector and a rear one as standard. If any of these reflectors are lost or damaged go to your dealer and get a replacement.

⚠️ WARNING: Reflectors are not a substitute for required lights. Riding at night and in other situations with poor visibility such as in fog or rain is dangerous and so you should use both lights and reflectors.

2.3.3 Lights
If you intend to ride at night you should install lights on the front and rear part of the bike. There is wide range of lights on the market although the most popular are battery-powered ones put on the handlebar and seatpost. We recommend you go to your dealer for proper light installation.

2.3.4 Pedals
The platform pedals hold the rider’s shoe by pins. Always make sure that you put the entire sole of your shoe on the pedal so your foot does not slip off and the pedal hits your leg.

2.3.5 Protective eyewear
We recommend you wear protective eyewear every time you ride your bicycle. When you get up to a certain speed the resulting wind can bother your eyes and reduce visibility. Protective eyewear also guards against airborne dirt, dust and insects whose impact may have fatal consequences.

2.4 If you have a fall
First, check if you are hurt and treat your wounds as best you can. Get medical help if you need it. Then check your bike for damage. After any fall, take your bike to an authorised Mondraker dealer for a full check. Carbon fibre components, including frame, wheels, handlebars, stem, cranks, brakes, etc. which have received a blow should not be used until they have been disassembled and thoroughly inspected by a qualified mechanic.

⚠️ WARNING: A fall or other impact can put extraordinary stress on bicycle components, causing them to fatigue prematurely. Carbon parts which have received a violent impact and bent aluminium parts can break suddenly. They should not be straightened because even after you have done this there is still a high risk they will break. If in doubt it is always better to replace these parts, because your safety is at stake.
3. ADDITIONAL TECHNICAL INFORMATION

This manual provides technical information about the general parts of any bike. If you need more precise and detailed technical information about a part in particular please contact its manufacturer. Mondraker recommends you take your bike to your Mondraker dealer for any repairs or maintenance which will be done by expert mechanics.

4. BICYCLE MAINTENANCE

It is very important for the useful life of your bike that you maintain its parts properly. Like any other machine a bicycle is not indestructible. Its parts are exposed to great stresses that weaken their materials. The durability and functioning of your bike will depend on its materials and how you use and maintain it. Good bike maintenance will give you better performance and the materials will last longer. As we mentioned above you should regularly check the safety features and we also recommend you should take your bike to your dealer for servicing to make sure it works properly. However, below are some basic tips for maintaining your bike.

4.1 Cleaning
Your bike needs to be clean to work properly, so here’s how to do it. The bike should be washed with a wet sponge and soap. For the chain, sprockets and front and rear derailleur you should use a liquid degreaser that you can buy at your Mondraker dealer. Once the bike is soaped and the degreaser applied, rinse it with non-pressurised water and make sure the water does not get into parts like the headset, hubs or bottom brackets. This way the grease will not be removed from these parts.

4.2 Lubricating
Once your bicycle is clean and dry you can lubricate it. There is a range of greases and lubes on the market for all the parts and below we suggest which ones you should use. For the chain, front and rear derailleur, levers, cables and sheathes you can use a fluid oil, which you can buy as a spray or liquid. There is also a Teflon-base lube that coats the area where it is applied so dirt cannot get in while it lubricates. For the seatpost you can use grease which also keeps the frame watertight. For the hubs, headset and bottom brackets we recommend you go to your dealer as they need to be disassembled for lubrication for which you will need a lot of experience and specific tools.

Note: When you are not using your bike, protect it from rain, snow, sun, etc. Snow and rain can damage the metal parts of your bike and sun can harm plastic parts and paintwork. We recommend you to leave the bicycle lubricated and covered with the tires at half pressure if you are not going to ride for a long time.
5. e-BIKES

How it works
This type of bike are legally classified as EPAC (Electrically Power Assisted Cycle, from now on named as “e-bike”). This category differs from the vehicles commonly called speed pedelec which are subject to type-approval requirements and need registration and insurance. An e-bike is a bicycle equipped with an auxiliary motor with 250 W maximum power which assists pedalling up to 25 kph and only works when the cyclist operates the pedals.

The level of assistance of the motor is variable, adjustable and can be changed by the cyclist even during riding. The assistance is progressively reduced and finally switched off when you reach 25 kph. The bicycle can be used normally when the pedal-assist system is off. In addition, an e-bike is equipped with a push aid feature that is activated by a button and propels the bike up to 6 kph.

⚠️ ATTENTION: The push aid feature should only be used when you are pushing the e-bike. Improper use could result in injury to the user.

An e-bike behaves differently to conventional bicycles. Its average speed and mass are higher and therefore braking force will be higher.

Recommendations for use and warnings
We recommend you gain experience and test the operating range of your e-bike under different conditions before going on longer and more challenging rides. Bear in mind that range is influenced by many factors such as assistance level, gear-switching behaviour, tyre type and pressure, age and condition of the battery pack, terrain, etc.

The intended use of this e-bike comes under Group 4 as defined in section 1.4 of this manual (For riding on rugged trails with medium obstacles) excepting public roads. If you want to use your e-bike on public roads, you must comply with the traffic regulations of the country concerned.

Under no circumstances should you modify the components of your e-bike. This could result in violation of local laws and/or lead to hazardous operating conditions.

Please read the motor manufacturer’s instruction manual carefully for more detailed information.

Cleaning recommendations
In addition to the points in section 4.1 of the manual, keep the battery clean. Clean it with a clean, soft cloth and do not immerse it in water or clean it with pressurised water. After cleaning, do not dry the e-bike with compressed air as dirt could penetrate sealed areas and electrical and electronic components and lead to corrosion.
Charging recommendations

The battery is supplied partially charged. To obtain maximum power on the first run, charge it completely using the original battery charger.

The battery can be charged at any time individually or on the bike without reducing its service life. Interrupting the charging procedure does not damage the battery. The battery is equipped with a temperature control indicator which enables charging only between 0°C and 40 °C.

**WARNINGS:**

Only use the charger provided with your e-bike or an identical original charger. Only this charger is matched to the lithium-ion battery used in your e-bike.

Keep the charger away from rain or moisture. The penetration of water into a battery charger increases the risk of an electric shock.

Only charge lithium-ion batteries approved for your e-bike. The battery’s voltage must match the charging voltage of the charger. Otherwise there is danger of fire and explosion.

Keep the battery charger clean. Dirt can lead to danger of an electric shock.

Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never try to open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts. Damaged battery chargers, cables and plugs increase the risk of an electric shock.

Do not operate the battery charger on easily inflammable surfaces (e.g. paper, textiles, etc.) or surroundings. The heating of the battery charger during the charging process can pose a fire hazard.

Use caution when touching the charger during the charging process. Wear protective gloves. The charger can heat up considerably, especially in high ambient temperatures.

Vapours can escape in case of damage and improper use of the battery. Look for fresh air and seek medical attention in case of malaise. Vapors can irritate the respiratory system.
Mondraker Warranty

The Mondraker bikes are exclusively sold through our network of official distributors who mount the bikes, fine tune them and can carry out any necessary maintenance.

The Mondraker frames are manufactured according to the most innovative production methods and are subject to severe quality checks. Hence, Mondraker bicycles offers a lifetime warranty on all its frames against material or production defects.

WARRANTY TERMS AND CONDITIONS:

1. The Mondraker Warranty must be activated by prior online registration at www.mondraker.com within at most 3 months after purchase. Any non-registered bike will be subject to the minimum warranty conditions required in the country of purchase.
2. This warranty is in force from the purchase date for bicycles and frames bought in or after the 2010 season. It is only applicable to the original owner and is non-transferable.
3. All components, suspension forks and rear shock absorbers mounted on our bikes will be covered by the manufacturer’s original warranty with the minimum required by legislation in the country of purchase.
4. The frame paintwork warranty is for two years.
5. All frames subject to change for the reasons covered by the warranty will be replaced by the same, equivalent or higher model from the same year while stocks last. If there are no frames available from the same year, it will be replaced by an equivalent frame from a subsequent year meaning that the shape, colour and graphic design of the frame may be significantly different.
6. All warranty claims must be made at an authorised Mondraker dealer and proof of purchase must be submitted.

WARRANTY EXCLUSIONS:

1. Usage and normal wear and tear in frames and parts which are liable to wear out such as tyres, grips, chains, brake pads, chain guides, etc.
2. Poor assembly or maintenance and mounting parts and accessories not originally designed for the bike or which are not compatible with it.
3. This warranty is limited to the repair or replacement of a defective part and does not cover any personal injury resulting directly or indirectly from its failure during use.
4. Damage or breakdown due to accident, misuse or negligence.
5. All bikes/frames have lifespan which will vary depending on the type of the material used and their construction. This lifespan may be reduced due to the form and type of use or lack of maintenance and care. Therefore the warranty will depend on this point.
6. Each frame is manufactured for a specific type of use in accordance with its technical specifications. The warranty will be valid provided the bike has been used in the way for which it was manufactured.
7. The rear triangles and links have a 2-year warranty from the purchase date. In case of breakage, only the damaged part will be replaced and not the entire frame.

Supervise children during use, cleaning and maintenance. This will ensure that children do not play with the charger.

Children or people who owing to their physical, sensory or mental limitations or their lack of experience or knowledge are not capable of securely operating the charger may only use this charger under supervision or after having been instructed by a responsible person. Otherwise, there is danger of operating errors and injuries.

CAUTION:
Read and observe the instructions and safety warnings you will find in the operating instructions of the battery, motor and cyclocomputer.

A safety warning with the following content can be found on the bottom side of the charger:
ONLY use with original lithium-ion batteries!

6. MONDRAKER WARRANTY
8. Labour for replacing or changing parts.
9. All warranty issues will be subject to the final decision of our mechanics about the nature and cause of the damage after a thorough technical analysis of the frame.

*If any of the above clauses is prohibited by the law of any country, that specific clause will be cancelled and the rest will remain applicable.

6. ADDITIONAL QUALITY GUARANTEE

Mondraker bicycles comply with the following safety standards:

EN ISO 4210-2:2014 Mountain, city and trekking, young adult and racing bicycles
This part of ISO 4210 specifies safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies having saddle height as given in Table I, and establishes the manufacturer’s guidelines related to the use and care of such bicycles.

This part of ISO 4210 applies to bicycles for young adults with maximum saddle height of more than 635 mm and less than 750 mm, city and trekking bicycles, mountain bicycles, and racing bicycles that have a maximum saddle height of 635 mm or more including folding bicycles (see Table I).

This part of ISO 4210 does not apply to special types of bicycle, such as delivery bicycles, recumbent bicycles, tandems, BMX bicycles, and bicycles designed and equipped for use in demanding applications such as regulated competition events, stunting, or acrobatic manoeuvres.

Table I - Maximum saddle height
Measurements in millimetres

<table>
<thead>
<tr>
<th>BICYCLE TYPE</th>
<th>City and trekking bicycles</th>
<th>Bicycles for young adults</th>
<th>Racing bicycles</th>
<th>Bicicletas de carreras</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM SADDLE HEIGHT</td>
<td>635 or more</td>
<td>635 or more and less than 750</td>
<td>635 or more</td>
<td>635 or more</td>
</tr>
</tbody>
</table>

EN ISO 8098: 2014 Bicycles for young children
This International Standard specifies safety and performance requirements and test methods for the design, assembly and testing of fully assembled bicycles and sub-assemblies for young children. It also provides guidelines for instructions on the use and care of the bicycles.

This International Standard is applicable to bicycles with a maximum saddle height of more than 435 mm and less than 635 mm, propelled by a transmitted drive to the rear wheel. It is not applicable to special bicycles intended for performing stunts (e.g. BMX bicycles).
EN 15194 Cycles, Electrically power assisted cycles, EPAC bicycles
This European Standard applies to electrically power assisted cycles with a maximum continuous rated power of 0.25 kW, of which the output is progressively reduced and finally cut off as the vehicle reaches a speed of 25 kph, or sooner if the cyclist stops pedalling.

This European Standard specifies safety requirements and test methods for the assessment in the design and assembly of electrically power assisted bicycles and sub-assemblies for systems using battery voltage up to 48 VDC or integrating a battery charger with a 230 V input.

This European Standard specifies requirements and test methods for engine power management systems, electrical circuits including the charging system to evaluate the design and assembly of electrically power assisted cycles and sub-assemblies for systems having a voltage up to and including 48 VDC or integrating a battery charger with a 230 V input.
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