

SAFETY ADVISORY

Issued by Angus Pinkerton - Chairman of the Flying & Safety Committee. 16th September 2024.

All paraglider pilots (including paramotor pilots) and hang glider pilots should read, digest, and take action on the contents of this advisory notice and keep it for future reference until it is superseded or withdrawn by the FSC Chairman. This notice will remain available on the BHPA website.

PARAGLIDER “MAILLON / QUICK LINK” CONNECTORS.

Recent Incident Reports have reported a small number of cases where the threaded sleeve-nut on a steel connector (known as a “maillon” or “quick link”) could be easily wound by hand beyond the top of the upper screw thread, to a point where it fully exposed the lower screw thread - opening the maillon in a way it is not intended to be opened.

For a maillon to function as a load carrying connector, the long, threaded sleeve nut must bridge the “gate” (the short open portion). Maillons have been known to unscrew over time, so they should be regularly checked and tightened appropriately (being careful not to over-tighten). If no manufacturer’s guidance is available on the correct tightening torque, the BHPA Pilot Handbook recommends nipping up the nut to be finger-tight, and then giving a further one-eighth turn with a small spanner.

The maillons featured in these Incident Reports were all used to connect paraglider suspension lines to risers. In all incidents, the end stop at the top of the upper thread did not function as it should – it allowed the continued turning of the nut past the end stop, exposing the bottom thread and opening the maillon in a way it is not intended to be opened. This is illustrated in the adjacent photograph.

Maillons may be used in parts of a paraglider or hang glider setup which are infrequently opened and closed (e.g. emergency parachute to harness, paraglider suspension lines to risers). Maillons must be appropriately sized for the load they are expected to carry, and installed so that the load is correctly applied to the maillon. They are often engraved with a safe working load or working load limit (SWL or WLL).

The Incident Reports featured maillons used on the riser to suspension line connections of certain paragliders. None of the incident maillons were engraved with identifying marks or load limits. Whilst this issue is being investigated further, the BHPA FSC makes the following recommendations to pilots:

- 1) As part of your daily inspection, check your maillons are in good condition and are properly closed. A correctly closed maillon is shown in the ‘green tick’ photograph below.
- 2) If the threaded sleeve nut can be finger-turned with ease, fully exposing the lower screw thread and opening the maillon, remove the maillon and replace it. Inform your manufacturer or dealer, and report the issue via the BHPA’s online incident reporting system.
- 3) If you have reason to open a maillon (for example to change a damaged paraglider suspension line) take heed of the manufacturer’s instructions when re-closing the maillon. Be careful not to apply such torque that the threaded nut is wound above the lower screw thread. If in doubt, consult a paraglider service centre or your paraglider supplier.

