

CONGRATULATIONS ON THE PURCHASE OF YOUR NEW SYNTACE STEM. Please carefully read all instructions as we have included some important information and helpful tips. We recommend that our stems are always used in combination with approved Syntace handlebars. Your Syntace stem was carefully designed and constructed. It is, however, necessary for you to follow the instructions as provided in the following.

Please remember that safety relevant bicycle components do not forget about previous impacts of any kind:
Components remember any damage (such as crashes, overloading, etc.) which can add up to a shorter lifespan of the component despite the fact that at Syntace, we keep incorporating an "overload safety" for all of our components. A frequent replacement of the Syntace stem and Syntace handlebar (e.g. every two years) is not necessary according to our findings and experiences, yet it is crucial to examine your stem and handlebar carefully after every single crash and look for small dents or cuts or whether the components have been bent. Damaged parts must not be fixed in any way but need to be replaced as hazardous injuries can not be prevented otherwise.

Intended usage

All stems are available as model 254 (nominal handlebar diameter 25,4 mm) for mountain bikes, as model 260 (nominal handlebar diameter 26,0 mm) and model 318 (nominal handlebar diameter 31,8 mm) for road bikes. The Syntace Force 99/109/119/139 as well as Syntace LiteForce stems are meant to be used on paved roads and off road, yet they are not approved for downhill riding, Dual Slalom and drops. Reaffirm the correct position and seat of all components according to this manual.

Maximum handlebar width:

Force 99/109/119/139/149:	740 mm
LiteForce 50 - 90 mm:	740 mm
LiteForce 100 - 110 mm:	680 mm
LiteForce 120 - 135 mm:	500 mm
Flatforce 44/55/66/77:	800 mm
Flatforce 88/99/111:	760 mm
Megaforce2/Superforce 31.8:	800 mm
Megaforce3:	780 mm

F44/F55 Screw allocation



CAUTION: The M6 screws for the fixation on the fork bridge need to be degreased before the assembly.

Minimum insert steerer:

Force 1.5:	34 mm
Force 99/109/119/139/149:	32 mm
LiteForce:	29 mm
Megaforce2:	30 mm
Superforce [26.0 und 31.8]:	28 mm
Flatforce 44/55:	22 mm
Flatforce 66/77:	24 mm
Flatforce 88/99:	26 mm



Measure the distance how far the steerer tube reaches out of the utmost top cap of your headset or the top spacer. If the minimum insert length as stated can not be reached, the safe clamping of the Syntace stem can not be ensured. In this case, either remove spacers or use a longer steerer tube. In order to prevent the twisting of your stem on the steerer tube, degrease it as well as the inside of the stem prior to the assembly (with alcohol or degreaser). If necessary, deburr the steerer tube and mind the fork manufacturer's instructions at all times, particularly mounting carbon fiber forks.

Megaforce3 system installation



CAUTION: The capsule needs to be inserted from the top

Mounting the stem

- Before mounting the stem, read the general instructions of your bike.
- Syntace stems have narrow tolerances. For an easy assembly, remove one screw and, with a washer in between – drive it into the opposite side in order to slightly widen it (see picture).
- Slide the stem onto the steerer tube and mount a fitting ahead cap with an ahead cap screw, respectively. Adjust the play of your headset.



Bild 3

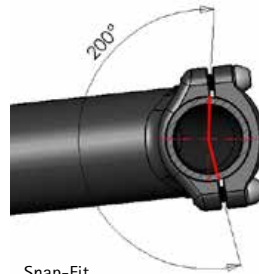
ADVICE: the ahead screw is meant exclusively to adjust the headset play and not to tighten the stem. With the stem clamp bolts loose, tighten the ahead screw only until no noticeable play can be felt in the headset bearing. It must be possible to turn the fork freely inside the steering tube. Also refer to the general instructions of your bike.

ADVICE: if you notice play in your system, reasons for this this can also be damaged bushings of your fork, "floating" rotors or play in your disc brakes.

- Using a torque wrench, tighten the clamp bolts gradually and alternately to 2/3 of the amount indicated on the stem.
- Stick to the "Twist Test": clamp the front wheel between your legs and reaffirm that the stem does not move on the steerer tube. It should resist a torque of at least 60 Nm.
- If necessary, raise the torque gradually by 0.5 Nm until you reach the maximum torque, yet never exceed the maximum torque rating.

CARBON FIBER STEERER TUBES: Please check with the fork manufacturer to assure it is capable of withstanding the stated torque loads. If this is not the case, please start tightening the steerer tube clamp screws carefully with about 4 Nm. Check the correct assembly afterwards. Particularly for carbon fiber steerer tubes, apply Syntace Friction Paste for carbon fiber/ Aluminum surfaces.

Lenkermontage



Snap-Fit
For increased safety and increased product lifespan, all Syntace stems (Megaforce, F99, Superforce) are equipped with a "Snap-Fit" which provides more than 180-degrees of clamping surface on the handlebars. Press firmly against the handlebars until you feel them snap into place.

- Shorten your handlebar only after you have ridden your bike for the first time. The handling improves and the safety is increased significantly, especially on tough terrain. If you prefer a narrower handlebar anyways, slide your brake and shift levers towards the stem as well as the grips and go for yet another test ride. You would not be the first person to put the levers and grips back outwards again thereafter.
- Start by sliding the shift and brake levers onto the handlebars. Once the handlebar has been mounted on the stem, the shift cables and brake hoses might be too short.
- Place the Syntace handlebar in the position you like it to be in. Make sure it is aligned accurately.
- Now push the handlebar into the "Snap-Fit" (see picture).



When using barends, you **MUST** use Syntace Bar Plugs (available separately).

- Tighten the handlebar clamp screws gradually and alternately with 2/3 of the maximum torque rating as indicated on the stem until the handlebar can no longer be twisted. Also mind the maximum clamp torque indicated by the carbon fiber handlebar manufacturer.
- If you want to ride with barends and in case your handlebar has been approved for this, mount them now, yet never do so without Syntace Bar Plugs (see picture).
- To increase the safety against a twisting stem, you may apply some Syntace Bond 48 or Loctite High Strength thread locker on the steerer tube.
- Tighten all stem screws again after the first hour of riding with the indicated torque rating.
- Frequently check the correct tightening torque and the proper seat of all components.

ADVICE: an old motocross advice for mountain bikes: tighten the screws of the shift and brake levers only to the point where they will still move in case of a crash. This can help prevent broken levers, further trouble and extra costs.

Care, maintenance and safety

Proper maintenance and care will ensure a long lifespan and reliable function of your Syntace components. Please refer to the following steps in order to maintain your system:

- Check the inside of your Syntace stem frequently for moisture and remove it.
- Check the screws of your handlebar and stem frequently for the proper torque (refer to "handlebar installation").
- Check your handlebar for signs of fatigue (discoloration, cracks, and dents).
- Warning: brake fluid may attack epoxies and resins as well upon longer exposure (brake fluid is highly deliquescent). Clean the handlebar thoroughly with water after it got in contact with brake fluid.
- Warning: using foam rubber (porous, penetrable) bar tape or grips on Aluminum handlebars can lead to a permanent accumulation of sweat or moisture between grip or tape and handlebar. As both sweat and acid cleaning chemicals attack anodized surfaces after some time, the bar is to be checked frequently and exchanged in case it shows any signs of corrosion. The bar will be increasingly prone to failure upon further use otherwise.
- If the Syntace bar is bent due to a crash, do never try to straighten it. Please inform your local dealer or Syntace if you face problems.

Twin Fix Clamps

If you want to replace your Twin Fix clamps with the standard stem clamps, you may order them with the article number: 145429 (M5) for Liteforce, F109, F44 und F55 and article number 145412 (M6) for Megaforce2 and Flatforce.



The Twin Fix clamps are designed to have a Syntace Phone Gripper, a Lupine lamp support or Garmin device directly on your stem. These mounts can be ordered directly at Syntace.

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:

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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

