

MTB-BAR CARBON

Duraflite 25.4 Carbon
Duraflite 31.8 Carbon
Vector Lowrider Carbon
Vector 31.8 Carbon
VRO Bar Carbon



We congratulate you to your Syntace bar. You made a good choice!
Please read the entire assembly instructions as they contain a lot of important information and many practical tips. Your Syntace bar has been designed and manufactured with utmost care. It is necessary, though, to follow the instructions and to care for it accordingly.


Keep in mind that all parts relevant for the safety of your bike have an "elephantine" memory: any damage (through crashes or overload), even if long ago, will add up over the lifetime of the product. At Syntace we added a large portion of "overload protection," but even our parts are not indestructible.

A regular exchange (every 2 year, for example) is, according to our current knowledge, not necessary. But after a crash you should check especially stem and handle bar for small fractures, grooves and dents. Check if stem or bar are bent. Replace those parts on the slightest sign of damage! Never try to straighten or "patch" damaged parts, replace them! If you don't, parts can fail and a crash with severe injuries may be the result.

Intended and proper use

The Syntace MTB bar has been designed for use with mountain bikes.

Attention: if you utilize 4-screw stems, only use bars designed for them! (Acute danger of bar failure!)

All Syntace bars suitable for 4-screw stems are marked with this symbol  !

All Syntace bars designed for a 4-screw stem can be used with conventional stems as well (to our current knowledge, there are no bars made by other manufacturers that can withstand the stress from 4-screw clamps for a long time).

Stems made of steel or titanium with sharp edges from welding or machining act like knife edges on a bar. We do advise against using them. If you still want to do it, please deburr the edges that have contact with the bar and take a lot of care to round all edges as well. Before you do, ask the manufacturer if working on the stem would void the warranty.

It is also necessary to check, if the stem does have the correct clamping diameter of 25.4 / 31.8 mm +/- 0.10 mm. If not, use a correctly dimensioned stem.

Attention: A few components on the market (SRAM X.O for example) are, due to less than perfect clamping design with a very asymmetrical clamping slit or tilted clamping screws (see pics), not very well suited for carbon fiber bars. A maximum torque of 1.5 Nm is admissible. Therefore we highly recommend the use of Syntace adhesion paste. The same is valid for brake levers. The torque values stated by manufacturers are usually only for aluminum bars and maximum values to boot. To mount bar ends (don't cut bar, use CRB plugs) use adhesion paste as well and tighten only enough for the levers not to twist. Never use manufacturers torque values without prior evaluation.

Appearance

Syntace mtb bars have a visible carbon UD finish. If you turn the bar against the light, you can distinctively see the fiber layers and their edges like shadows.

Mounting compatibility

You can use the Syntace carbon bar in all conventional stems.

The diameter of the clamping area on the carbon bar and the stem must be 25.4 / 31.8 mm +/- 0.15 mm.

Exeptions:

- The model Syntace Vector Lowrider Carbon is also usable in Syntace VRO-Systems.
- The VRO Bar Carbon is exclusively usable in Syntace VRO-Systems.

Removal of bars

First, remove the existing bar from your bike the following way:

- Remove any bar ends, end plugs and grips.
- Remove bike computers and any other accessories attached to the bar.
- Loosen screws of shifter pods and brake levers.

Installation of bars

In conventional stems

(only Duraflite 25.4/31.8, Vector Lowrider Carbon and Vector 31.8 Carbon):

- First mount the shifter pods and brake levers onto the bar

Tip: In case you use a stem with a closed clamp, first insert the bar into the clamp and then mount shifter pods and brake levers.

- Now bring the bar into the desired position and align it. Make sure the bar is centered (look for the markings).
- Now press the bar into "snap seat" (a feature of Syntace stems) and tighten screws alternately to required torque, however with a maximum of 8 Nm.

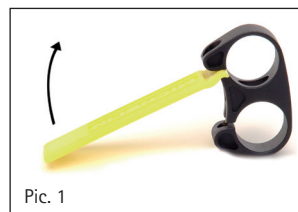
Tip: To increase safety and life span, all Syntace stems feature a greater than 180° "snap seat".

Attention: With some stem designs it is possible that the eye of the stem and the bar get deformed from high torque or repeated tightening. Bars "strangled" like this do not last their full life span and have to be exchanged, preferably with the stem!

Pro tip: Apply a little Syntace Dynamics friction paste to the clamping surfaces. This way bar and stem are more protected against twisting and the required torque can be further reduced!

In the VRO-System (only VRO Bar Carbon and Vector Lowrider Carbon):

- Slide the connector clamps (X-Ray, ECO, Peanut) onto bar. Not all the way to the center rings, though, only far enough so that the clamps can still move freely on the smaller diameter of the bar.



- Widen the connector clamps (X-Ray, ECO, Peanut) with a plastic tire lever by about 1-2 mm (Pic. 1) and now slide them onto stem and bar all the way to the center rings.
- Slide shifter pods and brake levers onto bar.
- Remove tire levers and insert greased (threads and head contact area) clamping screws.

- Before you tighten the clamping screws of the connector clamps, adjust bar to desired position.
- Tighten the connector clamps but not beyond inscribed torque.

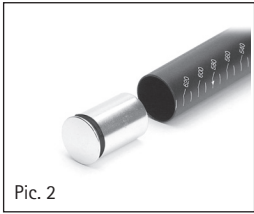
Installation of bars (continuation):

- Now align shifter pods and brake levers and tighten with the required torque.

Tip: Old motocross trick: only tighten brake levers enough so that they can still twist in case of a crash. You will save a lot of time and money by avoiding bent or broken levers.

- Now install grips, bike computer and all other accessories to bar.

Tip: Problems mounting/removing grips? The Syntace Screw-on Gripz slide easily onto the bar. Tighten slightly (3Nm) with a 5mm Allen wrench –done!



Pic. 2

Attention: if you use bar ends, now is the time to install them, but never without Syntace Bar Plugs (optional, model CRB for carbon fiber bars, see Pic. 2) Please do not install bar ends with a closed clamp (like Tune, Rook). There is a much higher danger for the carbon bar to break in case of a crash even if using Bar Plugs.

Note: The Syntace Vector 31.8 Carbon is not suitable for use with barends.

Bar width

Only shorten your handle bar after you have taken the "wide" bar out for a spin. With a wider bar you will have more control and better handling, especially in difficult terrain. Should you still want a narrower bar, don't cut it right away. Mount all control levers and the grips further inside and go for another ride with the bar still uncut to test if everything feels right before you cut. You would not be the first to use a wider bar after all.

Cutting of carbon bars:

For cutting, only use a fine-toothed saw. Never use a pipe cutter! Carefully deburr edges and seal with clear laquer.

Attention: Syntace carbon fiber bars can only be cut to the marked minimum length or else you run into acute danger of bar failure! If you use bar ends, under no circumstances cut the bar.

Minimum length (without barends):

Duraflite 25.4 Carbon:.....	560 mm
Duraflite 31.8 Carbon 600 (from production code 47.09 on).....	580 mm
Duraflite 31.8 Carbon 630 (from production code 47.09 on).....	610 mm
Vector Lowrider Carbon:	620 mm
VRO Bar Carbon:	620 mm

Not suitable for cutting:

Duraflite 31.8 Carbon (until production code 47.09)
Vector 31.8 Carbon

Care, maintenance and safety

Proper maintenance and care will ensure a long life and reliable function of your Syntace products. Please follow these simple steps to maintain your system:

- Check the inside of your Syntace stem regularly for moisture and remove if found.
- Check screws for proper torque regularly.
- Check bar regularly for signs of fatigue (discoloration, cracks and dents, for example).
- Warning: Upon longer exposure, brake fluid may attack epoxies and resins as well as other coatings used in carbon components (Brake fluid is highly deliquescent). Therefore, if brought into contact with any carbon component such as handle bars please ensure that the affected area is thoroughly cleaned with water to avoid any damage.
- Should the Syntace bar be bent because of a crash: Never attempt to straighten it! Contact your dealer or Syntace to arrange for replacement.

Warranty

Instead of the legally required 2 year warranty, Syntace gives 10 years warranty from date of purchase on all material and manufacturing defects.

Only condition: All components are to be installed and used as outlined in the owner's manual.

Within the warranty period faulty components will be assessed by Syntace Germany and accordingly either repaired or replaced.

The exchange of a Liteville frame within the warranty period occurs free of charge within the first 5 years warranty, in the 5 - 10th year a 50% discount on the respective current retail price is offered. For the Liteville 101 4x frame we give 3+7 years warranty, downhill use included.

If you would like to report a warranty case please send the component with a written explanation to:

Syntace GmbH, Dammweg 1, 83342 Tacherting / Germany
Tel. +49 8634-66 666, Fax: 6365, Email: syntace@syntace.de

In addition, we will make a special goodwill-offer to every Syntace or Liteville owner for misuse or damage - even if you are at fault - due to accident influences ("Bike on roof rack against garage wall"), even after years of use. With Syntace and Liteville products you are in good hands, even after you have made the purchase!

Your Syntace Team,

Jo Klieber

Mounting Components on Carbon Handlebars

Dear Syntace Customer,

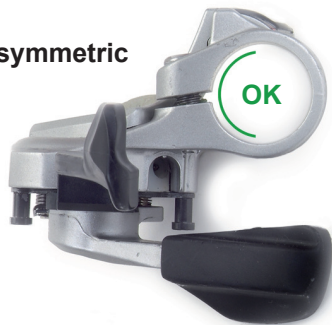
Several components which have come onto the market possess undesirable clamping mechanisms for carbon handlebars by either having a strongly asymmetric clamping slit or clamping bolts which are not perpendicular to the handlebar centerline (see diagrams).

In addition, the max. torque values given by manufacturers generally refers to aluminium handlebars, therefore we strongly recommend using friction paste and applying a much lower torque to mount components.

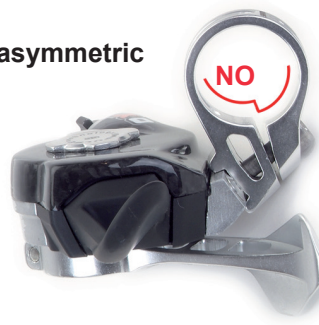
Some examples:

MTB Shifters and Brake Levers:

symmetric



asymmetric

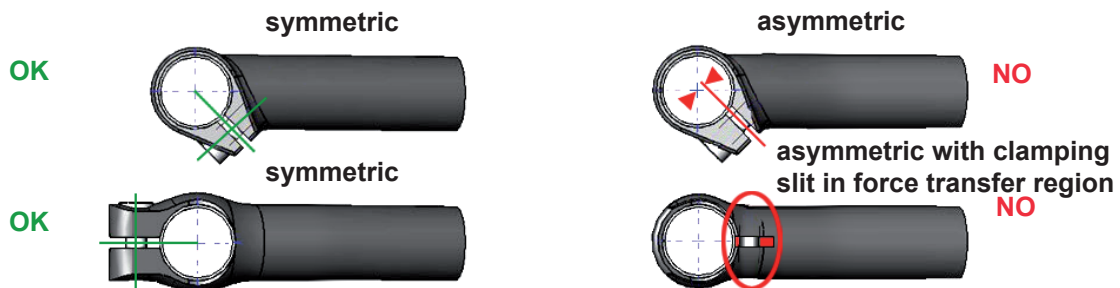


- SRAM X.0 – Trigger (according to manual 4 Nm) are to be mounted with a max. torque of 1.5Nm. Do not forget to apply friction paste to avoid those creaking noises.
- Reduced torque must also be applied to shifters and brake levers of other manufacturers if they exhibit an asymmetric clamping slit and/or clamping bolts which are not perpendicular to the handlebar centerline.
- Caution! Gripshift type shifters which do not exhibit a symmetric clamping mechanism, but instead apply a point pressure on a small surface area of the handlebar, or use a very narrow clamp, are not designed for use in combination with carbon handlebars. Examples are some SRAM and Rohloff shifters. These are to be used in combination with aluminium bars exclusively.



MTB Barends:

- When mounting barends, do not shorten Syntace handlebars and always use Syntace CRB Bar Plugs.
- Always use friction paste and tighten the clamping bolts in small steps until the torque is reached at which they only just do not move from the desired position when under load. Please do not just blindly follow manufacturers torque recommendations here.



- Do not mount on Syntace carbon bars: Barends with asymmetrical clamps or closed clamps with the clamp slit in the force transfer region (e.g. Tune).

Road Shifters and Brake Levers:



- Campagnolo Ergo Power is not designed ideally for carbon handlebars: The small bridges on the inner contour of the body have a small contact area resulting in point loads which may damage the handlebars. We can only recommend the Campagnolo Ergo Power shifters in combination with the Syntace Racelite Carbon bar from a production code of 06 05 (May 2006) and onwards with a maximum torque of 8Nm .
- Shimano STI shifters possess a larger contact area. The max. torque which is to be applied to a the Syntace Racelite Carbon of a production code up to 06 05 (May 2006) is 6Nm, newer models are approved for a max. torque of 8Nm.

- When mounting Syntace components please always carefully read the owners manual which you will find on www.syntace.com. If you have any questions please don't hesitate to give us a quick call.
- Carefully check the components clamps at monthly intervals, or every 1000Km's to ensure the clamp has not damaged the handlebar (disassembly required).
- You may order the friction paste in 20g syringes direct from Syntace (Tel. +49 8634-66666), or in 400g tubs from van Bokhoven (www.bokhoven.de, Tel. +49 751-76963-30).

Your Syntace-Team