



MA NUAL

OSC

OPTIMAL STIFFNESS CONSTRUCTION

LS1 STEM CONCERNED



LS1 STEM NOT CONCERNED



OPTIMAL STIFFNESS CONSTRUCTION

OSC (Optimal Stiffness Construction) is an innovative concept that evenly distributes stress from bar to stem. It reduces weight without reducing the strength of the structure itself. Traditionally, designers increase the thickness of the bar and handlebar to increase its strength, which inevitably also increases the overall weight of the structure. We do the exact opposite; pioneering the OSC technology through 3 major procedures:

WINGLET FACEPLATE

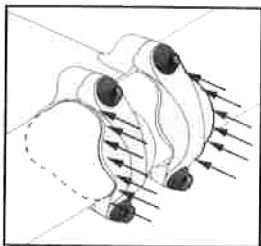
through years of researching, experimenting, and riding; We have seen the damage that can be inflicted upon

high-performance lightweight handlebars from enormous bending stress. Our R&D team designed the

WINGLET FACEPLATE

easily distributing stress from handlebar to stem, ensuring peak

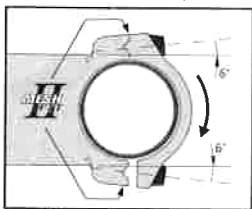
performance and above all else: your safety.



Distributing Shear Force.

MESH FIT

By creating a 6 degree tightening angle on the stem; an increase in friction force was attained compared to that of conventional clamping locks. The Mesh Fit design requires minimum tightening torque to create maximum engagement force. This ensures not only even distribution of stress, but also prevents overly tight situations that would cause potential damage to the handlebar.



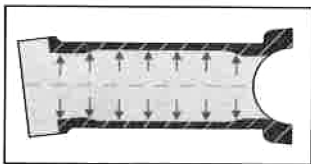
Minimum tighten torque, Maximum mesh fit.

MESH FIT II

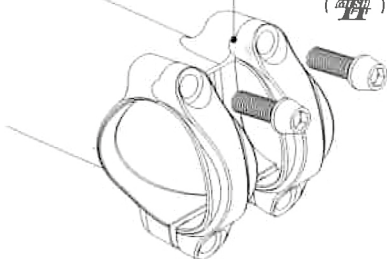
Mesh Fit II adds an easy-to-install feature that makes sure the faceplate is on and installed for optimal performance.



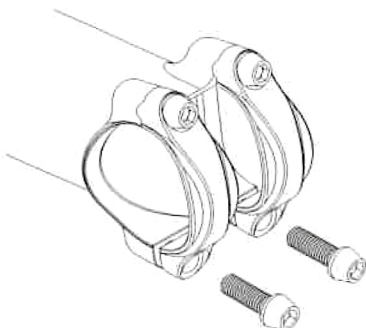
Extensive research, testing, and fabrication refinement has brought Variant Thickness technology to the forefront of our



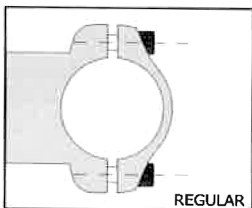
engineering mastery. State-of-the-art CNC machining creates calculated thickness variations throughout a single structure; hence efficiently sustaining and distributing stress with minimal effort.



- Match the correlating outward groove on the stem cap with the inward groove on upside of the stem (Mesh FIT II). Tighten upper screws first in the indicated torque.

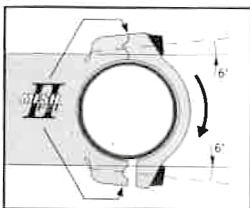


- Once upper screws are secured, then tighten the lower screws in the indicated torque.



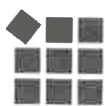
REGULAR

Parallel clamping require higher tighten torque.



Minimum tighten torque, Maximum mesh fit.

- Correct assembly result: There should be no gap on the upside where the stem and stem cap joins.



**OPTIMAL
STIFFNESS
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