Syntace

VECTOR CARBON

E\\ Anleitung. 20190923

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 outmost 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. Note: Since 2005 the entire Syntace handlebar selection has been approved for 4-bolt stems, but can still be used with 2-bolt stems.

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.0 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 light, you can distinctively see the fiber layers and their edges like shadows. It is quite normal for the surface clear coat layer to be scraped off somewhat when assembling components.

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.
- Lösen Sie die Lenkerklemmung am Vorbau.

Syntace GmbH · Dammweg1 · 83342 Tacherting · Germany · Tel. +49 (0)8634-66666 · Fax: +49 (0)8634-6365 · E-Mail: syntace@syntace.de · www.syntace.de

Syntace

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 by using M6-screws (6 Nm by using M5).

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

ACHTUNG: 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.

Pic. 1

- 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 an 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, Roox). 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 in 680 mm width (from production code 43-10 on) suitable for use with barends..

HINWEIS: Der Vector 31.8 Carbon ist in 680 mm Breite ab Produktionscode 43-10 (November 2010) für die Verwendung von Barends freigegeben. Die freigegebenen Modelle sind ebenfalls erkennbar an den aufgedruckten Skalen an den Lenkerenden.

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 (ab Produktionscode 47.09)	580 mm
Duraflite 31.8 Carbon 630 (ab Produktionscode 47.09)	610 mm
Vector Lowrider Carbon:	620 mm
Vector 31.8 Carbon 680 (ab Produktionscode 01.11):	640 mm
Vector 31.8 Carbon 740 (ab Produktionscode 01.11):	700 mm
Vector Carbon High10 680:	640 mm
Vector Carbon High10 740:	700 mm
Vector Carbon High5 740:	700 mm
Vector Carbon Low5 740:	700 mm
Vector Carbon Low10 680:	640 mm
Vector Carbon Low10 740:	700 mm

Syntace

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 901 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
Stefan-Flötzl-Str. 6
83342 Tacherting / Germany
Tel. +49 (0)8634-66 666
Fax: +49 (0)8634-6365
Email: syntace@syntace.de

Further Information at:
www.syntace.de/support

Please note: The latest installation and operating instructions are always binding for your product at: www.syntace.de/support

Syntace

ASSEMBLE ON CARBON HANDLEBARS

E\\ Manual. 20190923

Dear Syntace customers

Some recently introduced braking and shifting components may harm carbon fiber handlebars due to asymmetrical clamping slots or slanted clamping screws (see picture). Even worse, the Nm values as stated by the manufacturers usually refer to Aluminum handlebars. Please always apply carbon fiber assembly paste and only carefully tighten the clamping screws.

SELECTED EXAMPLES:

Mountain bike brake and shift levers:

- SRAM X.0 trigger (manufacturer's torque recommendation: 4 Nm). The actual torque must not exceed 1.5 Nm for carbon fiber handlebars. Do not forget assembly paste, the clamp will creak otherwise.

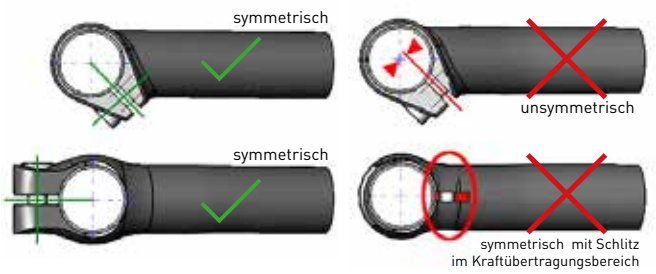
- A reduction of the assembly torque can be necessary for other manufacturer's components, too, in case they feature an asymmetrical clamping slot or slanted clamping screws.

CAUTION: Mountain bike grips with integrated, internal clamping designs (e.g. Ergon GE1) and grip shift levers that are constructed with asymmetrically clamping designs rather than symmetrical ones, yet feature small clamping contact surfaces are generally inappropriate for carbon fiber handlebars. These levers include all SRAM and Rohloff grip shift levers that can be mounted on Aluminum handlebars only.

- Drehgriffe, die statt symmetrisch klemmenden Schellen nur kleine Druckstücke (Segmentklemmung) verwenden, oder sehr schmale Klemmen haben, sind für Carbonlenker generell untauglich. Beispiele sind einige SRAM- und Rohloff-Drehgriffe. Diese ausschließlich auf geeigneten Alu-Lenkern verwenden.

Mountain Bike Barends:

- If barends are mounted on Syntace handlebars, do not shorten the handlebar and always mount CRB-Plugs.
- Use assembly paste and tighten the barends only until they do not move any more. Again, do not simply rely on the torque values provided by the manufacturer.



- Syntace carbon fiber handlebars are not designed to be combined with the following components: barends with asymmetrical clamping or closed clamping slots delivering the clamping force (e.g. Tune).

Syntace GmbH · Dammweg1 · 83342 Tacherting · Germany · Tel. +49 (0)8634-66666 · Fax: +49 (0)8634-6365 · E-Mail: syntace@syntace.de · www.syntace.de

Syntace

Road Bike Brake and Shifting Levers:

- Shimano STI levers come with a relatively big contact surface. Syntace Racelite Carbon handlebars with the production code 06 05 (May 2006) can stand up to 6 Nm clamping force, later Racelite models up to 8 Nm. Do not forget assembly paste.
- Campagnolo Ergo Power levers are generally bad for carbon fiber handlebars. The small contact areas generate high clamping pressures which is why we recommend an assembly only with handlebars produced after May 2006. The maximum torque is 8 Nm; in any case, apply assembly paste.
- Please additionally always refer to the latest Syntace components manuals that are provided at www.syntace.de. If you have further questions, do not hesitate to give us a call.
- Reaffirm once a month or every 1000 km that all clamping systems are in perfect condition. The disassembly is necessary in order to spot possible wear between the components. The clear paint may wear out, which is not a problem.
- You may order the assembly paste in a 20 g syringe (Phone +49(0)8634-66666) or in a 400 g can which you may order at Bokhoven www.bokhoven.de (Phone +49(0)751-76963-30).

A safe assembly of quality components

The Syntace Duraflite carbon fiber handlebar can perfectly be combined with quality components such as Shimano Deore XT and XTR, etc. as long as they are mounted professionally as stated above and according to the manufacturers' manuals. Grub screws and segment clamping designs as they can be found at some SRAM shifters are generally inappropriate.

GENERAL: We can not predict how the actual clamping forces are of every single brake or shift lever, as this depends on the thread and screw greasing.

The only valid rules of thumb include:

1) Clamps need to close symmetrically and without pressure peaks (the manufacturer's responsibility)
2) Clamping screws need to be tightened with 1 Nm steps only until they can be twisted on the handlebar with greater force, but do not move or twist when used during normal shifting and braking (the mechanics responsibility).

CAUTION!

If this type of clamping design is used, do not exceed 2 Nm of torque when tightening the clamping screw. The handlebar can break otherwise if exposed to high pressure.

Your Syntace Team

Jo Klieber