

# **MERIDA**

## **OPERATING INSTRUCTIONS**

### **MTB – CITY/TREKKING BIKE – ROAD BIKE**

EN ISO 4210-2

### **KIDS' BIKE**

EN ISO 8098

Read at least pages 11 and 12 before your first ride!

Perform the functional check on pages 13 and 14 before every ride!

Observe the chapter "Intended use", the service schedule and the bike card!



**Frame:**

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

**Suspension fork:**

- I Fork crown
- II Stanchion tube
- III Lower leg
- IV Drop-out

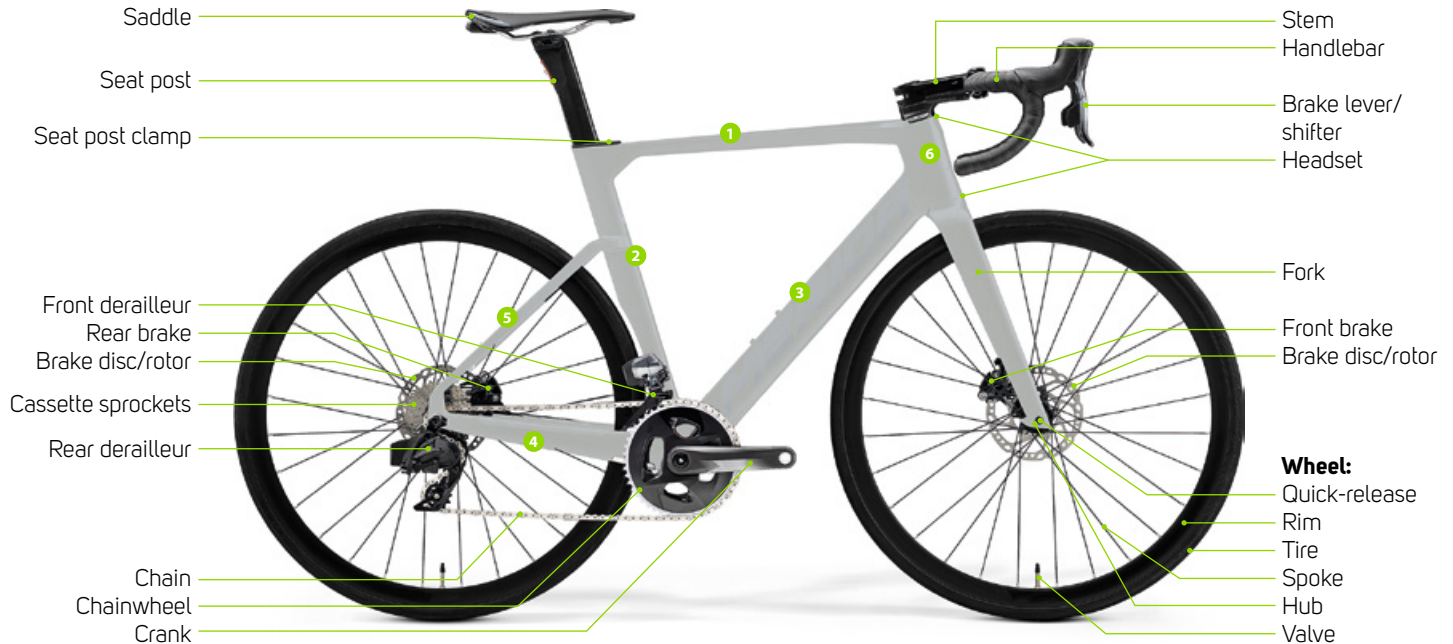


**Wheel:**

- Quick-release/thru axle
- Rim
- Tire
- Spoke
- Hub
- Valve

**Frame:**

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



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



**Wheel:**

- Quick-release/ thru axle
- Rim
- Tire
- Spoke
- Hub
- Valve

## MERIDA operating instructions

These MERIDA operating instructions are meant as start assistance. Together with the instructions of the component manufacturers this first introduction is part of a system.

If you do not find answers to all your questions in this start assistance and before doing any adjustment whatsoever, read the other user manuals or ask your MERIDA dealer for advice.

These MERIDA operating instructions include the following bicycle types:

**Mountain bikes / cross / cross-country, marathon and tour mountain bikes / enduro and all mountain bikes / dirt and freeride bikes**

**Road bikes / triathlon bikes / time trial machines / cyclo-cross bikes / gravel bikes**

**City, trekking and fitness bikes**

**Kids' bikes**



Be sure to also observe the instructions of the component manufacturers. These **MERIDA operating instructions are subject to European law. If delivered to countries outside Europe, supplementary information has to be provided by the manufacturer of the MERIDA bike, if necessary.**



**Always keep yourself informed at [www.merida-bikes.com](http://www.merida-bikes.com)**

### Imprint:

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Technical details in the text and illustrations of this manual are subject to change. The illustrations are exemplary and may differ from your MERIDA bike.

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## Some notes on these MERIDA operating instructions

The illustrations on the first pages of the MERIDA operating instructions show typical MERIDA city/trekking bikes, MERIDA road bikes and MERIDA mountain bikes. One of these MERIDA bikes looks similar to the MERIDA bike you have purchased. Today's bikes come in various types that are designed for specific uses and equipped accordingly. The MERIDA operating instructions include the following bicycle types:

Mountain bikes **(e)**, full suspension and hard tail (only front fork suspension)

Road bikes **(f)**, triathlon bikes and time trial machines, cyclo-cross bikes, gravel bikes

City, trekking, fitness bikes **(g)**

Kids' bikes **(h)**

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

These MERIDA operating instructions are not applicable to any other than the displayed bicycle types.



Pay particular attention to the following symbols:



This symbol indicates an imminent risk to your life or health unless you comply with the instructions given or take preventive measures.



This symbol warns you of wrongdoings which may result in damage to property and the environment.



This symbol provides you with information about how to handle the product or refers to a passage in the MERIDA operating instructions that deserves your special attention.

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

These MERIDA operating instructions comply with the requirements of the EN ISO standards 4210-2 and 8098.

## General safety instructions

Dear MERIDA customer,

In purchasing this MERIDA bike (a-d) you have chosen a product of high quality. Each component of your new MERIDA bike has been designed, manufactured and assembled with great care and expertise. Your MERIDA dealer gave the bike its final assembly and made a functional check. This guarantees you pleasure and a sense of confidence from the very first turn of the pedals.

This manual contains a wealth of information on the proper use of your MERIDA bike, its maintenance and operation as well as interesting information on bike design and engineering. Be sure to read the MERIDA operating instructions thoroughly. We are sure that even if you have been cycling all your life you will find useful and detailed information. Bike technology has developed at a rapid pace during recent years.

Therefore, before setting off on your new MERIDA bike, be sure to read at least the chapter "Before your first ride".

To ensure as much fun and safety as possible during cycling, be sure to carry out the functional check described in the chapter "Before every ride" before setting off on your MERIDA bike.

Even a manual as big as an encyclopedia could not describe any possible combination of bicycle models and components or parts on the market.



These MERIDA operating instructions therefore focus on your newly purchased MERIDA bike and standard components and provide useful information and warnings.

When doing any adjusting and maintenance work, be aware that the detailed instructions provided in your manual only refer to this MERIDA bike.

The information included here is not applicable to any other bicycle type. As bikes come in a wide variety of designs with frequent model changes, the routines described may require complementary information. Be sure to observe the instructions of the component manufacturers.

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



You find more detailed information on your MERIDA bike at <https://www.merida-bikes.com/en/p/service/instruction-manuals-144.html>





Before you set off, let us point out a few things that are very important to every cyclist. Never ride without a properly adjusted helmet and without eye protection **(e)**.

Make sure to wear suitable, bright clothing, as a minimum you should wear straight cut trousers and or leg bands and shoes fitting the pedal system **(f)**. Always ride carefully on public roads and observe the traffic rules so as not to endanger yourself or others.

This manual cannot teach you how to ride. Please be aware that cycling is a potentially dangerous activity that requires the rider to stay in control of his or her MERIDA bike at all times. If necessary, attend a beginners course for cyclists, as offered here and there.

Like any sport, cycling involves the risk of injury and damage. By choosing to ride a bike, you assume the responsibility for the risk. Please note that on a bike you have no protection technique around you like you have in a car (e.g. bodywork, ABS, airbag). Therefore, always ride carefully and respect the other traffic participants.

Never ride under the influence of drugs, medication, alcohol or when you are tired. Do not ride with a second person on your MERIDA bike and never ride without having both hands on the handlebars.



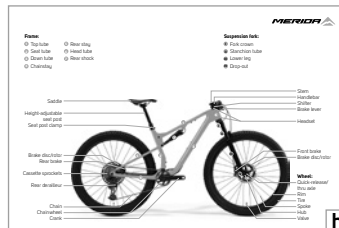
e



f



g



h

Observe the legal regulations concerning off-road cycling and public roads. These regulations may differ in each country.

Respect nature when riding through the forest and in the open countryside. Only use your bike on signposted, well maintained trails and hard-surface roads **(g)**.

In case you purchased a MERIDA kids' bike, observe the chapter "MERIDA kids' bikes".

First, we would like to familiarize you with the various components of your MERIDA bike. Unfold the front cover of the MERIDA operating instructions **(h)**. There you find an exemplary MERIDA city/trekking bike, MERIDA mountain bike and a MERIDA road bike showing all the essential components. Leave this page unfolded as you read. This helps you to easily locate the components as they are referred to in the text.



**For your own safety, never do any work or adjusting when servicing your bike unless you feel absolutely sure about it. If you are in doubt or if you have any questions contact your MERIDA dealer.**



**Keep in mind: Do not hitch yourself and your bike to a car. Do not ride hands-free. Take your feet off the pedals only if required by the condition of the road.**

## Intended use

Keep in mind that every type of bicycle, referred to as category in the following, is designed for a specific use. Be sure to use your MERIDA bike only according to its intended use, as it may otherwise not withstand the loads and fail resulting in an accident with unforeseeable consequences! If you use your bike for another than its intended purpose the warranty will become void.

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



Keep in mind that there are different types of bicycle which are subject to different legal framework conditions. Therefore, check the sticker (a+b) on the bike or have a look at the bike card to identify the category your MERIDA bike belongs to. Keep the specific regulations for your class in mind when riding on public roads and through the landscape.



Strictly observe the category to which your MERIDA bike belongs. From the category you can conclude on which grounds you are allowed to ride and for which riding actions your bike is suitable. You find more information in the chapter "Categories" and in the bike card (c). Ask your MERIDA dealer to confirm the category to which your MERIDA bike belongs.



a



b

Bike card		MERIDA	
Frame color		Intended use	<input type="checkbox"/> category 0 <input type="checkbox"/> category 3 <input type="checkbox"/> category 1 <input type="checkbox"/> category 4 <input type="checkbox"/> category 2 <input type="checkbox"/> category 5
Max. weight (incl. rider)		Permissible overall weight*	<input type="checkbox"/> without _____ kg <input type="checkbox"/> with _____ kg
Frame type		Permissible total gear weight	<input type="checkbox"/> yes <input type="checkbox"/> no
Frame size		Child seat permitted	<input type="checkbox"/> yes <input type="checkbox"/> no
Color graphics and text		Tire permitted	<input type="checkbox"/> yes <input type="checkbox"/> no
Special features		<b>Notes:</b> High seat: <input type="checkbox"/> Front wheel drive <input type="checkbox"/> Rear wheel drive Left lower: <input type="checkbox"/> Front wheel drive <input type="checkbox"/> Rear wheel drive	
<small>*The MERIDA dealer may have different maximum weights per category.</small>		Read at least the chapters "Before your first ride", "Intended use" and "Before every ride" in the MERIDA operating instructions.	
		<small>Quantity and signature of the MERIDA dealer</small>	

c



d



Information on the use of trailers (d) and child seats as well as to the permissible overall weight are provided in the chapters "Permissible overall weight" and "Operation with trailer".



Keep these MERIDA operating instructions for future reference and hand them over to the respective user, in case you sell, lend or pass on your bike.

## Categories

The category of your MERIDA bike is indicated on the orange-colored sticker (a+b) on the top tube.

### Keep in mind:

The higher the category of your MERIDA bike the greater is the direct influence of your riding skills on the service life of your MERIDA bike. Even in a terrain that is approved for MERIDA bikes, defects may occur as a result of riding mistakes. Even if the jump height is lower than the one indicated for the respective category, your MERIDA bike may be affected by defects due to a lack of riding technique or insufficient trail conditions.



Due to their design and equipment MERIDA bikes are not always suitable for being used on public roads. Before being used on public roads the prescribed equipment (e) supplied together with your MERIDA bike must be installed. Observe the traffic rules when riding on public roads. Inform yourself about the legal regulations for riding on public roads applicable in your country.



### Category 0 “Kids”

MERIDA bikes of the category “Kids” (f) are usually bicycles with a wheel size of less than 24”. These bikes are designed for use on hard-surface terrain, separated from public road traffic. The road surfaces can be asphalted, finely graveled, sandy or earthy. The wheels remain in constant contact with the road.



### Category 1 “Road”

MERIDA bikes of the category “Road” (g) are intended for use on public roads and cycle lanes with asphalted surface, whereas the wheels remain in constant contact with the ground. MERIDA bikes of this category are neither intended for off-road use nor as touring and travel bike.

Observe the traffic rules in force when riding on public roads.

### Category 2 “Cross”

MERIDA bikes of the category “Cross” (h) are intended for use on hard-surface terrain, i.e. for asphalted roads and cycle lanes or for field tracks with finely graveled, sandy or earthy surface that are sign-posted for cycle traffic. The wheels remain in constant contact with the road.

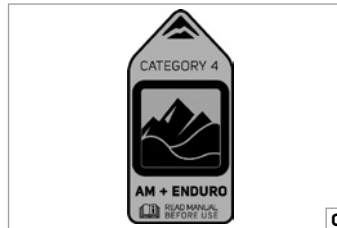
Rolling down a curb is automatically permitted at short term up to a maximum height of 15 centimeters.

### Category 3 “XC + TRAIL”

MERIDA bikes of the category “Cross Country (XC) + Trail” **(a)** are intended for off-road use. Bicycles of this category may be used on asphalted roads and cycle lanes or on field tracks with finely graveled, sandy or earthy surface that are sign-posted for cycle traffic. In addition, bicycles of this category may be used on trails and technical sections characterized by roots, stones, ditches and loose ground. On official mountain bike trails jumps with built landings up to a height of 60 centimeters are permitted.

The use in trail parks on suitable trails, such as “flow trails” **(b)**, is permitted as long as the trail is free of construction characteristics for higher categories for which a bicycle of this category is not approved.

In particular jumps carried out by inexperienced riders can result in improper landings. In this case the forces acting on the bicycle may be significantly higher compared to riders with a proper riding technique. This can result in damage and injuries. We recommend that you attend a riding technique course. If you use your MERIDA bike regularly in a trail park have it checked by your MERIDA dealer more often than indicated in the service plan.



### Category 4 “AM + Enduro”

MERIDA bikes of the category “All Mountain (AM) + Enduro” **(c)** are intended for off-road use. Bicycles of this category are not only intended for use on trails and technical sections **(d)** characterized by roots, stones, ditches and loose ground but also in rough terrain with blocked sections.

Jumps on official mountain bike trails with built landings up to a height of 1.2 meters are permitted.

The use in bike parks on suitable trails is permitted as long as the trail is free of construction characteristics for higher categories for which a bicycle of this category is not approved. In particular jumps carried out by inexperienced riders can result in improper landings. In this case the forces acting on the bicycle may be significantly higher compared to riders with a proper riding technique. This can result in damage and injuries. We recommend that you attend a riding technique course. If you use your MERIDA bike regularly in a trail park have it checked by your MERIDA dealer more often than indicated in the service plan.

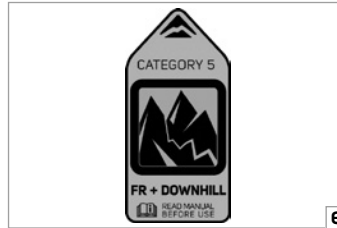
## Category 5 “FR + Downhill”

MERIDA bikes of the category “Freeride (FR) + Downhill” **(e)** are intended for off-road use. Bicycle of this category are not only intended for use on trails and technical sections characterized by roots, stones, ditches and loose ground but also in rough terrain with blocked sections **(f)**.

Jumps on official mountain bike trails with built landings at a height of more than 1.2 meters are permitted **(g)**.

The extensive use in bike parks is approved.

In particular jumps carried out by inexperienced riders can result in improper landings. In this case the forces acting on the bicycle may be significantly higher compared to riders with a proper riding technique. This can result in damage and injuries. We recommend that you attend a riding technique course. If you use your MERIDA bike regularly in a trail park have it checked by your MERIDA dealer more often than indicated in the service plan.



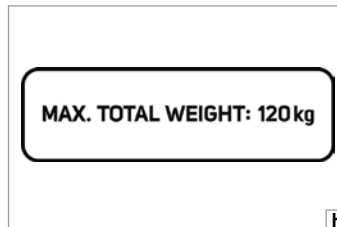
**e**



**f**



**g**



**h**

## Permissible overall weight

The permissible overall weight is indicated on the sticker on your MERIDA bike **(h)**. The following permissible overall weights are applicable if there is no weight indicated on your MERIDA bike:

Road bikes, triathlon bikes and time trial machines:	120 kg
Cyclo-cross bikes/road racing machines:	120 kg
City/trekking bikes:	135 kg
Fitness bikes:	120 kg
Kids' bikes:	80 kg
Mountain bikes:	135 kg

The permissible overall weight is calculated as follows:

$$\begin{aligned}
 & \text{Weight rider (kg)} \\
 & + \text{Weight bike (kg)} \\
 & + \text{Weight baggage (kg)} \\
 & + \text{Overall weight trailer incl. cargo} \\
 & \quad \text{and/or persons (if loaded) (kg)} \\
 & = \text{permissible overall weight (kg)}
 \end{aligned}$$



**If the weight indicated on your MERIDA bike deviates from the table in these operating instructions, the weight specified on your MERIDA bike applies. Special lightweight bikes only allow lower permissible overall weights. Special bikes for cargo transport or harder fields of use may allow higher permissible overall weights.**

## Operation with trailer

Numerous MERIDA bikes are approved for being operated with trailer **(a)** for the transport of cargo and children. With special child trailers that are towed behind the bike you can transport up to two children.

When using a trailer the following points must be observed:

- The trailer with its actual weight incl. cargo is regarded as part of the permissible weight of your MERIDA bike. See calculation formula in the chapter “Permissible overall weight”.
- Be sure to mount the trailer coupling to the rear axle or specific mounts at the drop-out (e.g. HDT mount).
- Mounting the trailer coupling to frame tubes, rear frame stays or the seat post is **not permitted**.
- If in the case of thru axles it is necessary for the attachment of the trailer coupling to replace the original thru axle or to clamp an adapter with the original thru axle make sure the axle thread and the thread of the axle nut is completely covered.
- Replacement axles must comply with the technical specifications of the original MERIDA axle (clamping width, thread pitch and thread length, material and diameter).
- If parts of the lighting system on your MERIDA bike are obscured by the trailer they must be mounted visibly to the trailer. In case of a night ride mount a battery/accumulator-powered lamp **(b)** to the rear.



- Do observe the permissible maximum speed indicated by the trailer manufacturer. Observe in this regard the operating instructions of the trailer manufacturer.
- Persons must be transported only in trailers approved for this purpose.



Always buckle up children in the trailer, as uncontrolled movements of the child can make the MERIDA bike or the trailer topple over.



Always protect your child with a suitable helmet **(c)**. In case of an accident a trailer provides no more than an imperfect protection. Keep in mind that you should always wear a helmet as well.



Trailers affect the braking behavior your MERIDA bike and occupy far more width than the bike would alone. Practice first of all by towing an empty trailer. Equip the trailer with a long pole with colored pennant to increase visibility.



Be aware of a longer stopping distance due to the additional load of the child transport.



You find more detailed information on your MERIDA bike at <https://www.merida-bikes.com/en/p/service/instruction-manuals-144.html>



## Before your first ride

1. If you want to use your bicycle on public roads, it has to comply with the respective legal requirements. These requirements may vary in each country. The equipment of MERIDA bikes are, therefore, not necessarily complete **(e-f)**. Ask your MERIDA dealer concerning the laws and regulations applicable in your country or in the country you intend to use your MERIDA bike. Have your MERIDA bike equipped accordingly before using it on public roads.

You find more information in the chapter “Legal requirements for riding on public roads”.



**Make yourself familiar with the traffic regulations in your country.**

2. Are you familiar with the brake system **(g)**? Have a look at the bike card and check whether the brake lever of the front brake is on the side you are used to (right or left). If it is not ask your MERIDA dealer to switch the brake levers before you set off for the first time.

Your new bike is equipped with modern brakes which may be far more powerful than those you were used to so far. Be sure to first practice using the brakes on a level, non-slip surface off public roads! Slowly approach higher brake performances and speeds.



**e**



**f**



**g**



**h**

3. Are you familiar with the type and functioning of the gears? Ask your MERIDA dealer to explain you the gear system and make yourself familiar with your new gears in an area free of traffic, if necessary.

You find more information in the chapter “The gears” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

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

You find more information in the chapter “Adjusting the MERIDA bike to the rider” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

5. If your MERIDA bike is equipped with clipless or step-in pedals: Have you ever tried the shoes they go with? Do not set off until you have practiced engaging and disengaging the shoes from the pedals in standing. Ask your MERIDA dealer to explain you the pedals.

More information is provided in the instructions of the component manufacturers.



6. If you have bought a MERIDA bike with suspension **(a)**, you should ask your MERIDA dealer to adjust the suspension mechanism to your needs before delivery. Improperly adjusted suspension components are liable to malfunction or damage. In any case they will impair the performance of your bike as well as your safety and joy whilst riding.

You find more information in the chapters "Suspension forks", "Rear shocks" and "Suspension seat posts" in these MERIDA operating instructions as well as the instructions of the component manufacturers.



**a**



**b**



**c**



**d**



Be aware that the distance you need to stop your bike increases, when you are riding with your hands on aero bars, handlebars with bar ends or on multi-position handlebars. The brake levers are not always within easy reach.



Be sure to use your MERIDA bike only for its intended purpose, as it may otherwise not withstand the loads and fail. Risk of accident!



In particular, make sure there is enough space **(b)** between crotch and top tube so you cannot hurt yourself when you have to get off quickly.



Observe that both braking effect and tire grip can be reduced drastically in wet conditions. Look well ahead when riding on wet roads and go well below the speed you would ride at in dry conditions.



A lack of practice with or a too tight disengaging mechanism of clipless pedals may result in problems of unclipping from the pedals **(c)**! Risk of accident!



In case you had a crash with your MERIDA bike, perform at least the check described in the chapter "Before every ride". Ride back very carefully by taking the shortest route possible, even if your MERIDA bike went through this check without any problems. Do not accelerate or brake hard and do not ride your bike out of the saddle. If you are in doubt have yourself picked up by car instead of taking any risk. Back home you need to check your MERIDA bike thoroughly once again. If you are in doubt or if you have any questions contact your MERIDA dealer!



Information about the use of trailers are provided in the chapter "Operation with trailer" and in the bike card. If are in doubt or if you have any questions, contact your MERIDA dealer.



Mounting a child seat is only possible if the pannier rack or the main frame has mounting points for this purpose. For safety reasons we recommend using child trailers in general **(d)**. If are in doubt or if you have any questions, contact your MERIDA dealer.



## Before every ride

Your MERIDA bike has undergone numerous tests during production and a final check has been carried out by your MERIDA dealer. Nevertheless, since changes in the function of your MERIDA bike may occur during transport or third parties may have made changes to your MERIDA bike during a standstill, it is essential that you check the following before every ride:

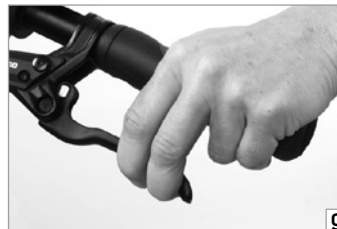
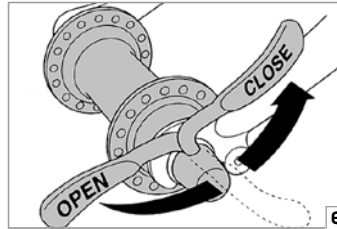
1. Are the quick-release levers **(e)**, thru axles or nuts of the front and rear wheel, the seat post and other components properly closed?

You find more information in the chapter “How to use quick-releases and thru axles” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

2. Are the tires in good condition and do they have sufficient pressure? The minimum and maximum pressure (in bar or PSI) is indicated on the tire side **(f)**.

More information on how to install tubeless tires is provided in the instructions of the component manufacturers.

3. Spin the wheels to check that the rims are true. If you have disc brakes, watch the gap between frame and rim or tire and, if you have rim brakes, between brake pad and rim.



Untrue rims can be an indication of tires with ruptured sides or broken axles or spokes.

More information is provided in the instructions of the component manufacturers.

4. Test the brakes in stationary by firmly pulling the brake levers towards the handlebars **(g)**. The brake pads of **rim brakes** must hit the rim evenly with their entire surface without touching the tire during braking, in open condition or in between. You should not be able to pull the lever all the way to the handlebar. Check the thickness of the brake pads, as well.

With **disc brakes** you should have a stable pressure point at once. If you have to actuate the brake lever more than once to get a positive braking response, have the MERIDA bike checked by your MERIDA dealer immediately.

You find more information in the chapter “The brake system” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

5. Let your MERIDA bike bounce on the ground from a small height **(h)**. If there is any rattling find out where it comes from. Check the bearings and bolted connections, if necessary.

6. In case you have a MERIDA bike with suspension, press down on your MERIDA bike and see whether the spring elements retract and extend as usual **(a)**.

You find more information in the chapters “Suspension forks”, “Rear shocks” and “Suspension seat posts” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

7. If your bike has a kickstand make sure it is fully raised **(b)** before you set off. **Risk of accident!**
8. Do not forget to take a high quality D- **(c)** or chain lock with you on your ride. The only way to effectively protect your MERIDA bike against theft is to lock it to an immovable object.
9. If you want to ride on public roads, make sure your MERIDA bike is equipped according to the applicable regulations of your country **(d)**. Riding without lights and reflectors in dark or dim conditions is very dangerous. You will be seen too late or not at all by other road users. If you ride on public roads, you always need an approved lighting system. Turn on the lights as soon as dusk sets in. Inform yourself about the legal regulations for riding on public roads applicable in your country.



**a**



**b**



**c**



**d**



Improperly closed fastenings, e.g. quick-releases, can cause parts of your MERIDA bike to come loose. This can result in a serious accident!



Be aware that the distance you need to stop your bike increases, when you are riding with your hands on aero bars, handlebars with bar ends or on multi-position handlebars. The brake levers are not always within easy reach.



Do not use your MERIDA bike, if it fails at one of these points! A defective MERIDA bike can lead to serious accidents! If you are in doubt or if you have any questions contact your MERIDA dealer.



During use your MERIDA bike is undergoing stress resulting from the surface of the road and from the rider's action. Due to these dynamic loads, the different parts are subject to wear and fatigue. Please check your MERIDA bike regularly for wear marks, scratches, deformations, color changes and any indication of cracking. Components which have reached the end of their service life may fail suddenly. Let your MERIDA dealer maintain and service your MERIDA bike regularly. In cases of doubt it is always best to replace components.

## After an accident

1. Check that the wheels are still firmly fixed in the drop-outs (**e**) and that the rims are still centered with respect to the frame or fork. Spin the wheels and observe the gap either between brake pads and rim sides or between frame and tire. If you have rim brakes and the width of the gap changes markedly and you have no way to true the rim where you are you need to open the brakes a little with the special device so that the rim can run between the brake pads without touching them.

Please note that in this case the brakes may not act as powerfully as you are used to. No matter whether you have rim or disc brakes, have the wheels trued by your MERIDA dealer immediately after you are back home.

You find more information in the chapters “The brake system”, “How to use quick-releases and thru axles” and “The wheels and the tires” in these MERIDA operating instructions and the instructions of the component manufacturers.

2. Check that the handlebar and the stem are neither bent nor broken and that they are still level and upright (**f**). Make sure the stem is firmly fixed on the fork by trying to turn the handlebars relative to the front wheel (**g**). Briefly lean on the brake levers to make sure the handlebars are firmly fixed in the stem. Realign the components, if necessary, and gently tighten the bolts to ensure a reliable clamping of the components.



The maximum torque values are printed directly on the components or specified in the instructions of the component manufacturers. You find more information in the chapter “Adjusting the MERIDA bike to the rider” and “The headset” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

3. Check that the chain still runs on the chainwheels and the sprockets. If your MERIDA bike fell over to the chain side, verify the proper functioning of the gears. Ask somebody to lift your MERIDA bike by the saddle and carefully shift through all the gears. Pay particular attention when switching to the small gears, making sure the rear derailleur does not get too close to the spokes as the chain climbs onto the larger sprockets (**h**).

If the rear derailleur or the drop-out/derailleur hanger is bent the rear derailleur may collide with the spokes. This in turn can destroy the rear derailleur, the rear wheel or the frame. Check the function of the front derailleur, as a displaced front derailleur can throw off the chain, thus interrupting the drive of your MERIDA bike. You find more information in the chapter “The gears” in these MERIDA operating instructions as well as the instructions of the component manufacturers.

4. Make sure the saddle is not twisted by using the top tube **(a)** or the bottom bracket shell as a reference. If necessary, open the clamping, realign the saddle and retighten the clamping. You find more information in the chapter "Adjusting the MERIDA bike to the rider" and "How to use quick-releases and thru axles" in these MERIDA operating instructions as well as the instructions of the component manufacturers.
  
5. Let your MERIDA bike bounce on the ground from a small height. If there is any rattling, see where it comes from. Check the bearings and bolted connections, if necessary.
  
6. Finally, take a good look at the whole MERIDA bike to detect any deformations, color changes or cracks **(b)**. Ride back very carefully by taking the shortest route possible, even if your MERIDA bike went through this check without any problems. Do not accelerate or brake hard and do not ride out of the saddle. If you are in doubt about the performance of your MERIDA bike, have yourself picked up by car, instead of taking any risk.

Back home you need to check your MERIDA bike thoroughly. Damaged parts must be repaired or replaced. Ask your MERIDA dealer for advice. For more information about carbon components see the chapter "Special characteristics of carbon" in these MERIDA operating instructions as well as the instructions of the component manufacturers.



**a**



**b**



**c**



**d**



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



If your MERIDA bike is assembled with carbon components **(c)**, it is imperative that you have it checked by your MERIDA dealer after an accident or similar incident. Carbon is extremely strong and durable with very low weight, making it perfect for the production of high-performance parts. However, one of the inherent properties of carbon is that possible overstress may compromise the inner carbon-fiber structure without showing any visible deformation, as is the case with steel or aluminum. A damaged component can fail without previous warning. Risk of accident!



After an accident or after your MERIDA bicycle has toppled over make it a rule to check the functioning and in particular the limit stop of the rear derailleur **(d)**.



More information, especially about carbon forks, is provided in the "Additional mounting and operating instructions for bikes with carbon fork steerer tubes" and in the instructions of the component manufacturers.

## How to use quick-releases and thru axles

### Quick-releases

Most MERIDA bikes are fitted with quick-releases to ensure fast adjustments, assembly and disassembly. Be sure to check whether all quick-releases are tight before you set off on your MERIDA bike. Quick-releases should be handled with greatest care, as they affect your safety directly.

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

Quick-release mechanisms essentially consist of two operative elements **(e)**:

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



**Do not touch the brake disc directly after having stopped, e.g. after a long down-hill ride, you may burn your fingers! Always let the brake disc cool down before opening the quick-release.**



Make sure the levers of both wheel quick-releases are always on the side opposite to the chain. This will help you to avoid mounting the front wheel accidentally the wrong way round. In the case of MERIDA bikes with disc brakes and quick-releases having a 5 mm-axle, it may be reasonable to mount both quick-releases with the lever on the side of the chain drive. This helps you not to come into contact with the hot brake disc and prevents you from having your fingers burnt. If you are in doubt or if you have any questions contact your MERIDA dealer.

### How to fasten components securely with a quick-release

Open the quick-release. You should now be able to read "Open" **(f)** on the lever. Make sure the component to be fastened is in the accurate position.

You find more information in the chapter "Adjusting the MERIDA bike to the rider" and "The wheels and the tires" in these MERIDA operating instructions as well as the instructions of the component manufacturers.

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

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

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

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

Finally lift the bike so that the wheel is suspended a few centimeters from the ground and hit the tire from above **(d)**.

If it is properly fastened the wheel will remain firmly fixed in the drop-outs of the frame or fork without producing any rattling.

To check the quick-release at the saddle, try twisting the saddle relative to the frame.



Never ride a MERIDA bike without having checked first whether the wheels are securely fastened. With an insufficiently closed quick-release the wheel can come loose. Imminent risk of accident!



When you park your MERIDA bike lock the wheels fastened with quick-releases together with the frame to an immovable object.



Quick-releases can be replaced by anti-theft locks. They can only be opened and closed with a special, coded key or an Allen key. If you are in doubt or if you have any questions contact your MERIDA dealer.



## Thru axles

Numerous MERIDA bikes are equipped with thru axles **(e)**. They provide forks and rear frames with a higher stiffness.

### Useful information for mounting wheels with thru axles

You need a 6 mm Allen key to loosen the MERIDA thru axles at the rear wheel and at the rigid fork. On MERIDA bikes this key is inserted in the rear axle from where it can be removed **(f+g)**. The tool can also be used to remove front wheel axles on MERIDA rigid forks and on some suspension fork models.

On suspension forks there are different thru-axle systems depending on the manufacturer **(h)**. Some of them can be used with the MERIDA tool, others use quick-release levers or require specific tools for mounting or removal.

If you are in doubt or if you have any questions contact your MERIDA dealer.



Improperly mounted wheels may result in severe falls accidents! Ask your MERIDA dealer to show you how to handle the thru-axle type you have.



To mount the axle only use the tools recommended by the manufacturer. Use a torque wrench whenever possible. Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check the proper fit of the component in between. Never exceed the maximum torque value indicated by the manufacturer! A too tight fixing of the axle can damage the axle or the fork leg.



Check the fastening after the first one to two hours of use and subsequently every 20 hours of use.



Read the operating instructions of the suspension fork manufacturer carefully before dismounting the wheel or doing any maintenance work on the suspension fork.

## Kids' bikes

### Useful information for parents

Children are among the most vulnerable road user groups, not only because of their lack of experience and practice, but also for the simple reason that they are smaller and may therefore have difficulties overseeing things and be easily overlooked by other road users. If you want your child to use his/her MERIDA bike on public roads, you should invest time in road safety instruction and help him/her improve his/her riding skills **(a-c)**. Children are not as observant as adults, and you should therefore get into the routine of checking the MERIDA kids' bike and performing adjustments and maintenance as necessary. If you are in doubt or if you have any questions contact your MERIDA dealer.

Keep in mind that it is your responsibility to supervise your child at least during his/her first rides and do not overtax your child! Inform yourself about the traffic rules in your country. They vary from country to country.

It is essential that your child has good control of his/her MERIDA bike **(d)**, before riding on public roads. As a first step in this direction we recommend that you give your child a scooter or a pedallless bike so that he/she can train his/her sense of balance.

This being accomplished you will need to make your child familiar with the functioning of the brakes and gears before you let him/her sit on his/her MERIDA bike.



Find a place away from the road, ideally a backyard or park, where you can practice braking and shifting gears with your child under your supervision. Once your child has progressed to a point where he/she can ride in traffic, teach him/her how to cross curbs and railway tracks, i.e. to cross these obstacles, if possible, at right angle. Your child should also learn to look ahead and back for any danger before taking this kind of obstacle.

Set a good example when it comes to wearing a cycling helmet and to riding on cycle lanes. It is also advisable to let your child take part in road safety lessons offered at schools or by local clubs and associations.



**It is important to tell children when they practice braking that in wet conditions the braking effect is less effective and the tire grip reduced and that they should therefore ride more slowly and brake more carefully.**



**Take care your child is wearing the helmet only for cycling. For example, wearing the helmet at a park or playground can be hazardous; the helmet could get caught on features or obstacles and result in strangulation by the helmet straps.**



**Children should not ride near precipices, staircases or swimming pools as well as on paths used by automotive mobiles.**



**Make sure the child always wears a properly fitting cycling helmet and well visible, i.e. bright, clothing. It is also advisable to wear reflector stripes to increase visibility.**





**Make sure the cycling helmet complies with the DIN EN 1078 standard.**



**Children can be vain. Therefore, buy a cycling helmet that the child feels happy with (e). Take your child with you to make sure you buy one which is comfortable and fits correctly. This will increase the chances that the helmet is actually worn, which one day might be a life-saver. Make sure the helmet is always fastened!**



**When buying the helmet, ask someone to explained to you how to adjust the straps of the helmet to the head. Only a properly fitted helmet can provide full protection in case of an accident!**

## Adjustment

Adjusting the MERIDA bike to the bodily proportions of a child is even more important than in the case of an adult. When determining the saddle height you should find a compromise that allows the child to reach the ground with both feet when sitting in the saddle while at the same time giving them enough space for pedaling (f). A safe standing (when stopping) takes absolute priority (g)!

Handlebars that are too far away from the saddle or adjusted in a too high/low position can also lead to the fact that the child is less confident and relaxed during cycling. Normally, kids' bikes allow adjustments of the saddle tilt and sometimes the tilt of the handlebars can be adjusted as well. Special attention should be paid to adjusting the control elements, such as the brake levers (h). Easy reach and operation should be ensured for the child.



For more information on how to perform the adjustments of the MERIDA kids' bike to the proportions and needs of your child, read the chapter "Adjusting the MERIDA bike to the rider". If you are in doubt or if you have any questions, contact your MERIDA dealer.

Get into the habit of doing the checks as described in the chapter "Before every ride" together with your child. In this way, your child will learn to handle the MERIDA bike properly and you will be able to detect any defects that have developed during use.

Encourage your child to tell you at once if anything should not be working properly on his/her MERIDA bike. Rectify the fault immediately or take the bike to your MERIDA dealer for repair.



**months!**

**Children and adolescents need to have the saddle height and the position of saddle and handlebars checked at least every three**



**Only buy training wheels that have been certified, for example, according to DIN/GS.**



**If you wish to install training wheels, ask your MERIDA dealer about suitable models. Read the mounting instructions of the supplier and ask, if necessary, your MERIDA dealer for further information.**



**The training wheels are only an unsatisfactory riding aid for very small children and should be removed as soon as possible to train the sense of balance of your child.**

## Adjusting the MERIDA bike to the rider

Your body height and proportions are decisive for the frame size of your MERIDA bike. Make particularly sure there is enough space between your crotch and the top tube so that you do not hurt yourself, if you have to get off your bicycle quickly **(a)**.

By choosing a specific type of bike you roughly determine the posture you will be riding in **(b+c)**. However, some components of your MERIDA bike are especially designed so that you can adjust them to your body proportions up to a certain degree. This includes the seat post, the handlebars and the stem as well as the brake grips or brake levers/shifters.

As all works require know-how, experience, suitable tools and skills, you should restrict yourself to adjusting your seating position. Contact your MERIDA dealer if you are not happy with your seating position or if you want something changed. They will see to your wishes the next time you leave your MERIDA bike at the workshop, e.g. for the first inspection.

After any adjustment/assembly work, be sure to make a short functional check as described in the chapter "Before every ride" and do a test ride on your MERIDA bike in an area free of traffic **(d)**.



With very small frame sizes, there is the risk of the foot colliding with the front wheel (toe overlap). Therefore, make sure your cleats are properly adjusted.



All tasks described in the following require the know-how of a mechanic and appropriate tools. Make it a rule to tighten the bolted connections always with greatest attention. Increase the torque values bit by bit and check the fit of the component in between. Use a torque wrench and never exceed the maximum torque values! You find them in the chapter "Recommended torque values" in these MERIDA operating instructions as well as on the components themselves and/or in the instructions of the component manufacturers.



The seating position depends highly on how you want to use the MERIDA bike. Ask your MERIDA dealer or your trainer for help. The advices given below are suitable for typical MERIDA road, MERIDA city, MERIDA trekking and MERIDA mountain bikes.



If sitting on the saddle is painful, e.g. because it numbs your crotch, this may be due to the saddle. Your MERIDA dealer has a very wide range of saddles available and will be pleased to advise you.

## Adjusting the saddle to the correct height

The correct saddle height depends on the length of your legs. When pedaling, the ball of your foot should be positioned above the center of the pedal axle. With your feet in this position you should not be able to extend your legs completely straight at the lowest point, otherwise your pedaling will become awkward **(e)**.



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



Sit on the saddle and put your heel on the pedal at its lowest point. Your leg should be fully extended and your hips should remain horizontal **(f)**.

To adjust the saddle height loosen the quick-release lever (see the chapter “How to use quick-releases and thru axles”) or the binder bolt of the seat post clamp at the top of the seat tube **(g)**.



The latter requires suitable tools, e.g. an Allen key, with which you turn the bolt two to three turns counterclockwise. Now you can perform the vertical adjustment of the seat post.

Be sure not to pull out the seat post too far – the mark on the seat post (end, max., min., stop, limit or the like) should always remain within the seat tube **(h)** and always grease the part of an aluminum or titanium seat post that is inserted into a seat tube made of aluminum, titanium or steel.



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



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



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



On steep downhill-rides it can be reasonable to lower the saddle of your MERIDA mountain bike. This allows a better control of the MERIDA bike.

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

Clamp the seat post by closing the quick-release, as described in the chapter “How to use quick-releases and thru axles” or by turning the seat post binder bolts clockwise in half turns **(a)**. You should not need much strength in your hands to clamp the seat post sufficiently tight. Otherwise the seat post does not match the frame.

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

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

Check that you can touch the ground safely while sitting on the saddle by extending your feet to the floor **(c)**. If you cannot you should lower the saddle a little until you can, at least to begin with.



Make sure not to overtighten the binder bolt of the seat post clamp. Otherwise you may damage the seat post or the frame. Risk of accident!



If the seat post wobbles in the seat tube or if it does not slide easily ask your MERIDA dealer for advice. Do not use brute force!



Tighten carefully by approaching the prescribed maximum torque value in small steps (0.5 Nm increments) and check in between the proper fit of the component. Never exceed the maximum torque value indicated by the manufacturer!



Children and adolescents need to have the saddle height and the position of saddle and handlebars checked at least every three months!



If your MERIDA bike has a dropper seat post **(d)** you find more information in the instructions of the component manufacturers.

## Adjusting the height of the handlebars

The height of the handlebars compared to the saddle and the distance between saddle and handlebars determines how much your upper body will be inclined forward. Lower handlebars bring you in a sporty position and much weight on the front wheel. This bent-over posture is more tiring and less comfortable because it increases the strain on your wrists, arms, upper body and neck.

There are two different stem systems that allow vertical adjustment of the handlebars: **the Ahead stem (e)** and **the adjustable Ahead stem (f)**. These systems require special knowledge. In this regard, the descriptions hereafter may be incomplete. If you are in doubt or if you have any questions contact your MERIDA dealer.



The stem is one of the load-bearing parts of your MERIDA bike. Changes to it can impair your safety. If you are in doubt or if you have any questions contact your MERIDA dealer!



These routines require a certain amount of manual skill and (special) tools. Ask your MERIDA dealer to explain you both function and adjustment of your stem or let him do that work.



The bolted connections of stem and handlebars have to be installed with the prescribed torque values (g). Otherwise the handlebars or the stem may come loose or break. Use a torque wrench and never exceed the maximum torque values! You find them in the chapter "Recommended torque values" in these MERIDA operating instructions, on the components themselves and/or in the instructions of the component manufacturers.



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



Make sure the handlebar/stem-combination is approved by the handlebar and/or stem manufacturer.



Make sure the handlebar clamping area is free of sharp edges.

## Adjustable stems

There are various solutions for adjusting the tilt **(a)** of the front part of adjustable stems:

There are models with bolts on the sides of the joint **(b)**, models with bolts coming from above or below, and models with additional locking mechanisms or adjusting bolts.

Ask your MERIDA dealer to explain you both function and adjustment of your stem or, still better, let him do that work.

More information is provided in the instructions of the component manufacturers.



**Keep in mind that readjusting the position of the stem changes the position of handlebar, brake levers and shifters. Readjust these components as described in the chapter "Adjusting the tilt of the handlebars and brake levers".**



## Stems for threadless systems, the Aheadset®-system

On MERIDA bikes with Aheadset®-headsets the stem also serves to adjust the bearing preload. If the stem position is changed, the bearing play must be re-adjusted. The vertical setting range is determined by the intermediate rings, also referred to as spacers **(c)**. In the case of flip-flop stem models **(d)** the stem can be mounted the other way round to achieve a different handlebar height.

Ask your MERIDA dealer to explain you both function and adjustment of your stem or, still better, let him do that work.



**In the case of turned stems, the cables may be too short. In this case riding can be unsafe. If in doubt,, ask your MERIDA dealer.**



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



## Correcting the fore-to-aft position and horizontal tilt of the saddle

The inclination of your upper body **(e)**, and hence your riding comfort and pedaling power, are also influenced by the distance between the grips of the handlebars and the saddle. This distance can be altered slightly by changing the position of saddle rails on the seat post. However, moving the saddle rail in the seat post also influences the pedaling process. Whether the saddle is positioned more to the front or to the back of the bike will alter how rearward the pedaling position of your legs is.

You need to have the saddle horizontal **(f)** in order to pedal in a relaxed manner. If it is tilted you will constantly have to lean against the handlebars to prevent yourself from slipping off the saddle.



**The bolted connections of the seat post have to be tightened to the prescribed torque values. Use a torque wrench and never exceed the maximum torque values! You find them in the chapter "Recommended torque values" in these MERIDA operating instructions, on the components themselves and/or in the instructions of the component manufacturers.**



**Make sure the saddle is clamped within the range of the marking **(g)** on the saddle rail. Otherwise the saddle rail can fail! Check the bolts by using a torque wrench once a month according to the prescribed values.**



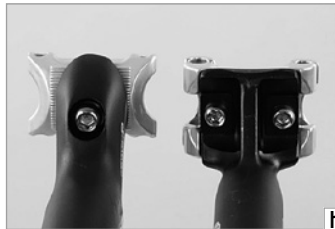
e



f



g



h



The setting range of the saddle is very small. Replacing the stem allows you to make far bigger adjustments to the rider's fore-to-aft position, as there are stems in different lengths. In doing so you may achieve differences of more than ten centimeters. In this case you would usually have to adjust the length of the Bowden and brake cables – a job best left to your MERIDA dealer!



Saddle manufacturers usually supply their products with detailed instructions. Read them carefully before adjusting the position of your saddle. If you are in doubt or if you have any questions contact your MERIDA dealer.

### Adjusting saddle position and tilt

With **patent seat posts (h)** one central Allen bolt secures the clamping mechanism, which controls the tilt and the horizontal position of the saddle. Some seat posts have two bolts side-by-side.

Release the bolt(s) at the top of the seat post. Release the bolt(s) two to three turns counterclockwise at the most, otherwise the whole assembly can come apart. Move the saddle forth or back, as desired. You may have to give the saddle a light blow to make it move. Observe the markings on the saddle rail and do not go beyond.

Make sure the seat of the saddle remains horizontal as you retighten the bolt(s). Your MERIDA bike should stand on level ground while you adjust the saddle.

Having found your preferred position, make sure both clamp halves fit snugly around the saddle rails before tightening the bolt(s) to the correct torque value as prescribed by the seat post manufacturer.

Retighten the bolt(s) with a torque wrench according to the instructions of the manufacturer. After fastening the saddle, check whether it resists tilting by bringing your weight to bear on it once with your hands at either end of the saddle.



If you have a **clamping with two bolts in line (b)** release both bolts by two to max. three turns, otherwise the whole assembly can come apart. Move the saddle forward or backward as desired to adjust the horizontal position. You may have to give it a light blow to move it. Observe the markings on the saddle rail and do not go beyond.

Having found your preferred position, make sure both clamp halves fit snugly around the saddle rails before tightening the bolt(s) to the correct torque value as prescribed by the seat post manufacturer.

Tighten both bolts evenly **(c)** so that the saddle remains at the same angle. If you wish to lower the nose of the saddle a little tighten the front bolt clockwise. You might have to loosen the rear bolt a little as well. To lower the rear part of the saddle the rear bolt has to be tightened clockwise and the front bolt to be released, if necessary. After fastening the saddle, check whether it resists tilting by bringing your weight to bear on it once with your hands at either end of the saddle **(d)**.



**Poorly tightened or loosening bolts can fail.  
Risk of accident!**



**Check the bolts by using a torque wrench once a month (a) according to the values indicated directly on the components and/or in the instructions of the component manufacturers.**



**Check the bolts by using a torque wrench once a month according to the values indicated directly on the components and/or in the instructions of the component manufacturers.**



**Poorly tightened or loosening bolts can fail.  
Risk of accident!**



If you have a **single bolt system (e)**, unscrew the transverse fixing bolt as far as possible without loosening the lock nut on the other side of the clamping device. In general, it is not necessary to take the mechanism completely apart if it is already equipped with the correct outer clamps for your saddle.

If you do find it necessary to unscrew the single fixing bolt completely remove it from the clamping device. This releases the outer clamping parts. The inner clamping parts are held in position with a rubber retention plate.

Mount the saddle rails into the inner clamping parts, add the outer parts and re-insert the fixing bolt. If the width of the saddle rails does not fit exactly into the clamp grooves do not try to force them in. The clamping mechanism or the saddle rails could break and result in an accident and/or injuries to the rider.

Use a different saddle model or contact your MERIDA dealer.



If the saddle rails fit into the clamp grooves slide the saddle on the seat post and ensure that the clamp is positioned midway along the total length of the rails **(f)**. Position the saddle so that its upper surface is parallel to the ground. Tighten the bolt gradually and make sure

1. the clamping device is still accurately mounted on the carbon seat post head and
2. the clamp is tightening evenly around each rail.

Once there is uniform hold on both rails, tighten the bolt gradually with a torque wrench **(g)** until you have reached the maximum torque value indicated in Newton meters (Nm) on the seat post.



**Check the bolts by using a torque wrench once a month according to the values indicated directly on the components and/or in the instructions of the component manufacturers.**



**Poorly tightened or loosening bolts can fail. Risk of accident!**

## Adjusting the tilt of the handlebars and brake levers

### Adjusting the brake lever reach on MERIDA bikes with road racing bars

In particular, riders with small hands should ask their MERIDA dealer to adjust the brake lever position **(a)**, i.e. the position where the brake starts to be effective, to the length of the rider's fingers immediately on purchase.

Some models of different manufacturers allow an adjustment at the brake lever/shifter, e.g. by means of adjusting bolts or spacers **(b)**. In the case of the other models the brake cables are clamped according to your wishes at the brake bodies. Adjusting bolts located in this area only serve to compensate brake pad wear.

Have the lever reach adjusted and make sure the first phalanx of the index finger reaches around the brake lever/shifter. Check the proper adjustment and functioning of the brake system subsequently as described in the chapter "The brake system" in these MERIDA operating instructions as well as in the instructions of the component manufacturers.



## What to bear in mind with MERIDA time trial handlebars of MERIDA triathlon and time trial machines

In triathlon sport and time trial, where a particularly aerodynamic seating position is important, so-called aero bars are commonly used. With these aero bars the shifters are often positioned at the handlebar ends, the brake levers at the ends of bull-horn handlebars. When you ride with your back in a horizontal position, the brake levers are out of reach **(c)** and the reaction time is longer, which makes your stopping distance longer. For this reason it is very important to anticipate problems when riding.

Within certain limits the position of the handlebars can be adjusted according to your personal preferences. That means that the straight part of the aero bars should point only slightly downwards or upwards. The basic handlebars should be parallel to the ground or point slightly upwards. Make sure your forearms are always comfortably rested, i.e. your elbows should project beyond the armrests a little towards the rear.



**Note that the distance you need to stop your bike increases, while riding with the hands on the top handlebars or in aerodynamic position. The brake levers are not always within easy reach.**



**Some manufacturers offer brake levers/shifters which are suitable for small hands. If you have any problems with the brake lever reach, contact your MERIDA dealer.**

## Adjusting the tilt of the handlebars and brake levers of MERIDA bikes with road racing bars

The straight extensions below the drops should be parallel to the ground or point slightly downwards towards the rear **(e)**. The ends of the brake lever/shifter units should meet an imaginary extension of the bottom line of the drops, the upper part of the lever will then be in horizontal position or point slightly upwards. Shifting the brake levers/shifters is a job best left to your MERIDA dealer, as it involves retaping the handlebars afterwards.

To adjust the tilt of the handlebars, release the Allen bolt(s) on the underside or front side of the stem **(f)**. Turn the handlebars to the desired position. Make sure the handlebars are accurately centered in the stem.

Carefully retighten the bolt(s) with the torque wrench. Make sure the upper and lower clamping slots of the stem are parallel and identical in width. If you have a stem with several bolts tighten them evenly in a cross pattern by using a torque wrench and observe the recommended torque values.

Try rotating the handlebars relative to the stem **(g)** and tighten the bolt a little more, if necessary.

Use a torque wrench and never exceed the maximum torque values given in these MERIDA operating instructions as well as on the components themselves and/or in the instructions of the component manufacturers.



## Adjusting the brake lever reach on MERIDA city, MERIDA trekking, MERIDA cross, MERIDA kids' and MERIDA mountain bikes

With most brake systems the distance between the brake levers and the handlebar grips is adjustable. This gives in particular riders with small hands the convenience of bringing the brake levers closer to the handlebar. On most bikes there is a small adjusting screw near the point where the brake cable of a cable brake enters the brake lever unit or at the lever itself. Turn this bolt **(h)** clockwise and watch how the lever adjusts as you do so.

Hydraulic brakes are also fitted with adjusting devices at the brake lever. There are different systems. Ask your MERIDA dealer for advice or read the instructions of the component manufacturers.

When adjusting the lever reach, make sure the first phalanx of the index finger reaches around the brake lever. Check the proper adjustment and functioning of the brake system subsequently as described in the chapter "The brake system" in these MERIDA operating instructions as well as in the instructions of the component manufacturers.



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



**In the case of disc brakes and hydraulic disc brakes observe the instructions of the brake manufacturer. If you are in doubt or if you have any questions contact your MERIDA dealer.**

## Adjusting the tilt of handlebars and brake levers of MERIDA city, MERIDA trekking, MERIDA cross, MERIDA kids' and MERIDA mountain bikes

The handlebars are usually slightly bent at the ends. Set the handlebars to a position in which your wrists are relaxed and not turned too much outwards **(a)**.

Release the Allen bolt(s) at the bottom or front side of the stem. Turn the handlebars to the desired position. Make sure the handlebars are accurately centered in the stem. Carefully retighten the bolt(s) with the torque wrench. Make sure the upper and lower clamping slots of the stem are parallel and identical in width. If you have a stem with several bolts tighten them evenly in a cross pattern by using a torque wrench and observe the recommended torque values.

Try rotating the handlebars relative to the stem and tighten the bolt a little more, if necessary **(b)**. Use a torque wrench and do not exceed the maximum torque values! You find the prescribed values on the components themselves and/or in the instructions of the component manufacturers. If the handlebars are not tight with the prescribed torque value use carbon assembly paste.



After adjusting the handlebars you need to adjust the brake lever/shifter units. Release the Allen bolt at either unit. Turn the levers relative to the handlebars. Sit in the saddle and place your fingers on the brake levers.

Check whether the back of your hand forms a straight line with the line of your forearm. Retighten the units with a torque wrench and do a twist test! The brake levers need not be absolutely tight. In case of a fall it is an advantage when the brake levers can be turned.



**Screw in the bolts at the stem individually until the clamping slots between the stem body and the faceplate are parallel and identical in width at the top and at the bottom (c). Tighten the bolts evenly and in a cross pattern, i.e. alternately and gradually, by using a torque wrench to the lower value of the recommended torque values.**



**Note that the bolted connections of stem, handlebars, bar ends and brakes have to be tightened to their specified torques. Use a torque wrench and never exceed the maximum torque values! You find them in the chapter "Recommended torque values" in these MERIDA operating instructions, on the components themselves and/or in the instructions of the component manufacturers.**

## Bar ends

Bar ends **(e)** provide additional ways of gripping the handlebars.



Be aware that the distance you need to stop your bike increases when you are riding with your hands on bar ends. The brake levers are not always within easy reach.



Never fix bar ends in vertical position or with their ends pointing rearwards **(f)** as this would increase the risk of injury in the event of a fall.



If you want to mount bar ends to the aluminum handlebars of your MERIDA bike, inform yourself in advance whether your MERIDA bike is approved for bar ends. If necessary, contact your MERIDA dealer before mounting.

## The brake system

Brakes **(a)** are used to adjust your speed to the surrounding terrain and traffic. In an emergency situation, the brakes must bring your MERIDA bike to a halt as quickly as possible.

During such full braking, the rider's weight shifts severely to the front, thus reducing the load on the rear wheel. The rate of deceleration is primarily limited by the danger of the rear wheel losing contact with the ground, resulting in an overturning of the MERIDA bike and, secondly, by the grip of the tires on the road **(b)**. This problem becomes particularly acute when riding downhill. Therefore, in case of an emergency braking you should try to shift your weight towards the rear and the ground as far as possible.

Actuate both brakes simultaneously **(c)** and bear in mind that, due to the weight transfer, the front brakes can generate a far better braking effect on a surface with good grip.

On loose ground there are different conditions. There overbraking the front wheel can make the wheel slip away. Make yourself familiar with the respective operation before you set off for the first time. Practice braking on different kinds of surface in an area free of traffic.

More information is provided in the instructions of the component manufacturers.



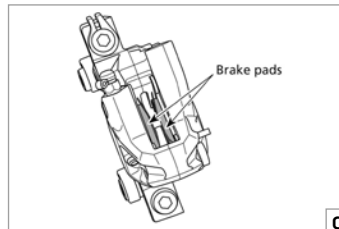
**a**



**b**



**c**



**d**



The assignment of brake lever to brake caliper can vary, e.g. left lever acts on front brake. Have a look at the bike card and check whether the brake lever of the front brake is on the side you are used to (right or left). If it is not ask your MERIDA dealer to switch the brake levers before you set off for the first time.



Be careful while getting used to the brakes. Practice emergency stops in a place clear of traffic until you are comfortable controlling your MERIDA bike. This can save you from having accidents in road traffic.



Wet weather reduces the braking effect and the road grip of the tires. Be aware of longer stopping distances when riding in the rain, reduce your speed and actuate the brakes carefully.



Make sure the braking surfaces and brake pads are absolutely free of wax, grease and oil. Risk of accident!



When replacing any parts, be sure to only use suitable original spare parts that bear the appropriate mark **(d)**. Your MERIDA dealer will be pleased to help you.



Be sure to read the instructions of the brake manufacturers before you start to readjust or to service the brake or before doing any work whatsoever.

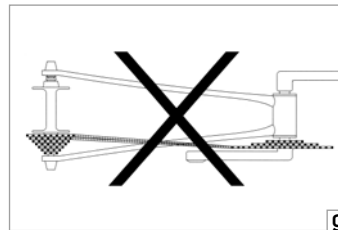
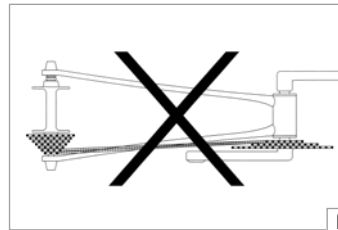
## The gears

The gears of your MERIDA bike serve to adjust the gear ratio to the terrain you are riding on and the desired speed.

In the case of **derailleur gears (e)** a low gear where the chain runs on the small chainwheel and on a large sprocket allows you to climb steep hills with moderate pedaling force. You must, however, pedal at a faster pace or higher frequency. High gears (large chainwheel, small sprocket) are for riding downhill. Every turn of the pedals takes you many meters forward at correspondingly high speed.

Continue pedaling during the entire shifting process, however, at clearly reduced pedaling force. In particular when shifting through the chainwheels continue pedaling slowly and without force.

Modern MERIDA bikes can have up to 24 gears. As there are, however, overlapping ranges, actually 15 to 18 gears are usable. It is not advisable to use gears which involve an extremely oblique run of the chain, as this reduces power transmission efficiency and hastens wear of the chain. The chain runs unfavorably when the smallest chainwheel is used with one of the two or three outermost (smallest) sprockets **(f)** or when the largest chainwheel is used with one of the inmost (largest) sprockets **(g)**.



In the case of **internal gear hubs (h)** "1" stands for the first, lowest gear. The gears are shifted through one after the other, if possible without turning the pedals, at least, however, at reduced pedal pressure. The highest number stands for the highest gear.

More information is provided in the instructions of the component manufacturers.



**Before you set off for the first time practice shifting gears in a place free of traffic until you are familiar with the functioning of the levers or twist grips of your MERIDA bike.**



**Always make sure changing gears makes as little noise as possible and is absolutely jerk free.**



**Be sure to read the instructions of the drive train manufacturer before you start to readjust or to service the gear system or before doing any work whatsoever.**



## Suspension forks

Most MERIDA bikes are equipped with suspension forks (a). This feature gives you better control of your MERIDA bike when riding cross-country or on rough road surfaces and ensures more ground contact for the tire. The (shock) loads on you and your MERIDA bike are noticeably reduced. Suspension forks differ in their types of spring elements and damping. Suspension forks normally work with air spring elements or with coil springs. Damping is usually done by oil. To work perfectly, the fork has to be adjusted to the weight of the rider, the sitting posture and the intended use (b). Be sure to have this adjustment carried out by your MERIDA dealer at the time of delivery. More information is provided in the instructions of the suspension fork manufacturer.



The suspension fork should be set up and adjusted in a way that it does not reach the end of its travel, i.e. bottoms out, unless in extreme cases. A spring rate which is too soft (too low air pressure) can usually be heard or felt as a "clunk" type noise. This noise is caused by the sudden complete compression of the suspension fork as it reaches bottom out. If the suspension fork frequently reaches bottom out, it will sustain damage over time, and so will the frame.



If the damping of the suspension fork is too strong, it may no longer be able to rebound when riding over a quick series of obstacles. Risk of accident!



Do not turn any bolt and particularly not by using tools in the hope that it is an adjusting device. You could be loosening the fastening mechanism, thus causing an accident. All manufacturers normally mark adjustment devices with a scale or with "+" (for stronger damping/harder suspension) and "-" signs.



Due to their design suspension forks are able and have to absorb shocks. If the fork is too rigid and blocked the shocks are introduced directly into the frame without any damping. This could damage the fork itself as well as the frame. If your fork has a lockout mechanism (c+d) do activate the lockout function only when riding over smooth terrain (roads, field tracks) and not when riding in rough terrain.



Suspension fork manufacturers normally supply instructions. Read them carefully before changing any settings and doing any maintenance work on your suspension fork.



More information on adjusting and maintenance is also available on the Internet at [www.srsuntour-cycling.com](http://www.srsuntour-cycling.com)  
[www.ridefox.com](http://www.ridefox.com)  
[www.rockshox.com](http://www.rockshox.com)  
[www.manitoumtb.com](http://www.manitoumtb.com)  
[www.dtswiss.com](http://www.dtswiss.com)  
[www.marzocchi.com](http://www.marzocchi.com)



## Rear shocks

Full suspension MERIDA bikes are not only equipped with a suspension fork but also with movable rear stays with **(e)** which are sprung and damped by a rear shock. This feature gives you better control of your MERIDA bike when riding cross-country or on rough road surfaces. The (shock) loads on you and your MERIDA bike are noticeably reduced. The rear shock normally works with an air spring element or – less frequently – with coil springs. Damping is usually done by oil.

To work perfectly, the rear shock has to be adjusted to the weight of the rider, the sitting posture and the intended use **(f)**. Be sure to have this adjustment carried out by your MERIDA dealer at the time of delivery.

More information is provided in the instructions of the rear shock manufacturer.



Due to their design full suspension frames are able and/or must absorb shocks. If the rear shock is too rigid and blocked the shocks are introduced directly into the frame without any damping. This could damage the rear shock itself as well as the frame. If your rear shock has a lockout mechanism, **(g)** do not activate the lockout function when riding in rough terrain, but only when riding over smooth terrain (roads, field tracks).



The rear shock should be set up and adjusted in a way that it does not reach the end of its travel, i.e. bottom out, unless in extreme cases. A spring rate which is too soft (too low air pressure) can usually be heard or felt as a “clunk” type noise. This noise is caused by the sudden complete compression of the rear shock as it reaches bottom out. If the rear shock frequently reaches bottom out, it will sustain damage over time, and so will the frame.



If the damping of the rear frame is too strong, it may no longer be able to rebound when riding over a quick series of obstacles. Risk of accident!



Do not turn any bolt and particularly not by using tools in the hope that it is an adjusting device. You could be loosening the fastening mechanism, thus causing an accident. All manufacturers normally mark adjustment devices with a scale or with “+” (for stronger damping/harder suspension) and “-” signs (h).



Rear shock manufacturers normally supply instructions. Read them carefully before changing any settings and doing any maintenance work on your rear shock.



More information on adjusting and maintenance is also available on the Internet at [www.srsuntour-cycling.com](http://www.srsuntour-cycling.com)  
[www.ridefox.com](http://www.ridefox.com)  
[www.rockshox.com](http://www.rockshox.com)  
[www.manitoumtb.com](http://www.manitoumtb.com)  
[www.dtswiss.com](http://www.dtswiss.com)  
[www.marzocchi.com](http://www.marzocchi.com)

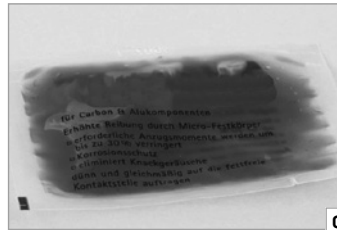
## Special characteristics of carbon

Special characteristics of components made of carbon-fiber-reinforced plastics, also referred to as carbon or CRP, need to be taken into account. Carbon **(a)** is an extremely strong material which combines high resistance with low weight. After overstress, however, carbon components, unlike metal parts, do not necessarily show durable or visible deformation even though some of the fibers may be damaged.

It is very dangerous to continue using the carbon component after an impact or undue stress, as it may fail without previous warning thereby causing an accident with unforeseeable consequences. For this reason we recommend that you have the component, or to be certain, the entire MERIDA bike checked by your MERIDA dealer after every incident, such as e.g. a crash.

Replace a damaged component **(b)** at once! Prevent further use by taking appropriate measures, i.e. saw the component into pieces. Damaged carbon frames can possibly be repaired. Contact your MERIDA dealer.

Carbon components must not be exposed to excessive heat. Therefore, never have a carbon component enameled or powder-coated. The temperatures required for enameling or powder-coating could destroy the component. Do not leave carbon fiber components near a source of heat or in your car during hot or sunny weather.



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

When you intend to transport your MERIDA bike in the boot of your car, be sure to protect the bike or the carbon frame and components **(c)**. Blankets, foam tubes or the like are a suitable padding to protect the sensitive material from damage. Do not place any bags on your MERIDA bike lying in your car.

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



**If carbon components on your MERIDA bike produce any creaking or cracking noises or show any external sign of damage, such as gouges, cracks, dents, discolorations etc., do not use the MERIDA bike any longer. Contact your MERIDA dealer immediately; he will check the component thoroughly.**



**Do not combine carbon handlebars with bar ends or an aero bar, unless they are specifically approved. Do not shorten carbon handlebars or clamp the brake levers and shifters more in the middle than indicated or needed. Risk of breakage!**



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



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



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



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



## General notes on care and servicing

### Maintenance and servicing

Your MERIDA dealer will have assembled and adjusted your MERIDA bike ready for use when you come to collect it. Nevertheless, your MERIDA bike needs regular servicing (h). Have your local MERIDA dealer do the scheduled maintenance work. This is the only way to ensure a long-lasting functioning of all components.

The bike is due for its first service after 100 to 300 kilometers, 5 to 15 hours of initial use or four to six weeks already. The MERIDA bike must be serviced, because in this initial "break-in" period of use of the MERIDA bike the spokes can slightly lose tension or the gears may go out of adjustment. This "break-in" process is unavoidable. Therefore, remember to make an appointment with your MERIDA bike dealer to have your new MERIDA bike inspected. This first service is very important for both functioning and durability of your MERIDA bike.

It is advisable to have your MERIDA bike serviced regularly by your MERIDA dealer after the "break-in" period. If you ride a great deal on poor road surfaces or cross-country, it will require correspondingly shorter service periods. The off-season during the winter months is a very good time to take your MERIDA bike to your MERIDA dealer for the annual inspection, as they will have plenty of time for you and for servicing.

The intended use of the MERIDA bike includes regular servicing and the replacement of wearing parts in time, e.g. chains, brake pads **(a)** or Bowden and brake cables **(b)**, and therefore has an influence on the warranty and the guarantee, as well.

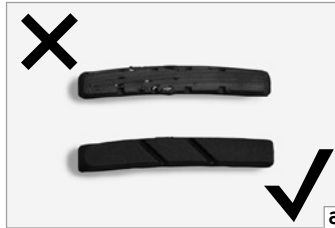
You find more information in the chapter “The service and maintenance schedule” in these MERIDA operating instructions as well as the instructions of the component manufacturers.



**Servicing and repairs are jobs best left to your MERIDA dealer. If you have your bike serviced by anyone else than an expert, you run the risk that parts of your MERIDA bike will fail. Risk of accident! When working on your MERIDA bike, restrict yourself to jobs for which you have the suitable tools, e.g. a torque wrench, and the necessary knowledge.**



**If a component needs to be replaced, make it a rule to only use original spare parts. Wearing parts of other manufacturers, e.g. brake pads or tires that are not of identical dimension, may render your MERIDA bike unsafe. Risk of accident!**



## Cleaning and caring for your MERIDA bike

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

Avoid cleaning your bike with a high-pressure cleaner. The high-pressure jet is likely to enter bearings by passing through the seals. This leads to the dilution of lubricants and consequently to greater friction. This destroys and impairs the functioning of the bearing races in the long term. Pressurized water also tends to abrade frame stickers.

A much more gentle way of cleaning your bicycle is with a low pressure water jet or a bucket of water and a sponge or a large brush. Cleaning your bike by hand has another positive side-effect: you may discover defects in the paint as well as worn or defective components at an early stage. Check the chain for wear **(c)** and relubricate **(d)** after cleaning and drying (see the chapter “Chain – care and wear” and the instructions of the component manufacturers). Wipe dry the sliding surfaces of the suspension fork and the rear shock and apply special spray. Apply a coat of standard hard wax on painted, metal and carbon surfaces (except from brake surfaces and brake discs). Polish the waxed surfaces after drying to give them a nice shine.

From time to time the dirt and oil needs to be cleaned off your chain with an oily cloth **(e)**. Special degreasers are not necessary; they even have a damaging effect.



Keep cleaning agents and chain oil free of the brake pads, rotors and rim sides (brake surfaces). Otherwise the brake could fail. Never grease or lubricate the clamping areas of a frame made of carbon, e.g. handlebars, stem, seat post and seat tube. Once greased carbon fiber components may never again be clamped reliably!



While cleaning, watch out for cracks, scratches (f), dents as well as deformed or discolored material. Have defective components replaced immediately and touch up paint defects. If you are in doubt or if you have any questions contact your MERIDA dealer.



Only use petroleum-based solvents for cleaning tough oil or grease stains from paint and carbon surfaces. Never use degreasing agents containing acetone, methyl chloride or the like, or solvent-containing, non-neutral or chemical cleaning agents that could attack the surface!



Do not clean your MERIDA bike with a high-pressure cleaner or a water jet and if you do, be sure to keep it at a distance. Also avoid aiming at the bearings.



## Safekeeping and storing your MERIDA bike

If you regularly look after your MERIDA bike during the season, you will not need to take any special measures when storing it for a short time, apart from securing it against theft. Store your bike in a dry, well aerated place.

If you want to store your MERIDA bike for a longer period of time, e.g. over the winter months, please observe the following things: During the long standing time, the inner tubes gradually lose air. If your MERIDA bike stands on flat tires for a long time, their structure may be damaged. It is therefore better to hang the wheels or the entire MERIDA bike or to check the tire pressure regularly (g). Clean your MERIDA bike and protect it against corrosion. Your MERIDA dealer has special cleaning agents, e.g. spray wax.

## Service and maintenance schedule

It is advisable to have your MERIDA bike serviced regularly after the “break-in” period. The schedule given in the table below is a rough guide for cyclists who ride their bike between 1,000 and 2,000 km or 50 to 100 hours of use a year.

If you consistently ride more or if you ride a great deal on poor road surfaces, the service intervals will shorten accordingly.

Component	What to do	Before every ride	Monthly	Annually	Others
Lighting	Check function	x			
Tires	Check pressure	x			
	Check tread and side walls		x		
Brakes (drum/roller)	Lever travel, test brakes in stationary	x			
Brake cables/pads/hoses	Visual inspection		x		
Brakes (disc brakes)	Lever travel, brake pads, seals, test brakes in stationary	x			
	Replace liquid (DOT-liquids)			•	
Suspension fork/rear shock	Observe maintenance schedule of manufacturer				
Fork (rigid)	Check and replace, if necessary				• at least every 2 years
Bottom bracket	Check for bearing play		x		
	Dismount and regrease (cups)			•	
Chain	Check and grease, if necessary	x			
	Check wear, replace, if necessary				
Derailleur gears					• after 1,000 km or 50 hours of use
Telescopic seat post	Observe maintenance schedule of manufacturer				
Crank	Check and retighten, if necessary		x		
Painted/anodized/carbon surfaces	Polish				x at least every 6 months
Wheels/spokes	Check wheel trueness and tension		x		
	True or retighten				• if necessary
Handlebars and stem (made of aluminum and carbon)	Check and replace, if necessary				• e-MTB: once a month • e-trekking: once a year
Headset	Check for bearing play		x		
	Regrease			•	

Component	What to do	Before every ride	Monthly	Annually	Others
Metal surfaces	Polish (except: brake discs)				<b>x</b> at least every 6 months
Hubs	Check for bearing play Regrease		<b>x</b>	•	
Pedals (all)	Check for bearing play		<b>x</b>		
Pedals (clipless)	Clean and grease locking mechanism		<b>x</b>		
Seat post/stem	Check bolts Dismount and re-lubricate Carbon: new assembly paste (no grease!)		<b>x</b>	•	
Front/rear derailleur	Clean and grease		<b>x</b>		
Quick-releases/thru axles	Check seat	<b>x</b>			
Bolts and nuts (multi-speed hubs, mudguards etc.)	Check and retighten, if necessary		<b>x</b>		
Valves	Check seat	<b>x</b>			
Cables (gears/brakes)	Disassemble and regrease			•	

If you have a certain degree of mechanical skills, experience and suitable tools, such as a torque wrench, you should be able to do the checks marked **x** by yourself. If defects are identified during the inspections, initiate appropriate measures immediately. If you are in doubt or if you have any questions contact your MERIDA dealer.

Jobs marked • are best left to your MERIDA dealer.



For your own safety, bring your MERIDA bicycle to your MERIDA dealer for its first inspection after 100 to 300 kilometers, 5 to 15 hours of initial use or four to six weeks, and at the very latest after three months.



You find more detailed information on your MERIDA bike at <https://www.merida-bikes.com/en/p/service/instruction-manuals-144.html>





## Recommended torque values

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

Where no maximum torque value is given start with 2 Nm. Observe the indicated values and observe the values on the components and/or in the operating instructions of the component manufacturers.

Component	Bolted connections	Shimano <sup>1</sup> (Nm)	SRAM <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)
Rear derailleur	Mount (on frame/derailleur hanger)	8–10	8–10	
	Cable clamp	5–7	4–5	
	Pulley wheels	3–4		
Front derailleur	Mount on frame	5–7	5–7	
	Cable clamp	5–7	5	
Shifter	Mount on handlebars	5	2.5–4	
	Hole covering	0.3–0.5		
Brake lever unit	Mount on handlebars	6–8	5–7	6–8
Hub	Quick-release lever	5–7.5		
	Locknut for bearing adjustment of quick-release hubs	10–25		
	Sprocket cluster lock ring	29–49	40	
Internal gear hub	Hub axle nut	30–45		
Crank	Crank mount (grease-free square-head)	35–50		
	Crank mount (Shimano Octalink)	35–50		
	Crank mount (Shimano Hollowtech II)	12–15		
	Crank mount (Isis)		31–34	
	Crank mount (Giga X Pipe)		48–54	
	Chainring mount	8–11	12–14 (steel) 8–9 (alu)	
Sealed cartridge bearing	Shell (square-head)	49–69		
	Shell (Shimano Hollowtech II, SRAM Giga X Pipe)	35–50	34–41	
	Octalink	50–70		

Component	Bolted connections	Shimano <sup>1</sup> (Nm)	SRAM <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)
Pedal	Pedal axle	35		
Shoe	Cleat	5–6		
	Spike	4		
Brake (V-brake)	Cable clamp	6–8	6–8	6–8
	Brake shoe mount	6–8	6–8	6–8
	Brake pad fixing	1–2		
	Brake boss frame/fork			8–10

<sup>1</sup> si.shimano.com <sup>2</sup> www.sram.com <sup>3</sup> www.tekro.com

## Recommended torque values for disc brakes

Component	Shimano <sup>1</sup> (Nm)	SRAM/Avid <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)
Brake caliper mount on frame/fork	6–8	9–10 (IS adapter) 8–10 (brake caliper)	6–8
Brake lever unit on handlebars			
– Single-bolt clamp	6–8	Discrete Clamp Bolt / Hinge Clamp Bolt / XLoc Hinge Clamp Bolt: 5–6 Pinch Clamp Bolt: 2.8–3.4 Split Clamp Bolts / Match Maker Bolts: 3–4 4–5	5–7
– Two-bolt clamp			
Union screws of hose at grip and normal hose at brake caliper	5–7	5	
Brake hose connector at brake caliper (disc tube cable)	5–7		
Expansion tank cap	0.3–0.5		
Bleeding device brake caliper	4–6		4–6
Bleeding device brake lever			2–4

Component	Shimano <sup>1</sup> (Nm)	SRAM/Avid <sup>2</sup> (Nm)	Tektro <sup>3</sup> (Nm)
Brake disc fixing (6-holes)	4	6.2	4-6
Brake disc fixing (centerlock)	40		
Brake pad retainer at brake caliper			3-5

<sup>1</sup> si.shimano.com   <sup>2</sup> www.sram.com   <sup>3</sup> www.tekro.com

These values are reference values of the above-mentioned component manufacturers. Observe the values in the instructions of the component manufacturers.

These values do not apply to the components of other manufacturers.



**Due to the unmanageable number of components on the market, MERIDA is not in a position to foresee every product that will be replaced or newly assembled by third parties. Therefore MERIDA denies any liability for such kind of additions or modifications with regard to compatibility, torque values etc. Whoever assembles or modifies the MERIDA bike shall ensure that the bike was assembled according to the state-of-the-art in science and technology.**



**Some components have the maximum permissible torque values printed on them. Use a torque wrench and never exceed the maximum torque values! If you are in doubt or if you have any questions contact your MERIDA dealer.**



**You find more detailed information on your MERIDA bike at <https://www.merida-bikes.com/en/p/service/instruction-manuals-144.html>**



## Warranty and guarantee

Your MERIDA bike was manufactured with great care. Normally it is delivered to you by your MERIDA bike dealer fully assembled.

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

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

To ensure a long service life and good durability of your MERIDA bike, use it only for its intended purpose (see the chapter "Intended use"). Observe the permissible weight specifications as specified in these operating instructions and/or on your MERIDA bike. Be sure to follow the mounting instructions of the manufacturers (above all, the torque values of the bolts) as well as the prescribed maintenance schedule.

Observe the checks and routines listed in these operating instructions or in any other operating instructions enclosed with this delivery (see the chapter "Service and maintenance schedule") as well as any instructions concerning the replacement of safety-relevant components such as handlebars or brakes etc.



**Keep in mind that accessories can greatly affect the characteristics of the MERIDA bike. If you are in doubt or if you have any questions contact your MERIDA dealer.**



**The law referring to full warranty rights is only valid in the countries where the law has been ratified according to the renewed European regulations. Please inform yourself about the situation in your country.**

## A note on wear

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

Regular care and maintenance increase the service life. The following parts which have reached their limit of wear must be replaced:

Drive chain	Chainwheels
Brake pads	Chainstay protection
Brake fluid (DOT)	Lamps
Brake discs/rotors	Tires
Brake cables	Sprockets
Brake cable housings	Saddle covering
Seals of suspension elements	Pulleys
Rim sides (of rim brakes)	Lubricants
Rubber grips	Paint and decals



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

## Guarantee on MERIDA bikes

These provisions of the guarantee are applicable as of model year 2020.

Your MERIDA bike is guaranteed (as of date of purchase to the initial buyer):

- Lifetime guarantee in the event of frame breakage for all frames of use categories 1–4
- 5 years on frame and rigid forks of the categories 0
- 5 years on rigid forks of bicycles of the categories 1–4
- 5 years of guarantee for frames of the category 5
- 2 years on all MERIDA branded components
- Statutory warranty for paints and decors with lacquered underside

In a guarantee-activating event MERIDA reserves the right to provide the current successor model in an available color or, if not available, a higher grade model.

Guarantee claims for rear shocks, suspension forks and other branded accessories will not be processed by MERIDA but by the component manufacturers' national distributors.

Your direct contact in any case should be your MERIDA dealer who will be pleased to answer your inquiries.

The manufacturer's guarantee only applies to claims made by the initial buyer and substantiated by presenting the customer's receipt and/or the bike card stating the date of purchase, the dealer address, the model and the frame number.

Precondition for the guarantee is the intended use, the observance of the service intervals as well as the exclusive use of original spare and/or accessory parts and the fact that the suspension systems are maintained by the MERIDA dealer at least once a year.

The guarantee does not cover labor and transport costs, nor does it cover follow-up costs resulting from defects.

The use in competitions is permitted in the frame of the respective use categories.

The guarantee does not apply for bikes that have been used for jumping or subjected to any other kind of overstress. It does not cover damage resulting from wear, neglect (insufficient care and maintenance), falls/accidents, overstress caused by overloading, incorrect mounting or improper treatment or resulting from changes to the bike in connection with the mounting or alteration of additional components.

Diligent compliance with the manufacturers' mounting instructions and maintenance intervals as prescribed in this manual are crucial to a long service life and good durability of the bicycles' components. Non-observance of the assembly instructions or maintenance intervals renders the guarantee null and void. Please observe the checks described in this manual as well as all instructions concerning the regular replacement of safety-relevant components, such as the handlebars etc.

These guarantee conditions are voluntary benefits of MERIDA. Moreover, the buyer may benefit from additional legal rights which vary from country to country. To find out more just ask your MERIDA dealer.

Keep in mind that in case of commercial use the guarantee for frames and rigid forks on models of categories 1–5 is limited to 2 years.



**In case of any inquiries contact your national distributor; visit [www.merida.com](http://www.merida.com) to find the address.**

## Service schedule



**1st service** – At the latest after 100–300 kilometers or  
5–15 hours of use or after three months from the date of sale

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature  
of the MERIDA dealer: \_\_\_\_\_

**2nd service** – At the latest after 2,000 kilometers or  
100 hours of use or after one year

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature  
of the MERIDA dealer: \_\_\_\_\_

**3rd service** – After 4,000 kilometers or  
200 hours of use or after two years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature  
of the MERIDA dealer: \_\_\_\_\_

**4th service** – At the latest after 6,000 kilometers or  
300 hours of use or after three years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature  
of the MERIDA dealer: \_\_\_\_\_

**5th service** – At the latest after 8,000 kilometers or 400 hours of use or after four years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**6th service** – After 10,000 kilometers or 500 hours of use or after five years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**7th service** – At the latest after 12,000 kilometers or 600 hours of use or after six years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**8th service** – At the latest after 14,000 kilometers or 700 hours of use or after seven years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_



**9th service** – At the latest after 16,000 kilometers or 800 hours of use or after eight years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**10th service** – At the latest after 18,000 kilometers or 900 hours of use or after nine years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**11th service** – At the latest after 20,000 kilometers or 1,000 hours of use or after ten years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

**12th service** – At the latest after 22,000 kilometers or 1,100 hours of use or after eleven years

Order no.: \_\_\_\_\_ Date: \_\_\_\_\_

Replaced or repaired parts:

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Stamp and signature of the MERIDA dealer: \_\_\_\_\_

## Bike card

Frame sticker

### Rear shock

(manufacturer/model)

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Frame type

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Frame size

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Size of wheels  
and tires

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Special features

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## Intended use

Use according to

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> category 0 | <input type="checkbox"/> category 3 |
| <input type="checkbox"/> category 1 | <input type="checkbox"/> category 4 |
| <input type="checkbox"/> category 2 | <input type="checkbox"/> category 5 |

### Permissible overall weight

MERIDA bike, rider and baggage \_\_\_\_\_ kg

Permissible load of pannier rack  without \_\_\_\_\_ kg

Child seat permitted  yes  no

Trailer permitted  yes  no

### Brake lever

Right lever

### Brake assignment

Front wheel brake

Rear wheel brake

Left lever

Front wheel brake

Rear wheel brake



**Read at least the chapters "Before your first ride", "Intended use", and "Before every ride" in these MERIDA operating instructions.**

# **MERIDA**

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