

SECOND STEP · AFTER A CRACK OR A SUSPECT FITTING IS FOUND

A crack is a different question.

The sea trial measures how hard this boat's rig works. It does not look inside a part. This step starts only when an inspection has found a crack, or a suspect fitting, and a decision is needed: sail on, repair, or replace.

This step needs

- A named finding
- Where it sits
- What was not seen
- A stated action

After a finding

Named inspection method

One stated action

Why it matters

Most rod failures start at the end fitting. A load record cannot see a crack there. Once a finding exists, the question is no longer how hard the rig works. It is whether that finding can be planned around.

When it starts

The measured loads from the sea trial already sailed become this boat's load spectrum, its DNA. Crack growth uses that spectrum, the boat's load history, and the records that exist. An inspector still names the place, the method, and the size they can detect.

Who it is for

Owners and captains who already have a crack report on a rod head, a bracket, a fitting or other rigging gear, and want a plain decision. It is not a first look at a rig that has not been inspected.

How it works**01 The finding, on the table**

We model the crack size and shape on the component, and we drive that model with the load spectrum from the outing.

02 Loads, only if measured

The sea-trial record for that part, for the conditions sailed. If that part was not measured, the gap is stated. A load is not invented for it.

03 One decision

Sail on and look again, repair, or replace. The action is written down. A life number without an action is not issued.

Finding only

We set the finding on this boat's measured load history and say what else sits on a similar path. No remaining-life number from the finding alone.

Finding, plus a measured outing

Cycles or sailing time to the limit, for that crack and the conditions sailed on this boat. The maker's interval still applies. Whichever comes first.

CRACK ASSESSMENT

What you receive

1 Same path, other parts

We place that finding on this boat's measured load history, and say whether another bracket, fitting or piece of gear sits on a similar path and should be looked at for the same reason.

2 Where the load was highest

The part that carried the highest repeated load on the outing, named in plain words. A quiet fitting and a hard-worked fitting are not the same decision. This is a ranking of the measured loads, not a health grade.

3 Cycles or time to the limit

A range of cycles, or of sailing time, to the limit set for that crack. Built from this boat's measured load history, the material, and the sized finding. Stress is taken from the uncracked shape, including a concentration where one exists.

4 The action

Sail on and look again, re-head before the next passage, or replace. One of these is written down. The maker's interval is never extended.

What this step does not do

- × It does not find the crack. Detection stays with the inspector and the method they name.
- × It does not replace a visual check, a class survey, or an insurer's inspection.
- × Remaining life is not taken from the sea trial alone, and not from mast motion alone. It is given only for the cracked part that was assessed.
- × It never extends the replacement interval set by the maker or the insurer.
- × A crack that was not sized, or a part whose shape cannot be represented, is not given a life number.
- × This boat only. A sister ship is a different rig, even with the same gear.

HOW TO ASK

Send the inspection report with the sea-trial brief.

No report, no crack step. The sea-trial sheet stays the first step.