



# Viper 640

## International Class Association

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### Update from the Technical Committee 8-18-2022

The roles of the Technical Committee are:

1. To review proposed rule changes that keep our class: simple, easy, affordable, fun, fair, and contemporary.
2. To answer question from fellow owners regarding the class rules. We are here to help.
3. To supervise enforcement of the Class Rules. We aim to do this in a helpful way so that owners can practice self-enforcement and arrive at sanctioned events with class-legal boats.

**Please feel free to join any Technical discussions on the Class Member Only forums.**

### Proposed Rule Changes for Electronic Vote

We have two minor rule changes which will be put to Member-Owners in an electronic vote commencing on Friday August 26<sup>th</sup>. If passed, these rules will be in effect prior to the start of the North American Championship at Gulfport.

#### **Add Rule 8.9**

Reason. To allow nonskid strips and foam cockpit floors such as Raptor deck. They make the boat more comfortable for some sailors and convey no competitive advantage, merely add a small amount of weight. The typical foam cockpit floor weighs 11 bs on a Viper.

***8.9 Adhesive non-skid or cushioned foam grip may be added to the floor of the cockpit.***

#### **Amend Rule 5.3 (b)**

Reason. Return to original simple wording of rule to provide clarity to suppliers and riggers.

***5.3 (b) The lower shroud length shall be adjustable by means of open body turnbuckles. ~~or alternatively a specific shroud adjuster or turnbuckle that is approved by the VICA as a component supplied by the Builder.~~***

Comment:

Almost every Viper owner has installed open body turnbuckles on the lower shrouds, which was the original configuration of the boat and has turned out to be the safest and easiest configuration. This rule change requires that new masts will be supplied with open body lower turnbuckles and avoid the

needless expense of replacing the lower shrouds. The rule will ensure new boats are delivered identical to the rest of the fleet and ready-to-race.

If anyone has original lower shrouds supplied by the builder with blue wave closed turnbuckles, or even worse pin adjusters, you can apply to the Technical Committee for a rule 11.4 exemption to continue using them. We will strongly recommend you change to open body turnbuckles, but we will grant the exemption and you can continue to sail. When you need to replace your shrouds, then you must update to open body turnbuckles.

### **Upcoming Rule Changes for Discussion and Feedback**

The Technical Committee invites feedback on a rule proposal to increase spreader sweep and introduce a fixed measurement for spreader sweep and spreader length.

- The existing minimum sweep is insufficient sweep. No sailmaker or tuning guide recommends sailing at minimum sweep. Masts sailing with such a flat spreader sweep are at a higher risk of inverting downwind in upper wind strengths.
- A fixed spreader sweep and fixed spreader length will make the mast easier to tune. Everyone will have the same rig, so tuning guides will be easier to replicate. It is one less item to adjust.
- A greater sweep makes the boat easier to sail and the mast less prone to inversion.
- Currently there is a great deal of variance in sweep. At events this year the TC has measured sweep ranging from 295 mm to 360 mm.
- We have tested a rig with 360 mm of sweep and observe the following
  - The increased sweep makes it easier to obtain a consistent luff curve . When the vang is applied, the mast bends more evenly along its length. Flat sweep means the vang is only effective on lower half of the sail.
  - Big Breeze: Upwind, greater sweep makes the headstay tension easier to control. Between 35 and 40 on the loos gauge, with the correct amount of prebend, the headstay is significantly tighter.
  - Big Breeze Downwind: The mast is significantly easier to keep in column. This makes the boat much easier to sail because the gnav can be eased to obtain a better mainsail shape, and there is less risk of inversion.
  - Light air upwind : The mainsail can be kept in shape with lower tension, allowing a softer headstay and thus a more powered up jib without sacrificing mainsail shape.
  - Overall the mast performs better and allows greater exploitation of the inherent advantage of a carbon mast.

We would very much welcome feedback from members who decide to try this rig setting.

Here is the proposed wording of the rule about spreaders.

#### **4.3 Spreaders- Revised Rule**

- (a) Spreaders shall be supplied by a VICA approved manufacturer.

(b) Spreaders shall be rigidly attached to the mast when rigged.

(c) The spreader length (excluding adjusters) shall be x mm

(d) The sweep of the spreaders shall be measured by attaching a line between the aft outer corners of the spreaders excluding the length adjusters. The distance between this line and the aft most point of the track on the mast, measured perpendicular to the mast shall be 350 mm +/- 5mm.

(e) The length and sweep of the spreaders may not be adjusted once a regatta has commenced.

Cost and Fitting : If a rule, similar to this proposal is popular we will get a bulk quote from Superspar and one other supplier for 100 sets of spreaders and let members know the cost. We will ask Rondar to work with us to design a jig so that spreaders are easy to drill.

We anticipate voting on a revised version of this rule proposal at the AGM in March at New Orleans. This allows members five months to experiment with higher sweep settings and provide feedback.

### **Measurement at Gulfport North American Championship**

The measurement checklist for Gulfport is attached. We highlight a few items:

- (i) We will be checking that each boat has a functioning VHF radio
- (ii) We will be checking headstay length.
- (iii) We will be measuring keel bulb shape and dimensions with a template to ensure they are as supplied by the builder.
- (iv) We will be measuring keel depth for 2 reasons
  - To ensure that the keel depth is as supplied by the builder
  - To collect data on any discrepancies between different generations of boats.

We will be on a close lookout to identify any keels that are deeper than they should be.

- (v) We are aware that a few wedge keel boats have had to place keel bolt washers between the keel and the top plate to enable the wedges to fit the receptacles. Temporarily this may be allowed subject to inspection from the TC. We will examine all these boats carefully to ensure they are as supplied by the builder. We believe most boats need less than 6 mm of washers. If any keel needs more than 6 mm of washers, then they must contact the TC for inspection and waiver. Boats may only use washers similar to the existing keel bolt washers. Custom spacers between the keel and the top plate are not class legal and the TC does not have the jurisdiction to approve custom spacers (World sailing regulations and the class constitution are clear on this).
- (vi) We may select a sample of boats for sail measurement.

### **Technical Committee Advisories**

**IMPORTANT WARNING Keel Lifting attachment line:** The line attached below the spreaders that we hang our keels from is often dyneema (Amsteel) without a cover. Dyneema is prone to sun damage and

is significantly weakened by UV. The manufacturer warns that the outer fibers can lose 40% of their strength in 6 months of constant UV exposure.

We have witnessed 3 keels lines breaking under load so far this year narrowly missing hands and feet, and in one case causing substantial damage to the boat.

The TC strongly recommends that owners closely inspecting the keel attachment line, and where appropriate replacing it with a covered dyneema or spectra line.

#### Technical Interpretation:

We have one insignificant TI.

#### **Rule 7.4 (b) Current Version-**

The distance from the head point to the intersection of the mainsail leech and the middle of the top mainsail batten shall be no less than 900 mm.

#### Technical Committee Interpretation -

The distance from the head point to the point where the top mainsail batten intersects the mainsail leech, (as measured from the centerline of the batten), shall be no less than 900 mm

Reason: Easier to read and understand

#### **Future Rule Proposals**

Following the Fall electronic vote, the next opportunity to vote on rule proposals will be the March AGM. If you have any suggestions, please let us know before December 1<sup>st</sup>.

If you have any questions regarding the class rules or any outline rule change proposals please do not hesitate to reach out to the Technical Committee. We are here to help.

Tyler Moore, Technical Committee Chair.