

# **MERIDA**

## **TRANSLATION OF THE ORIGINAL OPERATING INSTRUCTIONS**

### **EPAC / PEDELEC BICYCLES**

(ELECTRICALLY POWER-ASSISTED CYCLES)

EN 15194

Read at least pages 4-15 before your first ride!

Perform the functional check on pages 16-18 before every ride!

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



**Frame:**

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

- a Motor
- b Rechargeable battery
- c Display and control unit

**Suspension fork:**

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



**Frame:**

- 1 Central tube
- 2 Seat tube
- 3 Chainstay
- 4 Rear stay
- 5 Head tube

- a Motor
- b Rechargeable battery
- c Display and control unit

**Suspension fork:**

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



- Wheel:**
- Quick-release
  - Rim
  - Tire
  - Reflector ring
  - Spoke
  - Hub
  - Valve

## Translation of the original MERIDA operating instructions

The translation of these original MERIDA operating instructions includes the following pedelec types:

### Pedelec / e-bike / EPAC



It is essential to also observe the comprehensive MERIDA user manuals, the system instructions of your drive manufacturer and the instructions of the component manufacturers. The present translation of the original MERIDA operating instructions is subject to European law. If delivered to countries outside Europe, supplementary information has to be provided by the manufacturer of the MERIDA pedelec, if necessary.



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

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Technical details in the text and illustrations of this manual are subject to change.

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## Some notes on this translation of the original MERIDA operating instructions

The illustrations on the first pages of the translation of the original MERIDA operating instructions show typical MERIDA pedelecs (**e+f**). One of these MERIDA pedelecs looks similar to the MERIDA pedelec you have purchased. Today's pedelecs come in various types that are designed for specific uses and fitted accordingly (**g+h**).

In this translation of the original MERIDA operating instructions pedelecs with drive support and described as EPACs in the European standard EN 15194 are referred to as pedelecs. For a precise description of the different EPAC types see the chapter "Intended use".

In this translation of the original MERIDA operating instructions the term "bicycle" will always be used in general descriptions when it refers to city/trekking, mountain bikes and pedelecs.

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 operating instructions that deserves your special attention.**

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

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

**This translation of the original MERIDA operating instructions is not applicable to any other than the displayed pedelec types.**

The translation of these original MERIDA operating instructions are supplementary instructions on special features of pedelecs. Together with the system instructions of the drive manufacturer and the comprehensive, type-specific general MERIDA user manual it is part of a system.

The translation of these original MERIDA operating instructions together with the other instructions complies with the requirements of the EN ISO standard 4210-2, the EN standard 15194 for Cycles – Electrically power assisted cycles – EPAC bicycles as well as with the Machinery Directive 2006/42/EC.

## General safety instructions

Dear MERIDA customer,

In purchasing this MERIDA pedelec **(a+b)** you have chosen a product of high quality. Each component of your new MERIDA pedelec 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 pedelec, its maintenance and operation as well as interesting information on bicycle and pedelec design and engineering. Read this translation of the original MERIDA operating instructions thoroughly. We are sure that even if you have been cycling all your life you will find useful and detailed information. Bicycle technology has developed at a rapid pace during recent years **(c+d)**.

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

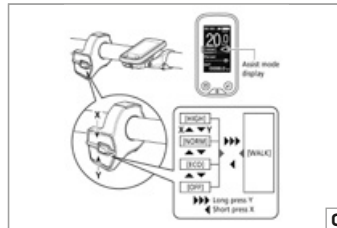
To ensure as much fun and safety as possible during cycling, be sure to carry out the functional check described in the chapter "Before every ride" before setting off on your MERIDA pedelec.



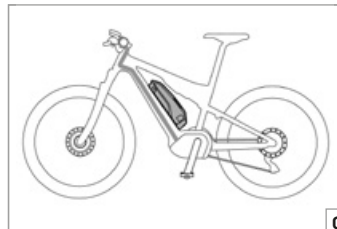
**a**



**b**



**c**



**d**

Even a manual as big as an encyclopedia could not describe any possible combination of bike or pedelec models and components or parts on the market. This translation of the original MERIDA operating instructions therefore focuses on your newly purchased MERIDA pedelec and standard components and provides useful information and warnings. In addition to this, the system instructions of your drive manufacturer give important information and warnings on handling your new MERIDA pedelec.

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

The information included here is not applicable to any other bike or pedelec type. As bikes come in a wide variety of designs with frequent model changes, the routines described may require complementary information. It is essential to also observe the comprehensive MERIDA user manual as well as the system instructions of your drive manufacturer and 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.





Observe the comprehensive MERIDA user manual, the system instructions of your drive manufacturer, the instructions of the component manufacturers as well as the relevant web links.

Before you set off, let us point out a few things to you that are very important to every cyclist. Never ride without a properly adjusted helmet **(e)** and without glasses. 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 the pedelec. Be aware that riding a pedelec is a potentially dangerous activity that requires the rider to stay in control of his or her MERIDA pedelec at all times. Be aware from the moment you set off that you ride at a higher speed than with a normal bicycle and that the pedelec is usually heavier than a normal bicycle which affects the handling. If necessary, attend a beginners course for pedelec riders, as already offered here and there.



**e**



**f**



**g**



**h**

Like any sport, riding a pedelec involves the risk of injury and damage. When you set off on a pedelec you should be aware and accept this risk. Keep in mind that on a pedelec you have typically no protection technique around you (e.g. bodywork or airbag) like you have in a car. Therefore, always ride carefully and respect the other traffic participants.

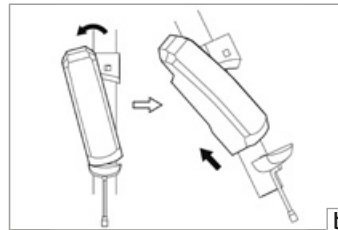
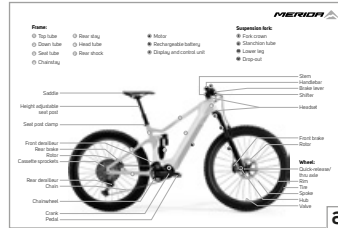
Never ride under the influence of drugs, medication, alcohol or when you are tired. Do not ride with a second person on your MERIDA pedelec (except on a tandem) and never ride without having both hands on the handlebars.

Observe the legal regulations concerning off-road cycling and cycling on public roads with MERIDA pedelecs. These regulations may differ in each country. Respect nature when riding through the forest and in the open countryside. Only use your pedelec on sign-posted, well maintained trails and hard-surface roads.

Always bear in mind that you travel rapidly and quietly when you are riding a MERIDA pedelec **(g+h)**. Do not startle pedestrians or other cyclists. If necessary, make others aware of your presence well ahead of time and by ringing your bell or make use of the brakes so as to avoid accidents. Familiarize yourself with your MERIDA pedelec. For more information in this regard read the chapter "Riding a MERIDA pedelec – Special features".



First we would like to familiarize you with the various components used on your MERIDA pedelec. Unfold the cover of this translation of the original MERIDA operating instructions **(a)**. Here you will find two exemplary MERIDA pedelecs 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.



## Intended use

Keep in mind that every kind or every type of pedelec, referred to as **category** in the following, is designed for a specific use. Be sure to use your MERIDA pedelec **(c+d)** only according to its intended use, as it may otherwise not withstand the stress, fail and cause 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 pedelec belongs. Have a look at your bike card.

**Pedelecs (pedal electric cycles) or EPACs (Electrically Power Assisted Cycles)** are bicycles with an auxiliary motor that only switches on when you move the pedals. When you stop pedaling, the motor switches off. MERIDA e-MTBs also belong to this category.

The starting or pushing aid provides assistance for pushing your MERIDA pedelec or when doing a hill start, even without pedaling, up to a speed of 6 km/h.



**Remove the rechargeable battery **(b)** or the display before doing any work on your pedelec (e.g. inspection, repairs, assembly, maintenance, work on your drive, etc.). Activating the drive systems unintentionally bears the risk of injury!**



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



**Note: Do not hitch yourself and your bike to a car. Do not ride freehand. Take your feet off the pedals only if required by the condition of the road.**

**MERIDA – MORE BIKE!**

The legal regulations for riding your MERIDA pedelec are listed in the overview below.

<b>Pedal assistance:</b>	up to max. 25 kmh (15.5 mph)
<b>Helmet:</b>	recommended <b>(e)</b>
<b>Driver license or moped license:</b>	no
<b>Registration or EU type approval:</b>	no
<b>Insurance plate:</b>	no
<b>Riding on cycle lanes:</b>	in and out of town obligatory
<b>Vehicle class:</b>	bicycle
<b>Legal age:</b>	no
<b>Child seat:</b>	permitted (see chapter "categories" and "Permissible overall weight")
<b>Child trailer:</b>	permitted



**Bike card**

Frame size: \_\_\_\_\_

**Intended use**

Use according to:  category 1  category 2  category 3  category 4  category 5

Permissible overall weight: \_\_\_\_\_ kg

Maximum overall power limit:  without \_\_\_\_\_ W  with \_\_\_\_\_ W

Child seat permitted:  yes  no

Trailer permitted:  yes  no

**Drive system:**  integrated  externally

**Brake type:**  Disc when brake  Disc when brake  Disc when brake  Disc when brake

**Left lever:**  Disc when brake  Disc when brake

**Right lever:**  Disc when brake  Disc when brake

**Read the chapter "Safety your first ride!" in this translation of these repair MERIDA warranty instructions.**

Stamp and signature of the MERIDA dealer

**Guidelines for the parts replacement of CE marked e-bikes/pedelecs up to a power output of 25 with 125 W max.**

Category 1	Category 2	Category 3	Category 4	Category 5
Motor	Motor	Motor	Motor	Motor
Controller	Controller	Controller	Controller	Controller
Display	Display	Display	Display	Display
Throttle	Throttle	Throttle	Throttle	Throttle
...	...	...	...	...



Keep in mind that there are different types of pedelecs/e-MTBs which are subject to different legal framework conditions. Therefore, check the sticker **(f)** on the pedelec/e-MTB or have a look at the bike card **(g)** to identify the category your MERIDA pedelec/e-MTB belongs to. Observe the respective specific regulations for riding on public roads but also on a tour through the landscape.



Strictly observe the category **(f)** to which your MERIDA pedelec/e-MTB belongs. The category specifies the grounds on which you are allowed to ride on and the riding actions your MERIDA pedelec/e-MTB is designed for. For more information see the chapter "Categories" as well as your comprehensive MERIDA user manual and the bike card. Ask your MERIDA dealer to confirm the category to which your MERIDA pedelec/e-MTB belongs.



Do not modify or manipulate ("tune") your MERIDA pedelec/e-MTB. Risk of an accident! Modifications and manipulations will turn your MERIDA pedelec/e-MTB into an illegal pedelec without registration. You have to face legal consequences, e.g. "Riding without insurance cover", which is punishable with a fine or with imprisonment. The warranty as well as the private liability cover will expire in addition. You are no longer allowed to use your MERIDA pedelec/e-MTB on public roads and on forest trails. For more information see the chapter "Guidelines: Things to know about pedelec/e-bike 25 tuning" **(h)**.



The use of a pedelec or an e-MTB by kids and adolescents under the age of 14 is not recommended.

**i** More information on the intended use of your MERIDA pedelec/e-MTB as well as on the maximum permissible overall weight (rider, pedelec and baggage together) are given on the sticker of the pedelec, in the bike card and in the chapters "Before your first ride" and "Permissible overall weight".

**i** Information on the use of trailers (a) and child seats on your MERIDA pedelec/e-MTB is given in Maintain your MERIDA pedelec the chapter "Operation with trailer" and in the bike card.

**i** Read in any case the comprehensive MERIDA user manual and the system instructions of the drive manufacturer that you received from your MERIDA dealer.

**i** Keep this translation of the original MERIDA operating instructions for future reference and hand it over to the respective user, in case you sell, lend or pass on the MERIDA pedelec/e-MTB.

**i** The regulations and rules for pedelecs/e-MTBs are being revised constantly. Read the daily press to keep you informed about current legislative changes.

**i** We strongly recommend that you take out private liability insurance. Make sure that coverage for damage caused during cycling by bicycle or pedelec is provided by your insurance. Contact your insurance company or agency.



## Categories

The category of your MERIDA pedelec/e-MTB is indicated on the orange-colored sticker (b) on the top tube.

### Keep in mind:

The higher the category of your MERIDA pedelecs/e-MTB the greater is the direct influence of your riding skills (c) on the service life of your MERIDA pedelecs/e-MTB. Even in a terrain that is approved for MERIDA pedelecs/e-MTBs defects may occur as a result of riding mistakes. And even if the jump height is lower than the one indicated for the respective category, your MERIDA pedelec/e-MTB may be affected by defects due to a lack of riding technique or an insufficient condition of the trail.



Due to their design and fittings MERIDA pedelecs/e-MTBs are not always suitable for being used on public roads. Before being used on public roads the prescribed systems (d) supplied together with your MERIDA pedelec/e-MTB must be installed. Observe the traffic rules when riding on public roads. For more information see the chapter "Legal requirements for riding on public roads" of your comprehensive MERIDA user manual.



Details relating to the use of trailers and the permissible overall weight are given in the chapters "Permissible overall weight" and "Operation with trailer".

### Category 1 “Road”

MERIDA pedelecs of the category “Road” **(e)** are intended for use on public roads and cycle lanes with tarred surface, whereas the wheels remain in constant contact with the ground. MERIDA pedelecs of this category are not intended for use as touring and travel bike.

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

### Category 2 “Cross”

MERIDA pedelecs of the category “Cross” **(f)** are intended for use on hard-surface terrain, i.e. for tarred roads and cycle lanes or for field tracks with gravel, sandy or earthy surface that are sign-posted for cycle traffic. The wheels remain in constant contact with the lane.

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



### Category 3 “XC + TRAIL”

MERIDA pedelecs of the category “Cross Country (XC) + Trail” **(g)** are intended for off-road use. Pedelecs of this category may be used on tarred roads and cycle lanes or on field tracks with gravel, sandy or earthy surface that are sign-posted for cycle traffic. Pedelecs of this category may also 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”, is permitted as long as the trail is free of construction characteristics for higher categories for which a pedelec of this category is not approved.

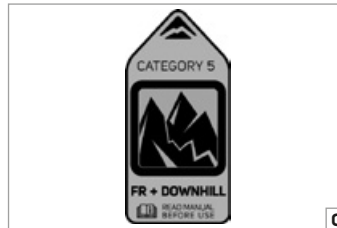
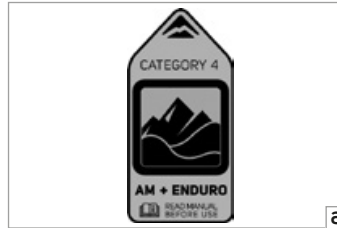
In particular jumps carried out by inexperienced riders can result in improper landings. In this case the forces acting on the pedelec may be significantly higher compared to riders with a proper riding technique. This can result in damage and injuries. We recommend that you attend a riding technique course. If you use your MERIDA pedelec 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 pedelecs of the category “All Mountain (AM) + Enduro” **(a)** are intended for off-road use. Pedelecs of this category are not only intended for use on trails and technical sections **(b)** 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 pedelec 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 pedelec regularly in a bike park have it checked by your MERIDA dealer more often than indicated in the service plan.



### Category 5 “FR + Downhill”

MERIDA pedelecs of the category “Freeride (FR) + Downhill” **(c)** are intended for off-road use. Pedelecs 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 **(d)**.

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

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 pedelec 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 pedelec regularly in a bike park have it checked by your MERIDA dealer more often than indicated in the service plan.

## Permissible overall weight

The permissible overall weight is indicated on the type plate of your MERIDA pedelec (**e+f**).

The permissible overall weight is made up as follows:

- Weight rider (kg)
- + Weight pedelec (kg)
- + Weight baggage (kg)
- + Overall weight trailer incl. cargo and/or persons (if loaded) (kg)
- = permissible overall weight (kg)

The weight of your MERIDA pedelec is either marked on the type plate of your MERIDA pedelec. If it is not, this weight ex works is below 25 kilograms. For calculating the overall weight assume in this case a weight of 25 kilograms for your MERIDA pedelec. More details are also given at [www.merida-bikes.com](http://www.merida-bikes.com)

## Operation with trailer

Your MERIDA pedelec is approved for operation with trailer (**g**) for the transport of cargo and children.

With specific child trailers that are towed behind a bicycle you can carry up to two children.



e



f



g

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 pedelec. 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 approved**.
- 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 pedelec 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 to the rear.

- Do observe the permissible maximum speed indicated by the trailer manufacturer. Follow 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 pedelec/e-MTB or the trailer topple over.



Always protect your child with a suitable helmet. 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.



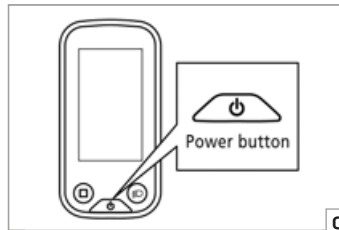
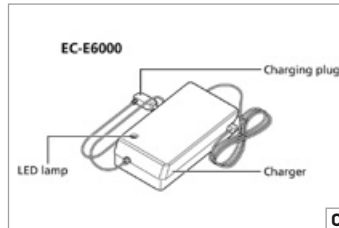
Trailers modify the braking behavior and the width of your pedelec/e-MTB. Practice first of all by towing an empty trailer (a). Equip the trailer with a long pole with colored pennant to increase visibility.



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



Your find more detailed information on your MERIDA pedelec 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 fittings of your MERIDA pedelec are therefore not necessarily complete.

Ask your MERIDA dealer about the laws and regulations applicable in your country or in the country where you intend to use your MERIDA pedelec. Have your MERIDA pedelec equipped accordingly (b) before using it on public roads.

For more information see the chapter "Legal requirements for riding on public roads" of your comprehensive MERIDA user manual.

2. The rechargeable battery of your MERIDA pedelec must be charged before you set off for the first time (c). Are you familiar with the handling and mounting of the rechargeable battery? Before you set off for the first time check whether the battery is properly mounted, that it has engaged audibly and that it is locked.

For more information see the system instructions of your drive manufacturer.



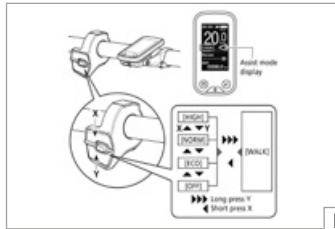
- The functions of your MERIDA pedelec are operated with the buttons on the control computer **(d)** or with the On/OFF-switch on the top tube **(e)**. Are you familiar with all functions and displays? Check whether you know the functions of all buttons on the control computer or on the control unit.

For more information see the system instructions of your drive manufacturer.



- Your MERIDA pedelec has a pushing aid **(f)**. The pushing aid provides assistance during pushing your MERIDA pedelec. Are you familiar with the pushing aid?

For more information see the system instructions of your drive manufacturer.



- Are you familiar with the brake system? 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) **(g)**. 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.



For more information see the chapter “The brake system” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

- Are you familiar with the type and functioning of the gears **(h)**? 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.

For more information see the chapter “The gears” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

- 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 whether your toes reach to the floor when you are sitting on the saddle. Your MERIDA dealer will be pleased to help you if you are not happy with your seating position.

For more information see the chapter “Adjusting the MERIDA bike to the rider” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

8. If your MERIDA pedelec is equipped with clipless or step-in **(a)** 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.



a

For more information see the chapter "The pedals and the shoes" in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

9. If you have bought a MERIDA pedelec with suspension **(b+c)** or suspension seat post **(d)**, 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.



b

For more information see the chapters "Suspension forks", "Rear shocks" and "Suspension seat posts" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.



c



d



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



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



Be sure to use your MERIDA pedelec only for its intended purpose, as your MERIDA pedelec may otherwise not withstand the stress and fail. Risk of a fall!



When mounting your MERIDA pedelec, make sure not to step on the pedals until you sit in the saddle and grip the handlebars tightly, and that one pedal is at the lowest position when you get on. The motor assistance might switch on suddenly and result in an uncontrolled start of your MERIDA pedelec. Risk of an accident!



Note 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.



Do not mount new or spare parts that are not designed for your MERIDA pedelec or that suspend the operating limitations of the 25 kmh assist and the rated power of 250 W. Your MERIDA pedelec is then no longer approved for use on public roads. You may lose insurance protection. Imminent risk of an accident!



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



Pulling the brake lever of the rear brake stops the motor (e). Emergency stop!



In case you had a crash with your MERIDA pedelec, perform at least the check described in the chapter "After an accident". Ride back very carefully by taking the shortest route possible, even if your MERIDA pedelec 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 once again your MERIDA pedelec thoroughly. If you are in doubt or if you have any questions contact your MERIDA dealer!



Unless otherwise permitted by the battery manufacturer charge your battery (f) in dry rooms fitted with a smoke or fire detector, however not in your bed room. Place the battery during the charging process on a big, non-inflammable plate made of ceramics or glass! Unplug the battery at short term as soon as it is charged up.



Charge your battery only with the supplied charger (g). Do not use the charger of any other manufacturer, not even when the connector of the charger matches your rechargeable battery. The rechargeable battery can heat up, catch fire or even explode!



Do not park your MERIDA pedelec in the blazing sun.



The weight distribution on your MERIDA pedelec differs clearly from the weight distribution on bikes without drive assistance. Your MERIDA pedelec is clearly heavier than a MERIDA bike without drive assistance. This impedes parking, pushing, lifting and carrying the MERIDA pedelec. Bear this in mind when loading your pedelec into a car and unloading it or when mounting it on a bicycle carrier system.



Be aware that the brakes of your MERIDA pedelec are always stronger than the drive. If you face any problems with your drive (e.g. because it pushes you forward in front of a bend), slow down your MERIDA pedelec carefully.



Before towing a trailer (h) with your MERIDA pedelec contact your MERIDA dealer.



You may mount a child seat to the main frame if it is explicitly provided with mounting points specifically for this purpose. Ask your MERIDA dealer whether the pannier rack is also designed to be fitted with a child seat. For safety reasons we recommend that you use a child trailer in general.



Keep in mind that not all MERIDA pedelecs are fitted with kickstands. Therefore, when parking your MERIDA pedelec make sure it stands safe and secure and is not at risk of toppling over or being knocked over. If your MERIDA pedelec topples over it can suffer from damage.

## Before every ride

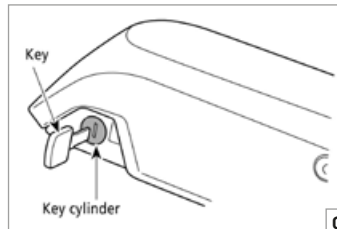
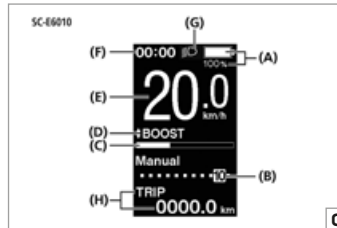
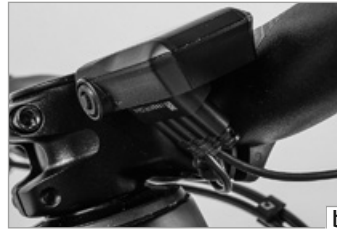
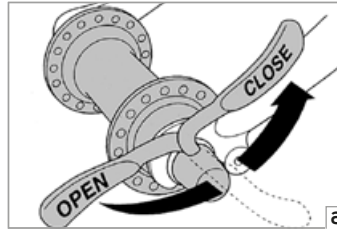
Your MERIDA pedelec has undergone numerous tests during production and a final check has been carried out by your MERIDA dealer. Nevertheless, be sure to check the following points to exclude any malfunctioning that may be due to the transport of your MERIDA pedelec or to changes a third person may have performed on your MERIDA pedelec before every ride:

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

For more information see the chapter "How to use quick-releases and thru axles" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

2. Are the connections of the rechargeable battery, the control computer **(b)** or the control unit and the drive correctly plugged?

For more information see the system instructions of your drive manufacturer.



3. Is your battery fully charged? Remember to fully recharge the battery after each longer ride (e.g. less than 50 % charged). Modern lithium-ion batteries have no memory effect. But it will not do any harm if your MERIDA pedelec is parked at short term (e.g. overnight) with the battery's state of charge being less than 50 %. However, you should not wait until the battery is fully discharged!

For more information see the system instructions of your drive manufacturer.

4. Do the display on the control computer **(c)** and the cycle computer on the handlebars show all the values? Is there any error message or warning on the display? Check the values are correct before every ride. Do not set off on your MERIDA pedelec under any circumstances if the control element shows a warning.

For more information see the system instructions of your drive manufacturer.

5. Is the battery tight in its holder and the lock properly locked up **(d+e)**? Never set off with a loose and unlocked battery.

For more information see the system instructions of your drive manufacturer.

- Are the tires in good condition and do they have sufficient pressure? Keep in mind that a pedelec weighs more and that your usual tire pressure may be insufficient. A higher pressure gives a better riding stability and reduces the risk of a puncture. The minimum and maximum pressure (in bar or psi) is indicated on the tire side.

For more information see the chapter “The wheels and the tires” in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

- Spin the wheels to check whether the rims are true. In the case of wheels with disc brakes watch the gap between frame and rim or tire. Untrue rims can be an indication of tires with ruptured sides or broken axles or spokes.

For more information see the chapter “The wheels and the tires” in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

- Test the brakes at standstill by firmly pulling the brake levers towards the handlebars **(f)**.



e



f



g



h

In the case of disc brakes the pressure point must be stable at once. If you have to actuate the brake lever more than once to get a positive braking response have the MERIDA pedelec checked by your MERIDA dealer immediately.

For more information see the chapter “The brake system” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

- Let your MERIDA pedelec bounce on the ground from a small height. If there is any rattling, find out where it comes from. Check the bearings, the bolts and the proper seat of the battery, if necessary.
- If you want to ride on public roads, make sure your MERIDA pedelec is equipped according to the applicable regulations of your country **(g)**. Riding without lights and reflectors **(h)** in dark or dim conditions is very dangerous because you will be seen too late or not at all by other road users.



**Make sure that the lighting system used complies with the road traffic regulations of the respective country where you are riding.**

A lighting set that corresponds to the regulations is a must on public roads. Turn on the lights as soon as dusk sets in.

For more information see the chapter "Legal requirements for riding on public roads" of your comprehensive MERIDA user manual.

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

For more information see the chapters "Suspension forks", "Rear shocks" and "Suspension seat posts" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

- If your bike has a kickstand make sure it is fully raised **(b)** before you set off. Risk of a fall!
- 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 pedelec against theft is to lock it to an immovable object. It is also recommended to always remove the rechargeable battery, the control computer or the control unit or the display from the MERIDA pedelec.



**a**



**b**



**c**



**d**



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



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



**Do not use your MERIDA pedelec, if it fails on one these points! Riding a defective MERIDA pedelec can result in serious accidents! If you are in doubt or if you have any questions contact your MERIDA dealer.**



**Your MERIDA pedelec is subject to severe stress resulting from the effects of the ground and the forces introduced by you into your MERIDA pedelec. Due to these dynamic loads, the different parts are subject to wear and fatigue. Examine your MERIDA pedelec regularly for wear marks, scratches, deformations, color changes or incipient cracking **(d)**. Components which have reached the end of their service life may fail suddenly. Bring your MERIDA pedelec to your MERIDA dealer regularly so that they can replace the parts in question, if necessary.**



**Maintain your MERIDA pedelec regularly and ask your MERIDA dealer to perform the scheduled maintenance work. This is the only way to ensure a long-lasting functioning of all components. For more information see the chapters "Intended use", "Servicing and maintenance" and "Service and maintenance schedule".**



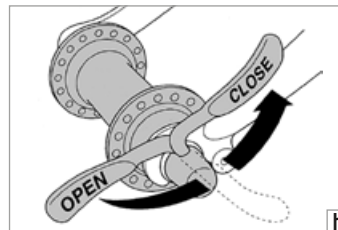
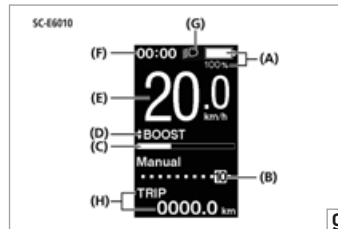
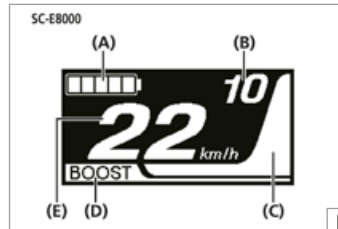
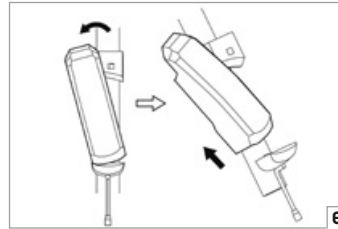
## After an accident

1. Check the rechargeable battery **(e)**. If the rechargeable battery is no longer properly in its holder or shows any damage do not use your MERIDA pedelec any longer, at least not in the assistance mode. Switch off the drive and the rechargeable battery separately, if necessary. A damaged battery can lead to a short-circuit resulting in a sudden failure of the MERIDA pedelec assistance right at the moment when you need it.

Damage to the outer housing of the rechargeable battery can result in water or moisture entry which can lead to short circuits or electric shocks. The rechargeable battery may catch fire or even explode! In such a case, contact your MERIDA dealer immediately.

For more information see the system instructions of your drive manufacturer.

2. Check whether the values are displayed properly and completely on the control computer **(f)** or the display **(g)**. Do not use your MERIDA pedelec if the control computer shows an error message or a warning. In the case of critical errors the system switches off automatically. In the case of non-critical errors the system may be still operable.



Do not set off on your MERIDA pedelec when the control computer or the display shows a warning. In such a case, contact your MERIDA dealer immediately.

For more information see the system instructions of your drive manufacturer.

3. Let your MERIDA pedelec bounce on the ground from a small height. If there is any rattling find out where it comes from. Check the bearings, the bolts and the proper seat of the battery, if necessary.
4. Check whether the wheels are still firmly fixed in the drop-outs **(h)** and whether the rims are still centered with respect to the frame or fork. Spin the wheels and watch the gap 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.

Have the wheels retuned by your MERIDA dealer immediately upon your return.



For more information see the chapters “The brake system”, “How to use quick-releases and thru axles” and “The wheels and the tires” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

5. Check whether the handlebar and the stem are neither bent nor broken and whether they are still level and upright. Make sure the stem is firmly fixed on the fork by trying to turn the handlebars relative to the front wheel **(a)**. 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 **(b)**. The maximum torque values are printed directly on the components or specified in the instructions of the component manufacturers.

For more information see the chapters “Adjusting the MERIDA bike to the rider” and “The headset” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.



6. Check whether the chain still runs on the chainwheels and the sprockets. If your MERIDA pedelec fell over to the chain side, verify the proper functioning of the gears. Ask somebody to lift your MERIDA pedelec 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 **(c+d)**.

If the rear derailleur or the drop-outs/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.

For more information see the chapter “The gears” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

7. Make sure the saddle is not twisted by using the top tube **(e)** or the bottom bracket shell as a reference. If necessary, open the clamping, realign the saddle and retighten the clamping.

For more information see the chapters “Adjusting the MERIDA bike to the rider” and “How to use quick-releases and thru axles” in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual and in the instructions of the component manufacturers.

8. Finally, take a good look at the whole MERIDA pedelec **(f)** to detect any deformations, color changes or cracks **(g)**.

Ride back very carefully by taking the shortest route possible, even if your MERIDA pedelec 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 pedelec have yourself picked up by car instead of taking any risk.

Back home you need to check your MERIDA pedelec thoroughly. Damaged parts must be repaired or replaced. Ask your MERIDA dealer for advice.



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 pedelec is fitted with carbon components **(h)**, 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 a fall!



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



For more information about carbon components see the chapter “Special characteristics of carbon” in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

## How to use quick-releases and thru axles

### Quick-releases

Most MERIDA pedelecs are fitted with quick-releases **(a)** to ensure fast adjustments, assembly and disassembly. Be sure to check whether all quick-releases are tight before you set off on your MERIDA pedelec. 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:

1. The lever **(b)** on one side of the hub which creates a clamping force via a cam when you close it.
2. The lock nut **(c)** 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 quick-release lever is not in contact with the brake disc. If you are in doubt or if you have any questions contact your MERIDA dealer.



Never ride your MERIDA pedelec without having checked first whether the wheels are securely fastened **(d)**. With an insufficiently closed quick-release the wheel can come loose. Imminent risk of an accident!



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



More information is given in the instructions of the (suspension) fork manufacturer.

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

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

For more information see the chapters "Adjusting the MERIDA bike to the rider" and "The wheels and the tires" in this translation of the original MERIDA operating instructions and in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

Move the lever back as if to close it. Now you should be able to read "Close" **(f)** 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.

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 or a rear stay, but not on a brake disc **(g)** 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 **(f)**, i.e. it should not stand out. The lever should lie close to the frame or the fork so that it cannot be opened 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. If you can turn the lever around open it and increase the preload. 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 bicycle a few centimeters so that the wheel no longer touches the ground and hit the tire from above. If it is properly fastened the wheel will remain firmly fixed in the drop-outs of the frame or fork without producing any rattling.

If your seat post is equipped with a quick-release mechanism check whether the saddle is firmly fixed by trying to twist it relative to the frame.



**Quick-releases can be replaced by an 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 pedelecs are fitted with thru axles. They provide both the suspension fork and the rear shock with adequate stiffness.

### Useful information for mounting wheels with thru axles

There is a wide range of thru-axle systems available on the market (**a-d**). Some systems are fastened with quick-release levers. Other systems may require special tools for assembly or disassembly.

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



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.



In any case be sure to read the chapter "How to use quick-releases and thru axles" in your comprehensive MERIDA user manual and in the instructions of the suspension fork, thru axle and wheel manufacturers before removing the wheel or doing any maintenance work and mounting a fork/wheel combination with thru-axle system!



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.



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

## Adjusting the MERIDA bike to the rider

Your body height and proportions are decisive for the frame size of your MERIDA pedelec. Pay particular attention to the fact that there is enough clearance between your crotch and the top tube so that you do not hurt yourself when you have to get off your bike quickly.

With the choice of a pedelec type you roughly determine the posture you will be riding in (e). However, some components of your MERIDA pedelec 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 pedelec 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 pedelec in an area free of traffic.



In the case of very small frame sizes or if the foot is incorrectly positioned on the pedal there is the risk of the foot colliding with the front wheel. Therefore make sure your foot is correctly positioned on the pedal (f).



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 settings" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual, directly on the components and/or in the instructions of the component manufacturers.



The seating position depends highly on how you want to use the MERIDA pedelec (g+h). Ask your MERIDA dealer or your trainer for help. The advice given below is suitable for typical city, trekking and cross-country/marathon 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 stretch your legs completely straight at the lowest point, otherwise your pedaling will become awkward **(a)**.

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 stretched and your hips should remain horizontal.

To adjust the saddle height loosen the quick-release lever (see 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 **(b)**. 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 (max., min., stop or the like) should always remain within the seat tube. Always grease the surface 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.



**a**



**b**



**c**



**d**

Align the saddle with the frame by using the saddle nose and the bottom bracket or the top tube as a reference point **(c)**.

Clamp the seat post tight again by closing the quick-release, as described in the chapter “How to use quick-releases and thru axles” or by tightening the seat post binder bolts to the torque value indicated on the clamp.

Verify 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. 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 whether you can touch the ground safely while sitting on the saddle by stretching your feet to the floor **(d)**. If you cannot you should lower the saddle a little until you can, at least to begin with.





When riding steep downhill courses on your mountain bike pedelec it may be useful to lower the saddle. This allows a better control of the MERIDA pedelec.



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 components may never again ensure reliable clamping! Use special carbon assembly paste instead.



Make sure not to overtighten the binder bolt of the seat post clamp (e). Observe the torque value indicated on the clamp. Otherwise you may damage the seat post or the frame. Risk of an accident!



Never ride your bicycle with the seat post drawn out beyond the min. insert, maximum, limit or stop mark (f)! 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.



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!



If your MERIDA pedelec has a Vario seat post (g) you can find more information in your comprehensive MERIDA user manual and 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 handlebar, i.e. the **adjustable** and the **Ahead®-stem (h)**. Both 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 (a) is one of the load-bearing parts of your MERIDA pedelec. 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. 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 settings" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual, directly on the components and/or in the instructions of the component manufacturers.



Stems come in varying lengths (b) as well as shaft and handlebar clamp diameters (c). 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 **(e)** of the front part of adjustable stems:

Some designs use bolts on the sides of the joint **(f)**, others have bolts coming from above or below, and others again are equipped 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.

For more information see the chapter "Adjusting the height of the handlebars" in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.



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

In the case of MERIDA pedelecs with Aheadset®-headsets the stem also serves to adjust the bearing preload. If you change the position of the stem you have to re-adjust the bearing play (see the chapter "The headset" in your comprehensive MERIDA user manual and in the instructions of the component manufacturers).

The vertical setting range is determined by the spacer rings, also referred to as spacers **(g)**. In the case of flip-flop stem models **(h)** 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.



**If you adjust the handlebars clearly upwards the cables may be too short. In this case riding can be unsafe. In if 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.**



**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".**

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

The inclination of your upper body (a), 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, this also influences your pedaling. 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 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 settings" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual, directly on the components and/or in the instructions of the component manufacturers.**



**Make sure the saddle is clamped within the range of the marking (b) 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.**



a



b



c



d



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 plus/minus 2 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!



The manufacturers of saddles deliver their products with detailed manuals. 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 (c)** 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 **(d)** as you retighten the bolt(s). Your MERIDA pedelec 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.



**Clamping with two bolts in line (f):** release both bolts two to three turns counterclockwise, 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 **(g)** 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 on the tip and once at the rear end **(h)**.



**Check the bolts by using a torque wrench (e) 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 an accident!**



**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 an accident!**

If you have a **single bolt system (a)**, unscrew the fixing bolt as far as possible without loosening the lock nut on the outer 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 **(b)**. 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 **(c)** 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 an accident!**

### Adjusting the brake lever reach

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 handlebars **(d)**.

Normally there is a small adjusting bolt on the lever itself.

Turn this bolt **(e)** 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 **(f)**. Check the proper adjustment and functioning of the brake system subsequently as described in the chapter "The brake system" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.



## Adjusting the tilt of the handlebars and brake levers

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.

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 **(g)**. 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 once clamped in the stem **(h)** and tighten the bolt a little more, if necessary. Use a torque wrench and never exceed the maximum torque values! You will find the prescribed values directly on the components and/or in the manuals of the component manufacturers.

If the handlebars are not tight with the prescribed torque value use carbon assembly paste.



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




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 **(a)**. 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.



 **Tighten the bolts at the stem **(b)** until the clamping slots between the stem body and the faceplate are parallel and identical in width at the top and at the bottom. 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.**

 **There are stem models where both bolts (top or bottom) are tightened on one side first and then both bolts on the opposite side. These stems are marked with a separate imprint, such as "Close Gap" or "No Gap" indicating this specific feature.**



**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 settings" in this translation of the original MERIDA operating instructions as well as in your comprehensive MERIDA user manual, directly on the components and/or in the instructions of the component manufacturers.**

Bar ends provide additional ways of gripping the handlebars.



**Be aware that the distance you need to stop your bicycle 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 a vertical position or with their ends pointing rearwards as this would increase the risk of injury in the event of an accident.**



**Do not install multi-position handlebars on your MERIDA pedelec. Contact your MERIDA dealer.**



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

## The brake system

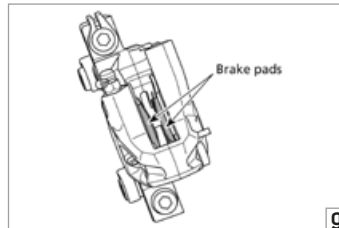
Brakes **(e)** are used to adjust your speed to the surrounding terrain and traffic. In an emergency situation, the brakes must bring your MERIDA pedelec to a halt as quickly as possible.

In the event of such emergency brakings, the rider's weight shifts forward abruptly, 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 pedelec and, secondly, by the grip of the tires on the road. 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 **(f)** 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.

The braking conditions on unpaved surfaces differ, i.e. overbraking the front wheel can make the wheel slip away. Make yourself familiar with the operation before you set off for the first time. Practice braking on different kinds of surface in an area free of traffic.

For more information see the chapter "The brake system" in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.



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 able to keep your MERIDA pedelec safely under control or attend a riding technique course. 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.



Ensure that braking surfaces and brake pads are absolutely free of wax, grease and oil. Risk of an accident!



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



Read in any case the chapter "The brake system" in your comprehensive MERIDA user manual as well as in the instructions of the brake manufacturer before you start to readjust or to service the brake or before doing any work whatsoever.

## The gears

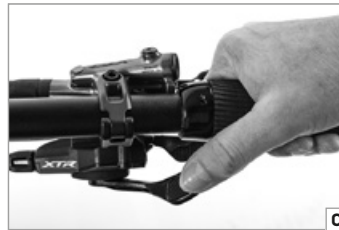
The gears **(a-c)** of your MERIDA pedelec serve to adjust the gear ratio to the terrain you are riding on and the desired speed. Modern MERIDA pedelecs can have up to 12 gears.

In the case of **derailleur gears** a low gear allows you to climb steep hills with moderate pedaling force. You must, however, pedal at a faster pace or higher frequency. Downhill you switch to a high gear. Every turn of the pedals takes you many meters forward at correspondingly high speed.

Continue pedaling during gear shifting.

In the case of **multi-speed hubs** and **gearbox shift systems** "1" stands for the first, lowest gear. The gears are shifted through one after the other at standstill or during pedaling. The pressure on the pedal must be reduced during shifting. In the case of electronic multi-speed hubs the drive power and thus the pressure on the pedal is reduced automatically.

As the case may be, multi-speed hubs may have automatic gear shifting.



For more information see the chapter "The gears" in your comprehensive MERIDA user manual as well as 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 pedelec.**



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



**Read in any case the chapter "The gears" in your comprehensive MERIDA user manual as well as in the instructions of the gear manufacturer before you start to readjust or to service the gears or before doing any work whatsoever on them.**

## Suspension forks

Many MERIDA pedelecs have suspension forks **(e)**. This feature gives you better control of your MERIDA pedelec 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 pedelec 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 **(f)**. Be sure to have this adjustment carried out by your MERIDA dealer at the time of delivery.

For more information see the chapter "Suspension forks" in your comprehensive MERIDA user manual as well as in the instructions of the suspension fork manufacturers.



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.



A too strong damping of the suspension fork can result in a sluggish rebound movement with a rear shock that will not recover when exposed to a quick series of impacts. Risk of a fall!



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 suspension fork has a lockout mechanism **(g+h)** do not activate the lockout function when riding in rough terrain but only when riding over smooth terrain (roads, field tracks).



Suspension fork manufacturers normally supply instructions. Read them carefully before changing any settings or 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.manitoumtb.com](http://www.manitoumtb.com)  
[www.ridefox.com](http://www.ridefox.com)  
[www.dtswiss.com](http://www.dtswiss.com)  
[www.rockshox.com](http://www.rockshox.com)  
[www.magura.com](http://www.magura.com)  
[www.marzocchi.com](http://www.marzocchi.com)

## Rear shocks

Full suspension MERIDA pedelecs **(a)** are not only equipped with a suspension fork but also with movable rear stays which are sprung and damped by a rear shock. This feature gives you better control of your MERIDA pedelec when riding cross-country or on rough road surfaces. The (shock) loads on you and your MERIDA pedelec 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 **(b)**. Be sure to have this adjustment carried out by your MERIDA dealer at the time of delivery.

For more information see the chapter “Rear shocks” in your comprehensive MERIDA user manual as well as in the instructions of the rear shock manufacturers.



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.



A too strong damping of the rear frame can result in a sluggish rebound movement with a rear shock that will not recover when exposed to a quick series of impacts. Risk of a fall!



a



b



c



d



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 (c).



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 (d) do not activate the lockout function when riding in rough terrain but only when riding over smooth terrain (roads, field tracks).



Rear shock manufacturers normally supply instructions. Read them carefully before changing any settings or 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.manitoumtb.com](http://www.manitoumtb.com)  
[www.ridefox.com](http://www.ridefox.com)  
[www.dtswiss.com](http://www.dtswiss.com)  
[www.rockshox.com](http://www.rockshox.com)  
[www.rst.com.tw](http://www.rst.com.tw)  
[www.xfusionshox.com](http://www.xfusionshox.com)

## Riding a MERIDA pedelec – Special features

Your MERIDA pedelec is designed to be used like a conventional bike. The unique riding experience, however, starts when you actuate the drive system **(e+f)**. At that moment the assistance generated by the 250 W motor increases with its high torque the stronger you pedal.

Set off for your first ride by selecting the lowest level of drive assistance. Gradually get used to the additional propulsion. Slowly approach the potential of your MERIDA pedelec in an area free of traffic.

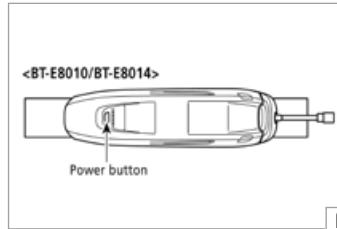
Practice typical riding situations such as starting off and braking, tight corners and riding on narrow cycle paths and lanes. This is where a MERIDA pedelec clearly differs from a conventional MERIDA bike.



**Pulling the brake lever of the rear brake stops the motor. Emergency stop!**



**Be aware that the brakes of your MERIDA pedelec are always more effective than the drive. If you face any problems with your drive (e.g. because it pushes you forward in front of a bend) slow down your MERIDA pedelec carefully.**



## Riding with drive assistance

The system is switched on and off at the buttons of the control element on the battery or on the handlebar. Furthermore, different assistance modes can be selected, the remaining capacity of the rechargeable battery is displayed and the different functions of the cycle computer, if available, can be selected.

When switched on, the system is activated during pedaling and the drive assistance is available. Sensors measure your pedaling movements and control the fully automated drive assistance according to the selected assistance mode. The level of the additional propulsion depends on the assistance mode, your speed and, as applicable, the amount of force applied to the pedals.

If there is no response of the On/OFF button on the frame or on the display after a longer standstill the system can also be switched on at the integrated battery. Remove the small plastic cap on the down tube **(g)** for this purpose. Press the button with a suitable, blunt tool, e.g. a 4-mm Allen key. In the case of bicycles with removable axle levers of the rear axle the latter can be used for switching on **(h)**.

The assistance switches off when you reach a speed of more than 25 kmh.

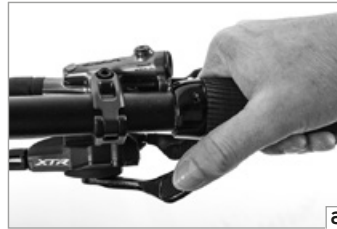
Keep in mind that you may have to change your riding habits: Do not mount by placing one foot on the pedal and by trying to throw the other leg over the saddle. The MERIDA pedelec would set off suddenly. Risk of a fall!



Stop pedaling earlier than you are used to before riding a corner or bend. Otherwise there may be too much propulsion and your cornering speed may be too high.

Do not give in to the temptation to always ride in a high gear due to the strong motor. Shift gears frequently **(a)** in the same way that you are used to doing with a conventional MERIDA bike so as to make your own contribution to your forward progress as efficient as possible. Your cadence should always be in a smooth flow. In other words, you should pedal at more than 70 crank rotations per minute.

Keep in mind that the other road users are not yet used to the new pedelecs and their higher speeds. Ride with this fact in mind and anticipate the actions of other road users. Be aware that the speed you ride at will be clearly faster than you are used to. Therefore, keep these facts in mind and be ready to brake whenever an unclear or a possibly dangerous situation comes into your field of vision.



**a**



**b**



**c**

Display	Battery level
	100 - 81 %
	80 - 61 %
	60 - 41 %
	40 - 21 %
	20 - 1 %
	0 %

**d**



Do a test ride in an unfrequented area **(b)** to make yourself familiar with the riding characteristics of your MERIDA pedelec and the possibly higher speed and acceleration, before riding on public roads. Risk of an accident! Never ride without a helmet!



Do not step on the pedals before sitting in the saddle, select the lowest drive assistance and be ready to brake when you set off. Risk of a fall!



Keep in mind that due to the higher driving power at the rear wheel the risk of an accident increases with slippery roads (due to wetness, snow, gravel etc.). This applies all the more when riding bends. Risk of a fall!



Keep in mind that car drivers and other road users may underestimate your speed. Always wear bright clothing. Therefore, always ride on public roads with this fact in mind and anticipate the actions of other road users. Risk of an accident!



Keep in mind that pedestrians do not hear you when you approach at high speed. Therefore, ride particularly defensive and anticipating when using cycle lanes and cycle/footpaths to avoid accidents. If necessary, ring the bell **(c)** in time to warn others.



## Range – Useful information for a long ride

How long and how far you can benefit from the auxiliary drive depends on several factors, i.e. the road conditions, the weight of the rider and any additional load, the rider's pedal force, the degree or mode of assistance, (head)winds, frequent stops, temperature, weather conditions, topography, tire pressure etc.

The charge state of your rechargeable battery can be read from the control element on the handlebars **(d)** or additionally on the rechargeable battery.



**In general, the rechargeable batteries of MERIDA pedelecs have no memory effect. However, a battery is a wearing part, i.e. repeated charging and long utilization times lead to a deterioration of the battery (power loss). It is recommended that you charge the battery after every long ride. Avoid any depth discharge of the rechargeable battery.**

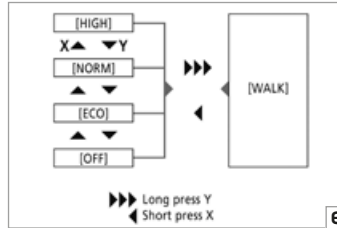


**For more information see the system instructions of your drive manufacturer.**

To extend the range it is recommended that you ride with low assistance (Eco) or no assistance at all on level or downhill trails **(e)** and only select maximum drive assistance (Boost) **(f)** with headwinds, heavy additional loads and/or when climbing hills.

Furthermore, you can extend the range by

- checking the tire pressure regularly, i.e. once a week with a pressure gauge, and adjusting it, if necessary **(g)**



- shifting down gears in time in front of traffic lights and intersections or in general in cases of stops and by setting off in low gears
- shifting gears regularly, as you would do on a MERIDA bike without drive
- not only riding in high gears
- riding with these facts in mind and always looking ahead to avoid any unnecessary stops
- reducing your additional load, i.e. without any unnecessary baggage
- storing your battery in your home and installing it only shortly before you set off on your MERIDA pedelec in cooler weather, in particular when it is cold
- not parking your MERIDA pedelec in the blazing sun

For more information on whether your MERIDA pedelec has a recuperation function see the system instructions of your drive manufacturer.

If your battery has not enough capacity to reach your destination benefit from the decisive advantage of the hybrid concept of your pedelec: Without drive assistance you can ride your MERIDA pedelec like a usual bike with an unlimited range and nearly without compromises in terms of riding characteristics.



**If your battery runs empty during the ride do not recharge the battery with an arbitrary charger, even if it happens to be fitted with an identical connector type. Risk of explosion! Charge your battery with the series charger **(h)** only.**

## Riding without drive assistance

You can also use your MERIDA pedelec without drive assistance, i.e. just like a conventional MERIDA bike.

Keep in mind some major things when riding with an empty or without rechargeable battery **(a)**:

- You can switch on the control element on the handlebars of your MERIDA pedelec, even if you want to ride without drive assistance to take advantage of the functions of your cycle computer. For more information see the system instructions of the drive manufacturer.
- If the lighting set of your MERIDA pedelec **(b)** is powered by the rechargeable battery you can use your light when riding with an empty battery. It is, however, recommended that you recharge the battery immediately after you have returned.
- After having removed the battery from the down tube of your MERIDA pedelec: Keep the connections of the rechargeable battery free of dirt and moisture.
- A remaining capacity of the battery is not only “reserved” for the lighting but also for electronic gear systems. But this function is only available with the battery installed, before the battery is completely discharged and before no more indications are on the display.



a



b

## Integrated battery in the case of models without lock


### Removal of the battery

Switch off the system.

Loosen the rubber lip at the bottom end of the battery (c) and push the protective cover to the limit stop upwards.

Carefully remove the protective cover (d).

Hold the battery in a way that it cannot fall down. Carefully release the bolt on the down tube by using the supplied tool (e+f).

 This tool is inserted as lever in the rear wheel axle and can be pulled out by applying a little force (g).



Keep holding the battery. By pressing the button on the upper end of the battery it can now be unlocked (h).

Slowly tilt the battery downwards and remove it from the lower holder (i).

### Installing the battery

Carefully position the battery in the lower holder on the down tube.

Tilt the battery in direction of the down tube and click it in the upper holder (k).

Position the cover in the upper area and finish by carefully closing the rubber lip (c).



## Integrated battery in the case of models with lock

### Removal of the battery

Switch off the system.

Loosen the rubber lip at the bottom end of the battery **(a)** and push the protective cover to the limit stop upwards.

Carefully remove the protective cover **(b)**.

Hold the battery in a way that it cannot fall down. Unlock the battery by using the key **(c)**.

Keep holding the battery. By pressing the button on the upper end of the battery it can now be unlocked **(d)**.

Slowly tilt the battery downwards and remove it from the lower holder **(e)**.



### Installing the battery

Carefully position the battery in the lower holder on the down tube.

Tilt the battery in direction of the down tube and click it in the upper holder **(f)**.

Position the cover in the upper area and finish by carefully closing the rubber lip **(a)**.



## Useful information for proper handling of the rechargeable battery

Remove the rechargeable battery **(g+h)** if you do not use your MERIDA pedelec for a longer period of time (e.g. during the winter season). Store the rechargeable battery in a dry room at temperatures between -20 and +60 degrees Celsius. During storage the state of charge should be approx. 50 % of the charging capacity **(i)**. Check the state of charge when the rechargeable battery is left unused for more than two months and recharge it in between, if necessary **(k)**.

Clean the battery housing with a dry or, if at all, a slightly moist rag. Look out for possible defects of the housing. Do not direct the water jet of a high-pressure cleaner to the rechargeable battery, as there is a risk of water entry and/or short-circuit.

For more information on the proper handling of your rechargeable battery see the system instructions of your drive manufacturer.



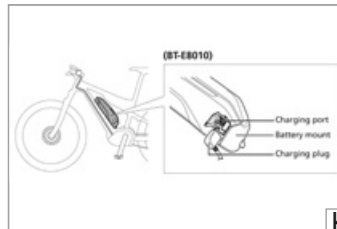
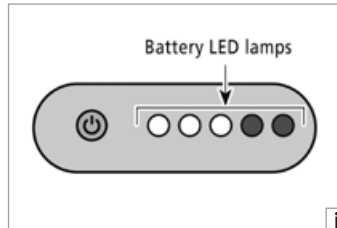
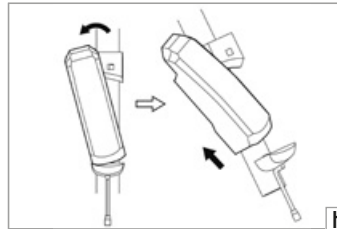
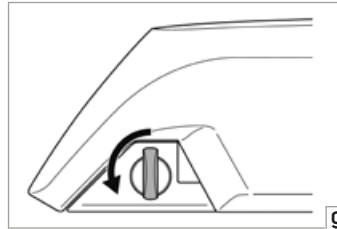
**Make sure your rechargeable battery is in sound condition. Do not open, disassemble or crush the battery. Risk of explosion!**



**Make sure your rechargeable battery is not exposed to mechanical impacts.**



**Keep your battery away from fire and heat. Risk of explosion!**



Unless otherwise permitted by the battery manufacturer charge your battery in dry rooms fitted with a smoke or fire detector, however not in your bed room. Place the battery during the charging process on a big, non-inflammable plate made of ceramics or glass! Unplug the battery at short term as soon as it is charged up.



Keep the rechargeable battery and the charger away from moisture and water during the charging process to exclude electric shocks and short circuits.



Do not use a rechargeable battery or a charger that is defective. If you are in doubt or if you have any questions contact your MERIDA dealer.



Do not expose your battery or the charger to the blazing sun. For more information see the system instructions of your drive manufacturer.



Do not charge any other electrical devices with the supplied charger of your MERIDA pedelec!



The drive is not approved for steam cleaning, high-pressure cleaning or cleaning with a water hose. The contact of water with the electrics or the drive can destroy the units. The individual drive components can be cleaned with a soft rag and neutral detergents. You may use a moist rag but not excessive water. Keep the rechargeable battery dry and do not submerge it! Risk of explosion!



Charge your battery only with the supplied charger. Do not use the charger of any other manufacturer, not even when the connector of the charger matches your rechargeable battery (a). The rechargeable battery can heat up, catch fire or even explode!



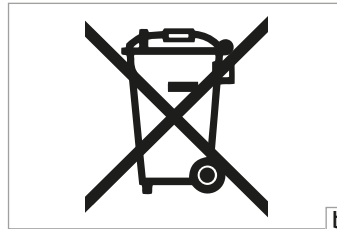
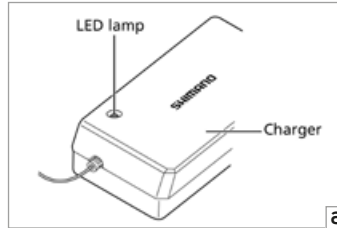
Keep the rechargeable battery and the charger out of the reach of children!



Batteries must not be short-circuited. Therefore store them in a safe storage area and make sure the battery is not short-circuited accidentally (e.g. with another battery). In addition, rechargeable batteries must not be stored inappropriately, e.g. in a box or in a drawer where they can be short-circuited by other conductive materials or where they can short-circuit each other. Do not deposit any objects in the storage area (e.g. clothes). After having removed the battery from the down tube or the frame of your MERIDA pedelec: Keep the connections of the rechargeable battery free of dirt and moisture.



When you remove your battery from the holder for charging it (with your MERIDA pedelec left in the open during the charging process) you should protect the connections, e.g. with a plastic bag against rain, water, moisture and dirt. If the connections of the rechargeable battery are soiled clean them with a dry rag.



Make sure to use the battery only for the MERIDA pedelec for which it is designed.



A remaining capacity of the battery is not only "reserved" for the lighting but also for electronic gear systems. But this function is only available with the battery installed, before the battery is completely discharged and before no more indications are on the display.



Make sure not to discharge your rechargeable battery completely (also referred to as depth discharge). This occurs often when the battery has run out completely and the MERIDA pedelec was left standing for some days. Depth discharge will affect the rechargeable battery of your MERIDA pedelec permanently. A deep-discharged battery can only be recharged in exceptional cases and with special chargers. Contact your MERIDA dealer.



Charge the battery in absolutely weather-proof spaces.



If the rechargeable battery or the charger (or parts of it) must be replaced only use original spare parts. Contact your MERIDA dealer, if necessary.



Charge the battery at a temperature between 0 and 40 degrees Celsius, preferably at an ambient temperature of approx. 20 degrees Celsius. Therefore, before starting the charging, wait until the temperature of the battery has increased or decreased after a ride in cold or hot weather.



Do not dispose of your rechargeable battery in the normal household garbage (b)! It must be disposed of according to battery disposal regulations. Therefore, sellers of new rechargeable batteries must provide collection of old batteries and appropriate disposal. If you are in doubt or if you have any questions contact your MERIDA dealer.



Remove the rechargeable battery from your MERIDA pedelec or MERIDA e-bike if you do not use your MERIDA pedelec for a longer period of time and keep it clean and dry.



Do not charge your battery over a long period of time, if you do not need it.



Lithium-ion batteries have no memory effect; they can therefore be charged at any time without affecting the charging capacity. However, a battery is a wearing part, i.e. repeated charging and long utilization times lead to a deterioration of the battery (power loss).

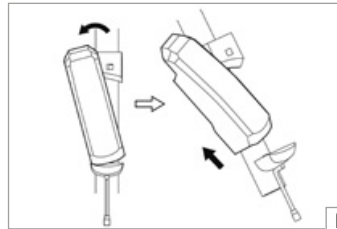
For more information on the proper handling of your rechargeable battery see the system instructions of your drive manufacturer.

## Transporting the MERIDA pedelec

### By car

MERIDA pedelecs can be transported like conventional bikes outside or inside the car **(e)**. Always make sure the MERIDA pedelec is securely fastened outside or inside the car and check the fastenings regularly. In addition, you should remove the battery from the MERIDA pedelec **(f-h)** prior to fastening it on the car roof. Stow the battery and, if applicable, a removable display unit inside the car and secure it appropriately to avoid any damage in transit.

For more information see the chapter "Transporting the MERIDA bike" of your comprehensive MERIDA user manual.



The weight distribution on MERIDA pedelecs differs markedly from the weight distribution on MERIDA bikes without drive assistance. A MERIDA pedelec is markedly heavier than a MERIDA bike without drive assistance. For this reason parking, pushing, lifting and carrying the MERIDA pedelec is more difficult. Bear this in mind when loading your pedelec into a car and unloading it or when mounting it on a bicycle carrier system.



Before transporting several pedelecs with a roof mounting or a rear mounting carrier system, inform yourself about the maximum load capacity of the bike carrier, the roof load and/or the bearing load of the trailer coupling. Keep in mind that the weight of a MERIDA pedelec is higher than the weight of a bike without drive. Maybe you can only transport one or two MERIDA pedelecs instead of three bikes without drive.



Make sure to remove all movable and loose parts and above all the rechargeable battery, the control element and the cycle computer on the handlebars before transporting the pedelec inside or outside the car. If you transport your MERIDA pedelec without its battery on a bike carrier system protect the connections against water, moisture and dirt, e.g. with a plastic bag.



If necessary, inform yourself about the regulations concerning bike/pedelec transport in the countries that you intend to transit during your journey. The regulations, e.g. with regard to the marking, differ from country to country.



## By train / By public transport

Taking pedelecs with you by public transport is permitted in general, the regulations applicable in the cities differ, however. There are e.g. some places where you are only allowed to travel with your MERIDA pedelec during off-peak hours and with an additional bicycle ticket. Inform yourself in time about the transportation requirements before you start the trip!



For an easier boarding and disembarking you can remove the battery (a-d).



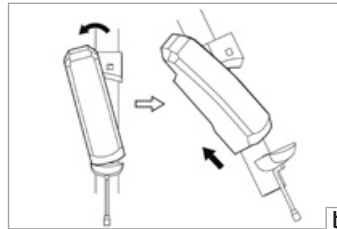
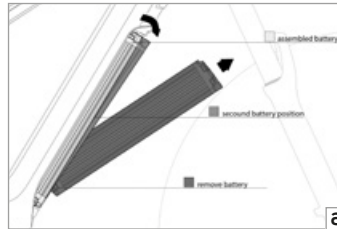
In some countries each traveler is only allowed to take one bike or pedelec when traveling by rail.



Before you start your trip, inform yourself in good time about the transportation requirements and also observe the regulations and rules about bike and pedelec transport in the countries through which you intend to travel.



Before taking your MERIDA pedelec on ferries or car trains, contact the provider and inform yourself about the transportation requirements.



## By plane

If you intend to take your MERIDA pedelec by plane or to dispatch it by a forwarding agent, you have to observe particular packing and labeling requirements for rechargeable batteries which are considered as hazardous goods. Contact the airline, an expert for hazardous items or the forwarding agent in good time.



Contact the airline with which you intend to travel in time and inform yourself about conditions and possibilities of taking your MERIDA pedelec with you.



Currently, pedelec batteries are not permitted aboard passenger planes. There is however the possibility of taking your MERIDA pedelec with you without battery and to lend a battery in your vacation country. Inform yourself in good time before departure whether there is the possibility of lending a battery for your MERIDA pedelec.

## Service and maintenance

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

Your MERIDA pedelec will be due for its first service after 100 to 300 kilometers, three to six weeks or 5 to 15 hours of initial use. The bedding-in phase typically involves safety-relevant bolted connections and spokes slightly losing tension or gears coming out of adjustment, so there is every reason to have your MERIDA dealer service the MERIDA pedelec at this stage.

This bedding-in process is unavoidable. Therefore, remember to make an appointment with your MERIDA dealer to have your new MERIDA pedelec inspected. The first service is very important for both functioning and durability of your MERIDA pedelec.

It is advisable to have your MERIDA pedelec serviced regularly by your MERIDA dealer after the bedding-in phase. If your bicycle does harder service, because you ride a great deal on poor road surfaces, it will require correspondingly shorter service intervals. The off-season during the winter months is a very good time to take your MERIDA pedelec to your MERIDA dealer for the annual inspection, as they will have plenty of time for you and for servicing.



e



f



g



h

The intended use of the MERIDA pedelec includes regular servicing and the replacement of worn out parts in time, e.g. chains, brake pads, Bowden cables **(f)** or tires, which have an influence on the warranty and the guarantee, as well.

Keep in mind that your suspension elements require regular maintenance. For more information see the chapters "Suspension forks" and "Rear shocks" in this translation of the original MERIDA operating instructions and in your comprehensive MERIDA user manual as well as in the instructions of the component manufacturers.

In addition, your MERIDA dealer can install updates for the e-bike systems. With these updates new energy saving riding programs can be loaded allowing greater ranges for you.

Keep in mind that the auxiliary drive can increase the wearing. This applies to the rear tire and in the case of mid-mounted motors to the chain **(g)**, sprockets and chainwheels.



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



**If a component needs to be replaced, make it a rule to only use original spare parts **(h)**. Wearing parts of other manufacturers, e.g. brake pads or tires that are not of identical size, may cause harm to the safety of your MERIDA pedelec. Risk of an accident!**



Remove the rechargeable battery or the display before doing any work on your pedelec (e.g. inspection, repairs, assembly, maintenance, work on your drive, etc.). Activating the drive systems unintentionally bears the risk of injury!



Keep in mind that the auxiliary drive may lead to partly higher wear than you are used to. This applies in particular to the brakes and the tires and in the case of bottom bracket drives to the chain and the sprockets.



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

## Drive maintenance and care

The motor, the rechargeable battery and the control element and/or the display are mainly maintenance free, except for the battery charging which is necessary regularly.

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



Having cleaned the chain as thoroughly as possible, apply chain oil, wax or grease (b) to the chain links. To lubricate the chain drip the lubricant onto the rollers of the lower run of the chain while you turn the crank. Once this is done, turn the cranks a few more times; then let the MERIDA pedelec rest for a few minutes so that the lubricant can disperse. Finally wipe off excess lubricant with a rag so that it does not spatter around during riding or can collect road dirt.



Do not mount new or spare parts that are not designed for your MERIDA pedelec or that suspend the operating limitations of the 25 kmh assist and the rated power of 250 W. Your MERIDA pedelec is then no longer approved for use on public roads. You may lose insurance protection. Imminent risk of an accident!



A battery that has reached the end of its service life must not be disposed of in the household garbage (c). Bring the rechargeable battery to the dealer where you buy your new one. If in doubt ask your MERIDA dealer.



Do not use a steam cleaner or a high-pressure cleaner for cleaning. The contact of water with the electronics or the drive can destroy the units. The individual drive components (d) can be cleaned with a soft rag and neutral detergents. You may use a moist rag but not excessive water. Do not submerge the rechargeable battery!

## Service and maintenance schedule

It is advisable to have your MERIDA pedelec serviced regularly after the bedding-in phase. The schedule given in the table below is a rough guide for cyclists who ride their pedelec 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/lines	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 you come across any defects take appropriate measures without delay. 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 pedelec 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.



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



## Recommended torque settings

All bolted connections of the pedelec components have to be tightened carefully and checked regularly to ensure the safe and reliable operation of the MERIDA pedelec. 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 setting 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 (Shimano Hollowtech II)	12 - 15		
	Crank mount (Isis)		31 - 34	
	Crank mount (Spider)	8 - 11	12 - 14 (steel) 8 - 9 (alu)	
	Direct Mount chainwheel or spider on drive	40 - 50		
Sealed cartridge bearing	Shell (square-head)	49 - 69		
	Shell (Shimano Hollowtech II, SRAM Giga X Pipe)	35 - 50	34 - 41	
	Octalink	50 - 70		
Motor	Motor mount	16		

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		

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

## Recommended torque settings for disc brakes

Component	Shimano <sup>1</sup> (Nm)	SRAM <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 Split Clamp Bolts / Match Maker Bolts: 3 - 4 4 - 5	5 - 7
– Two-bolt clamp			
Union screws of cable at grip and normal cable at brake caliper	5 - 7	5	
Brake cable 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 <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> www.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. The person assembling or modifying the MERIDA pedelec must ensure that the pedelec 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.



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



## Warranty and guarantee

Your MERIDA pedelec was manufactured with great care. Normally it is delivered to you by your MERIDA 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 claim, it is necessary to present your receipt and your bike card. Therefore, keep these documents in a safe place.

To ensure a long service life and good durability of your MERIDA pedelec, use it only for its intended purpose (see the chapters "Before your first ride" and "Intended use"). Please observe the permissible load specifications as specified on the bike card. 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 this translation of the original MERIDA operating instructions, in your comprehensive MERIDA user manual, the system instructions of your drive manufacturer and the instructions of the component manufacturers (see the chapter "Service and maintenance schedule" in your comprehensive MERIDA user manual) or the replacement of safety-relevant components, such as handlebars, brakes etc, if necessary.



**Keep in mind that accessories can affect the properties of your MERIDA pedelec considerably. 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 pedelec 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 pedelec (mileage, riding in the rain, dirt, salt etc.). MERIDA pedelecs that are often left standing in the open may also be subject to increased wear through weathering.

The components below require regular care and maintenance. Nevertheless, sooner or later they will reach the end of their service life depending on conditions and intensity of use. Parts that have reached their limit of wear must be replaced:

Rechargeable battery	Rubber grips
Drive chain	Chainwheels
Brake pads	Chainstay protection
Brake fluid (DOT)	Lamps
Brake discs/rotors	Tires
Brake cable housings	Sprockets
Seals of suspension elements	Saddle covering
Rear frame bearings	Pulleys
Hubs and headset	Lubricants
Paint and decals	



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

## Guarantee on MERIDA bikes

These guarantee conditions 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 rigid forks of bicycles of the categories 1-4
- 2 years of guarantee for frames of the categories 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 a bike of the current successor model in an available color or, if no such bike is 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 is 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 1-4 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.**

# Guidelines for the parts replacement of CE marked e-bikes /pedelecs up to a pedal assist of 25 kmh (15.5 mph)

CATEGORY 1	CATEGORY 2	CATEGORY 3*	CATEGORY 4	CATEGORY 5
Components which require the approval of the vehicle manufacturer/ system provider before the replacement	Parts which must not be replaced without approval of the vehicle manufacturer	Parts which may be replaced upon approval of the vehicle or component manufacturer	Components which do not require a specific approval	Special notes for mounting accessories
<ul style="list-style-type: none"> <li>&gt; Motor</li> <li>&gt; Sensors</li> <li>&gt; Electronic control unit</li> <li>&gt; Electric cables</li> <li>&gt; Operating unit on the handlebar</li> <li>&gt; Display</li> <li>&gt; Battery pack</li> <li>&gt; Charger</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>Frame</b></li> <li>&gt; <b>Rear shock</b></li> <li>&gt; <b>Rigid and suspension fork</b></li> <li>&gt; <b>Wheel for hub motor</b></li> <li>&gt; <b>Brake system</b></li> <li>&gt; <b>Brake pads (rim brakes)</b></li> <li>&gt; <b>Luggage carrier</b> (Luggage carriers directly affect the load distribution on the bicycle. Both negative and positive modifications will result in a riding behaviour potentially different from that intended by the manufacturer)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>Crank arm</b> (Provided that the distances crank arm – frame centre (Q Factor) are observed)</li> <li>&gt; <b>Wheel without hub motor</b> (Provided that the ETRTO is observed)</li> <li>&gt; <b>Chain / Toothed belt</b> (Provided that the original width is observed)</li> <li>&gt; <b>Rim tape</b> (Rim tapes and rims must be compatible. Modified combinations may result in rim tape shifting and thus in defective inner tubes)</li> <li>&gt; <b>Tyres</b> (The stronger acceleration, the additional weight and more dynamic cornering require the use of tyres approved for e-bike use. In this respect, observance of the ETRTO is essential)</li> <li>&gt; <b>Brake cables / Brake hoses</b></li> <li>&gt; <b>Brake pads</b> (Disc, roller, drum brakes)</li> <li>&gt; <b>Handlebar-stem unit</b> (Provided that there is no need to change the lengths of cables and/or hoses. A modification of the seating position for the benefit of the consumer should be possible within the original cable lengths. A modification beyond results in a significantly changed load distribution on the bicycle and entails potentially critical steering properties)</li> <li>&gt; <b>Saddle and seat post unit</b> (Provided that the offset to the rear does not exceed 20 mm with regard to the series / original field of use. In this case, as well, a modified load distribution beyond the intended setting range may possibly lead to critical steering properties. The length of the saddle rails at the saddle structure as well as the saddle form are also important)</li> <li>&gt; <b>Headlights</b> (Headlights are designed for a specific voltage which must be compatible with the rechargeable battery of the vehicles. In addition, the electromagnetic compatibility (EMC) must be ensured whereas the headlight may be responsible for a part of the potential disturbance)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>Headset</b></li> <li>&gt; <b>Bottom bracket</b></li> <li>&gt; <b>Pedals</b> (Provided that the pedal is not wider than the series / original pedal)</li> <li>&gt; <b>Front derailleur</b></li> <li>&gt; <b>Rear derailleur</b> (All gear change parts must be suitable for the number of gears and compatible with one another)</li> <li>&gt; <b>Shift levers / Twist grip</b></li> <li>&gt; <b>Cables and housings</b></li> <li>&gt; <b>Chainwheels / Belt sprockets / Cassette sprocket</b> (Provided that the number of teeth and the diameter is identical to the series / original field of use)</li> <li>&gt; <b>Chainguard</b></li> <li>&gt; <b>Mudguards</b> (Provided that the width is not smaller than the series / original parts and the clearance to the tyre is 10 mm at least)</li> <li>&gt; <b>Spokes</b></li> <li>&gt; <b>Inner tube with identical design and identical valve</b></li> <li>&gt; <b>Dynamo</b></li> <li>&gt; <b>Rear lamp</b></li> <li>&gt; <b>Reflector</b></li> <li>&gt; <b>Spoke reflector</b></li> <li>&gt; <b>Kickstand</b></li> <li>&gt; <b>Grips with screw clamps</b></li> <li>&gt; <b>Bell</b></li> </ul>	<ul style="list-style-type: none"> <li>&gt; <b>Bar ends are permissible, provided that they are mounted appropriately towards the front</b> (The load distribution must not be modified severely)</li> <li>&gt; <b>Rear-view mirrors are permissible.</b></li> <li>&gt; <b>In Germany additional battery/rechargeable battery-operated headlights are permissible according to § 67 of German road traffic licensing regulations. (Inform yourself about the legislation in your country).</b></li> <li>&gt; <b>Trailers are permissible upon approval of the vehicle manufacturer only.</b></li> <li>&gt; <b>Child seats are permissible upon approval of the vehicle manufacturer only.</b></li> <li>&gt; <b>Front baskets are to be considered critical due to the undefined load distribution. Permissible upon approval of the vehicle manufacturer only.</b></li> <li>&gt; <b>Pannier bags and top cases are permissible. Permissible total weight, maximum loading of pannier rack and a correct load distribution has to be observed.</b></li> <li>&gt; <b>Permanently mounted weather protection devices are permissible upon approval of the vehicle manufacturer only.</b></li> <li>&gt; <b>Front and rear luggage carriers are permissible upon approval of the vehicle manufacturer only.</b></li> </ul>
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\* **Note for category 3:** An approval can only be given by the component manufacturer, if the component was tested sufficiently according to its intended use and the respective standards in advance and if a risk analysis was made.

This is the translation of the original guidelines issued by ZIV, VSF and BIV (German umbrella organisation for the German cycle industry guilds) in cooperation with Zedler-Institut, updated in 2018. In the event of any misunderstandings, the original German version (Leitfaden für den Bauteiltausch bei CE-gemarkten E-Bikes / Pedelecs mit einer Tritterunterstützung bis 25 km/h) shall be applicable.

Experts of the following associations / companies were involved in drawing up the present guidelines: (in alphabetical order)



## Guidelines: **Things to know about pedelec / e-bike 25 tuning**

Pedelecs/e-bikes 25 are limited to a continuous rated power of 250 Watt and a maximum design speed through electrical pedal assistance of 25 kmh (15.5 mph). **In this case only they are equivalent to bicycles in terms of road traffic law. (§ 63a, paragraph 2 of German road traffic licensing regulations, inform yourself about the legislation in your country).**

Raising the output and/or the maximum design speed beyond this limit will result in the fact that the vehicle becomes a motor vehicle.

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Last update: 2018/07

The consequences are as follows\*:

- > Subject to compulsory operating licence
- > Subject to compulsory driving licence (class depends on maximum speed)
- > Subject to compulsory insurance (insurance tag)
- > Helmet compulsory
- > Using cycle lanes not permissible
- > Proof of fatigue strength for all safety-relevant components must be submitted

Possible legal consequences in case of tuning for users\*:

- > Administrative offence and fine
- > Criminal offence (§ 21 of German road traffic act: "Riding without driving licence"; infringement of obligatory insurance law)
- > Caution: in the event of repetition, your criminal record certificate may no longer be clean (criminal record!)
- > In case of infringement of § 21 German road traffic act: Withdrawal of driving licence
- > Loss of insurance cover (private liability)
- > Loss of materials defect liability and warranty claims
- > Loss of driving licence
- > Regularly, partial responsibility in case of accident

Possible legal consequences in case of tuning for retailers\*:

- > Aiding and abetting of an offence, participating in an administrative offence
- > Retailer liable for personal and material damage
- > Loss of business liability insurance cover

\* for example in Germany, inform yourself about the legislation in your country

This is the translation of the original guidelines issued by ZIV, VSF and BIV (German umbrella organisation for the German cycle industry guilds) in cooperation with Zedler-Institut, updated in 2018. In the event of any misunderstandings, the original German version (Leitfaden: Wissenswertes über Tuning von Pedelecs/E-Bikes 25) shall be applicable.

Experts of the following associations / companies were involved in drawing up the present guidelines: (in alphabetical order)



## Service schedule



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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:



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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

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

Order no.:                      Date:

Replaced or repaired parts:

.....  
.....  
.....  
.....

Stamp and signature  
of the MERIDA dealer:

## Bike card

Frame sticker

Drive system:

Mid-mounted motor

Battery model

integrated     externally

Key no.

### Rear shock

(manufacturer/model)

---

Frame type

---

Frame size

---

Size of wheels  
and tires

---

Special features

---

(Tip for the MERIDA dealer: Copy the bike card and keep one copy in your customer file.)

## 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

### Brake lever

Right lever

### Brake assignment

Front wheel brake

Rear wheel brake

Left lever

Front wheel brake

Rear wheel brake



**Read the chapter "Before your first ride" in this translation of these original MERIDA operating instructions.**

Stamp and signature of the MERIDA dealer

# **MERIDA**

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