Installation and operating instructions

Cockpit

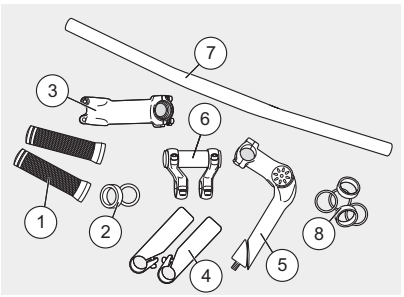
Thank you for purchasing a MERIDA component.

About these instructions

Carefully read and follow these installation and operating instructions before use. Keep these instructions for future reference.

⚠	**Danger** Indicates essential safety instructions.
📖	**Note** Indicates additional information.

These instructions are valid for the following MERIDA components (Fig. an example):



1. Handlebar grips
2. Spacer
3. Ahead stem
4. Bar ends
5. Stem steerer tube
6. Handlebar adjuster
7. Handlebar
8. Headset

Special features

All carbon components require special care and attention. The material is very durable and has a low weight. However, the material is also very brittle. Therefore, have you bicycle inspected by your dealer following accidents or other incidents.

1. Intended use

The majority of MERIDA components are designed for use on racing, trekking, and mountain bikes, and their typical use.

The majority of stems are designed for use exclusively with threadless fork steerers and so-called Aheadset® headsets.

Use in combination with threaded fork steerers can lead to sudden failure, resulting in a crash.

The models with steerer tube are suitable for use in conventional threaded forks.

Before your first ride

📖	**Note** If you have any questions, contact your MERIDA dealer.

Do not file or drill and holes in the components as this damages their structure and voids the warranty.

Adjust your bicycle so that you can reach the brake levers at all times.

Carbon

⚠	**Danger** Never use bar ends or clip-on/ aero bars with carbon handlebars, unless the handlebar is approved for them.

After being overstressed, a previously damaged carbon component may fail with continued use without warning.

If your MERIDA carbon component has been exposed to such stress, take your bicycle to your MERIDA dealer. Damaged carbon components must never be fixed or repaired! They must be replaced immediately.

Carbon components must never be exposed to high temperatures. Therefore, never have them painted. Avoid storage near to heat sources. Carbon components have a limited life cycle. Therefore, replace the handlebars and stems at regular intervals, as a precaution.

Ensure that clamp areas are absolutely free of grease and lubricant when a clamping surface is made of carbon. Use a special carbon assembly paste for the assembly.

2. General assembly instructions

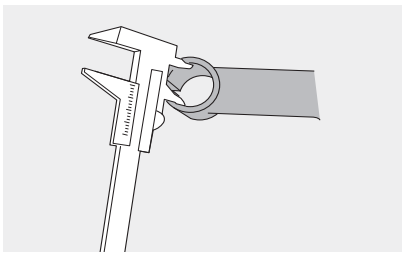
⚠	**Danger** Each of the following instructions must be strictly observed. Non-observance of these instructions may lead to the failure of the components and result in an accident.

Only use MERIDA components that are designed to be used together. MERIDA assumes no responsibility for the combination of a MERIDA handlebar with an unsuitable stem, or MERIDA stems and bar ends with an unsuitable handlebar.

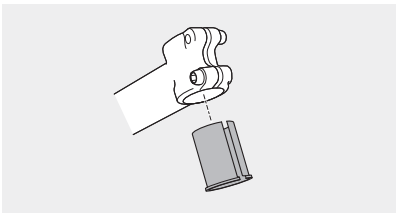
If you do, however, use components from another manufactures, use the clamp diameters found in their manuals to ensure their safe use with MERIDA components.

Check all clamp areas of the components for burrs and sharp edges prior to assembly. Ask your MERIDA dealer to check any components with such burrs or sharp edges. When you replace the handlebar, also inspect the old handlebar for damage.

3. Aheadset® stems



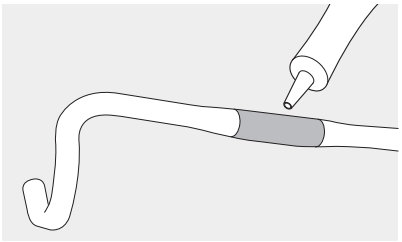
Check the clamp diameter.



When using a larger stem, use a suitable reducing sleeve.

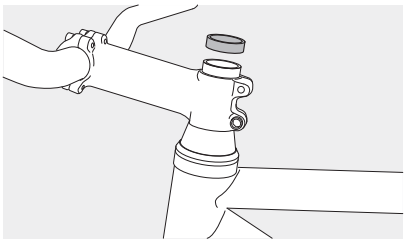
Make sure that the slots of the stem and sleeve are positions above each other, and that the slot of the sleeve is facing backward.

If you are replacing the stem on a fork, check the clamp area for damage. Carbon clamp areas must be absolutely free of grease.



Use carbon paste on the clamp areas instead.

Lubricate the thread and the head contacts of the steerer clamping bolts with a high-quality lubricant. Keep lubricants away from the clamp areas of the fork and stem. Apply a thin layer of carbon paste to the fork's clamp area. Slide the stem onto the fork.



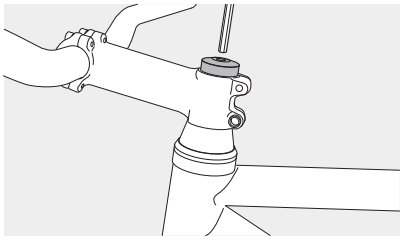
Depending on the steerer tube length and the desired stem position, you may have to insert spacers on the fork steerer above the headset, and/or on the stem.

⚠	**Danger** The space between the top of the stem and the upper edge of the steerer tube should not exceed 2–3 mm.

Spacers are available in different heights and must be stacked so that the steerer tube ends 2–3 mm below the top edge of the stem. The maximum height of the installed spacers must not exceed 40 mm. Observe the fork manufacturer's guidelines.

The stem must provide support for a sufficient length of the steerer tube. This ensures reliable clamping if the clamping bolts of the steerer tube are clamped to the prescribed torque value.

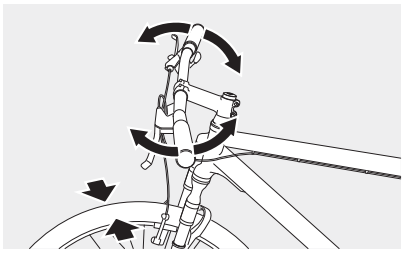
3.1. Adjusting the Aheadset® headset



Open the side clamping bolts of the stem tube. Adjust the headset by carefully turning the top sunk screw. The screw is only used for adjusting the bearing play.

Align the stem with the front wheel so that the handlebar is not at an angle to the front wheel when it is pointing straight ahead. Stand over the top tube and look down over the stem to the front wheel to check the alignment. Tighten both clamping bolts alternately. The recommended tightening torques can be found marked near the bolt.

📖	**Note** For forks with carbon steerer tubes, make sure that there is a cone mechanism inside as a counter-bearing for adjusting the headset.

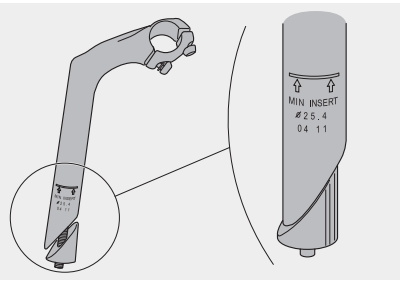


The handlebar/stem units must be checked for resistance to torsion and the torques specified on the components must be observed when tightening.

In case of doubt, contact your MERIDA dealer.

📖	**Note** If the stem cannot be clamped, the components are not compatible.

4. Conventional stems



Open the stem spindle. Slide the stem tube into the head tube on the frame.

Pay attention to the maximum extension height. The stem must not be askew.

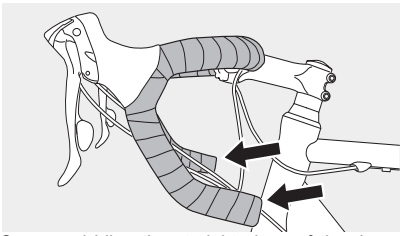
For max. torque, refer to the information on the stem.

If the seat can be twisted, you must tighten the bolt.

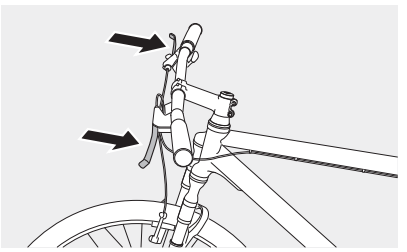
⚠	**Danger** Never ride a bicycle whose stem has been pulled out beyond the maximum extension height mark.
⚠	**Danger** Never open the head nut of the headset bearing. This changes the bearing play.

5. Mounting the handlebar

The chosen stem must always have the correct clamp diameter. During mounting, the handlebar should sit centrally in the handlebar clamp area. If the handlebar cannot be inserted without the application of force and there is play between the two components, contact your MERIDA dealer.



On a road bike, the straight piece of the drops should be positioned parallel to the ground or angled slightly downward.



Mountain bike and trekking handlebars are angled at an ergonomic hand position.

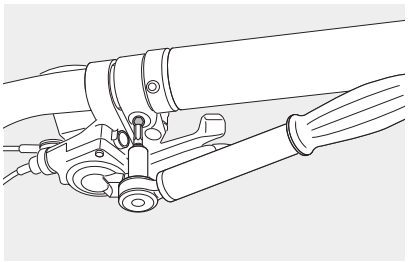
Tighten the greased bolts of the handlebar clamp a few turns with your fingers. Turn all the bolts with an Allen key until the upper and lower clamping slots of the handlebar clamp between the stem faceplate and stem body are the same width. Use a torque wrench to alternately and gradually tighten the bolts to the lower torque limit. With a 4-bolt faceplate, tighten the bolts evenly in a cross pattern.

Refer to the information on the stem for the torque.

Mounting the controls

Examine the clamp areas of the shifter/brake levers, handlebar/remote levers, and grips (Lock-On grips) for burrs and sharp edges. Note the limitation of the handlebar clamp area, if present.

Loosen the clamping bolts as much as possible before sliding them onto the handlebar. Avoid rotational movements during assembly. Tighten the bolts again.



After aligning the controls and grips, tighten the clamping bolts to the lower limit of the recommended tightening torque. If the controls or grips still do not clamp tightly, increase the torque until you reach the upper torque limit specified by the component manufacturer. If they can still be twisted, contact your MERIDA dealer.

6. Adjusting the handlebar height with Aheadset®

With the Aheadset® system, the stem is part of the headset system. To adjust the position, the stem must be dismounted and remounted. If the stem is changed, the bearing must be readjusted – see "3.1. Adjusting the Aheadset® headset" on page 2. The height of the handlebar can be adjusted by changing the spacers.

Remove the bolt for the bearing preload at the top of the steerer tube and remove the cap. Loosen the bolts on the side of the stem and pull the stem out of the fork. You can now remove the spacers.

Place them back on the steerer tube above the stem to position the handlebar at the desired height.

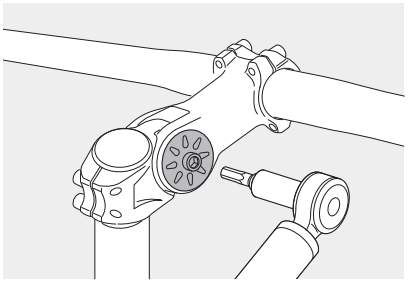
To turn the stem around, the bolts clamping the handlebar need to be loosened. In the case of stems with caps, the handlebar can simply be removed; otherwise, the handlebar controls need to be dismantled. Turn the stem around and mount it. Check that the Bowden cables tense and do not limit the steering angle.

Check the seat of the stem. If the stem twists, increase the torque to the maximum permitted torque, or reassemble the stem.

⚠	**Danger** Tighten screws and bolts correctly.

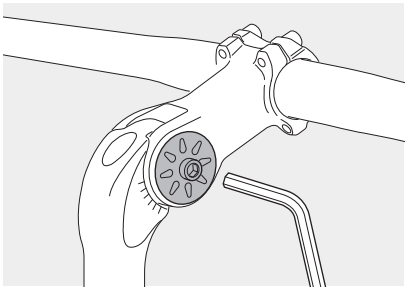
Adjustable Aheadset® stems

With adjustable MERIDA Aheadset® stems, the height can be varied via the tilt adjustment of the front stem area.



Loosen the side bolt of the pawl 3–5 turns and open the steerer tube clamp. Do not remove the bolt completely. Slide the bolt to the opposite side of the head. Adjust the movable stem. Slide the loosened adjusting part back into the stem until the pawl engages with the teeth of the gear. Tighten the bolt. For maximum torque, refer to the information on the component.

Conventional stems



	Note Never adjust the heat nut of the headset bearing when adjusting the stem.

To adjust **conventional stems**, open the stem spindle 2–3 turns. With Allen screws, the key must be inserted into the screw heads. Hit the tool with a rubber mallet.

	Danger Never ride a bicycle whose stem has been pulled out beyond the maximum extension height mark.

Do not put the stem out beyond the marking on the tube. Align the handlebar again so that it is not askew when riding straight ahead. Retighten the stem spindle. For maximum torque, refer to the information on the component.

Adjustable conventional stems

With **adjustable conventional MERIDA stems with side adjustment bolts,** the height can be varied via the tilt adjustment of the front stem area.

Loosen the side bolt of the pawl approx. 3–5 turns until the teeth release. Do not unscrew it completely. Slide the bolt to the opposite side of the head, and now adjust the stem. Reinsert the adjusting part until the pawl engages. For maximum torque, refer to the information on the component.

With **adjustable conventional stems with an adjustment bolt on the bottom**, the tilt is set by a mechanism on the bottom. The procedure is similar, but the bolt cannot be removed completely.

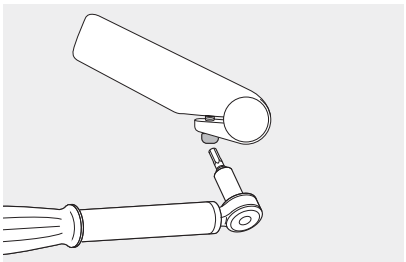
Bar ends

	Danger Do not mount or use bar ends on MERIDA carbon handlebars.

Bar ends offer additional grip options. Ensure that the handlebar is suitable for use with bar ends before mounting them.

The clamp areas must be free of burrs.

Loosen the bolts of the brake levers and shifters, and slide the grips inward over the width of the bar end cuffs so that they have sufficient clamping space. Do not use liquids or grease to loosen the grips. If necessary, use compressed air.



	Danger If the bar ends do not clamp properly to the contact surfaces despite the use of MERIDA carbon paste, the components might not be compatible.
	Danger Components must be tightened to the specified torque.
	Danger Clamping bar ends to an unsuitable handlebar may result in a break.
	Danger Braking distance increases when you are riding with your hands on the bar ends.

Loosen the bolts on the bottom of the bar ends by 1–2 turns.

Place the bar ends on the ends of the handlebar and adjust them. Both sides must be at the same angle.

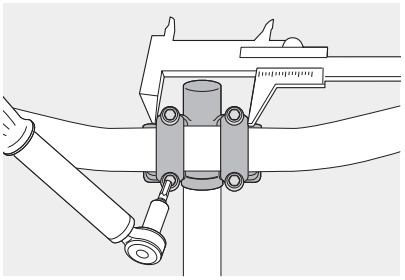
Tighten the bolts in 0.5 Nm increments. For maximum torque, refer to the information on the component.

7. Handlebar adjuster

The handlebar adjuster adjust the angle of the stem without dismantling the handlebar controls.

Only components with a 25.4 mm clamp may be combined with a handlebar adjuster with a 25.4 mm clamp diameter. The stem must not be wider than 50 mm.

Remove the handlebar from the stem – “5. Mounting the handlebar” on page 2 and mount the handlebar adjuster so that it sits centrally in the stem clamp. Only tighten the four screws enough so that the handlebar turns.



Attach the clamping arms as close to the stem as possible. The clamping arms can be pushed to a maximum of 55 mm apart.

After adjusting the angle, secure the clamping arms with clamping bolts. For maximum torque, refer to the information on the component.

The handlebar must be positioned in the middle between the two clamping arms. The brake levers and shifters must be easy to reach.

Tighten the bolts handlebar clamp until the top and bottom clamping slots are the same width. Tighten the bolts alternately to the lower recommended torque limit. For maximum torque, refer to the information on the component.

8. Adjusting the inclination of the handlebar grips and brake levers

Adjust the handlebar so that the wrists are relaxed and not twisted outward too much.

Adjusting the brake levers is a jobs for a specialist.

Adjusting the handlebar position by twisting the handlebar

Loosen the hex screw on the stem 1–2 turns. Turn the handlebar to the desired position. The handlebar must be clamped in the middle by the stem. Retighten the bolts to the prescribed torque value.

To adjust the brake levers and shifters, loosen the hex screw on the grip binders. Twist the grip on the handlebar. Sit on the saddle and place a finger on the brake lever. Your hand must form a straight line with your lower arm. Retighten the bolts to the prescribed torque value.

9. Grips and bar tape

Mounting the grips

Keep the grips and bar tape in good condition and free from grease or the like.

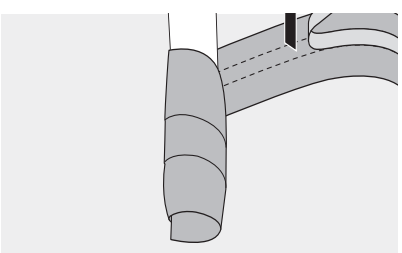
Conventional grips are usually pushed onto the oil and grease-free handlebars. The easiest way to mount these grips is with compressed air.

Grips with screw attachments are pushed on and secured to the handlebar with screws. For maximum torque, refer to the information on the component.

Grips with open ends should be sealed with the included bar plugs.

Wrapping the bar tape

The handlebar must be free of dirt and oil.



Start at the open handlebar end. Allow the tape to overhang one turn. Wrap the tape diagonally upward, so that a third of the tape overlaps. Hold the tape under tension during this process and

remove the paper backing from the self-adhesive side as you go.

Place a single piece of tape on the brake lever so that the handlebar is completely covered. Continue wrapping the tape evenly until you reach the thicker handlebar cuff. Cut the tape diagonally with scissors for a straight finish. Secure the tape with the enclosed adhesive strip. Push the overhanging bar tape into the open end of the handlebar and close it with a bar plug..

10. Cleaning and care

Note
When cleaning, pay attention to any damage to the materials.

Clean the components regularly with water and a soft cloth. For stubborn dirt, use dish soap with warm water. Do not use harsh cleaning agents such as thinners.

After the components have dried, you should rub the metallic surfaces and carbon with hard wax at least two times per year. Polish the components once the wax has dried.

11. Maintenance

Check the torque values of all bolts after the first 100–300 km (60–180 miles), and then again every 2,000 km (1,200 miles).

12. Warranty and guarantee

Statutory warranty rights apply within the first two years. This regulation only applies in states that have ratified the EU bill. Bar tape and grips are subject to natural wear, depending on use and external conditions.

We also grant a manufacturer's guarantee on all MERIDA components, except grips and bar tape, (from the date of purchase, to the first purchaser) of 5 years on material and workmanship.

Should any defects occurs, contact your MERIDA dealer. In a guarantee case where the respective higher-quality model is unavailable, MERIDA INDUSTRY CO., LTD. reserves the right to deliver the respective current successor model in the available color.

Assembly and/or conversion costs and any accessories will not be refunded in a guarantee case.

The manufacturer guarantee is only valid for the first purchaser upon presentation of proof of purchase with the purchase date, dealer address, and model name.

The intended use is a prerequisite for the guarantee. The guarantee does not cover labor and transportation costs, or any follow-up costs caused by defects.

Competition use in the context of road races, triathlon, or the MTB sections of cross-country races are covered by the guarantee.

Other visible fall damage resulting from jumps or other types of overstress is likewise not covered by the guarantee. The guarantee does not cover damage caused by wear, neglect, crashes, overstressing caused by overloading, improper installation and care, or the modification of components.

In the interest of a long life and durability of the components, the manufacturer's installation instructions and the prescribed maintenance intervals must be adhered to exactly. Failure to comply with the installation instructions and inspection intervals will void the guarantee.

Handlebar grips and tape wear during use. Regular cleaning and care have a positive impact on wear.

13. Technical specifications

Note
If there is any doubt, always adhere to the values specified on the component.

Handlebar

Clamp area cuff
MTB, Cruiser, Traveller: 25.4 mm
Road bike: 26.0 mm
Oversized road bike and MTB: 31.8 mm

Handlebar clamp max. torque:
2-bolt stem: 8 Nm
4-bolt stem: 6 Nm

Bar ends

Clamp area: 22.2 mm
Torque: 6–8 Nm

Aheadset® stem

Handlebar clamp area:
MTB, Cruiser, Traveller: 25.4 mm
Road bike: 26.0 mm
Oversized road bike and MTB: 31.8 mm

Steerer tube clamp area: 28.58 ± 0.05 mm

Torque:
Steerer tube clamp: 5–7 Nm

Handle bar clamp
2-bolt stem: 6–8 Nm
4-bolt stem: 5–6 Nm

Conventional stem

Handlebar clamp area: 25.4 mm
Steerer tube internal diameter 25.4 mm

Handlebar clamp torque:
2-bolt: 15 Nm
Steerer tube clamp:: 20–22 Nm

Adjustment bolt adjustable conventional stems: 10 Nm

Handlebar adjuster

Handlebar clamp area: 25.4 mm
Stem clamp area: 25.4 mm

Handlebar clamp: 8–10 Nm
Stem clamp: 8–10 Nm

Reducing sleeves

Handlebar clamp diameter:

from 31.8 mm to 26.0 mm
from 31.8 mm to 25.4 mm

Tube diameter:
from 28.6 mm to 25.4 mm (1 1/8" to 1")

Spacer

For 1 1/8"
Available in heights of 2, 3, 5, 10 and 15 mm

Handlebar grips, Screw-on model

Torque: 2–3 Nm

If you have any questions, please contact:
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5th Edition, February 2017

Graphics, text, and design
2W Technische Informations GmbH & Co.KG
www.2wgmbh.de