



Midland Gliding club – Strops and traces

Issue 2 13/3/2024

Reason for issue 2:

- 1. Update following issue of new Skylaunch tech note [1]*
- 2. Omission of heavy-duty heat shrink following failure due to overheating rope during application.*

This is guidance for preparing strops and traces.

It is based on the guidance published by Skylaunch [1], but that is largely for systems without a retrieve winch. It has been adapted for use at Long Mynd and reviewed by the BGA winching adviser, Andy Holmes.

The principal differences are:

1. The use of a longer trace, to keep the retrieve cable away from the glider during the ground run
2. The use of a smaller parachute to survive high-speed dragging through heather and to get the parachute clear of the glider quickly when launching directly on to the ridge at low level in strong winds.

A copy of pages 3 and 4 is to be displayed in the ropework preparation area.

Regards,

Geoff

References:

- 1. Skylaunch technical note “GLIDER END CABLE EQUIPMENT EXPLAINED 14/12/2023”**



Skylaunch 14/12/2023



We use the Skylaunch layout but the lengths we use are not standard because of the retrieve winch. Strops are 3m+/- 0.5m as standard, but traces are much longer at 27m and we use a smaller parachute.

Trace:

This has a plain loop at one end and a hook with a captive ring at the other. No colour coding so no need for heat shrink, but ends of splice need to be well spread with a hot knife to prevent them coming undone.

We have only a few hooks with captive rings in stock, but they should not get lost so it should be possible to re-use the old ones.

Strop heat shrink:

The heavy weight black heat-shrink shown is to be omitted following an incident in which the considerable heat needed to shrink it resulted in damage to the rope concealed by the heat shrink.

The light weight heat shrink used to mark the weak link strength shrinks more easily and will continue to be used.



Strop:

This has a Tost double ring at the glider end.

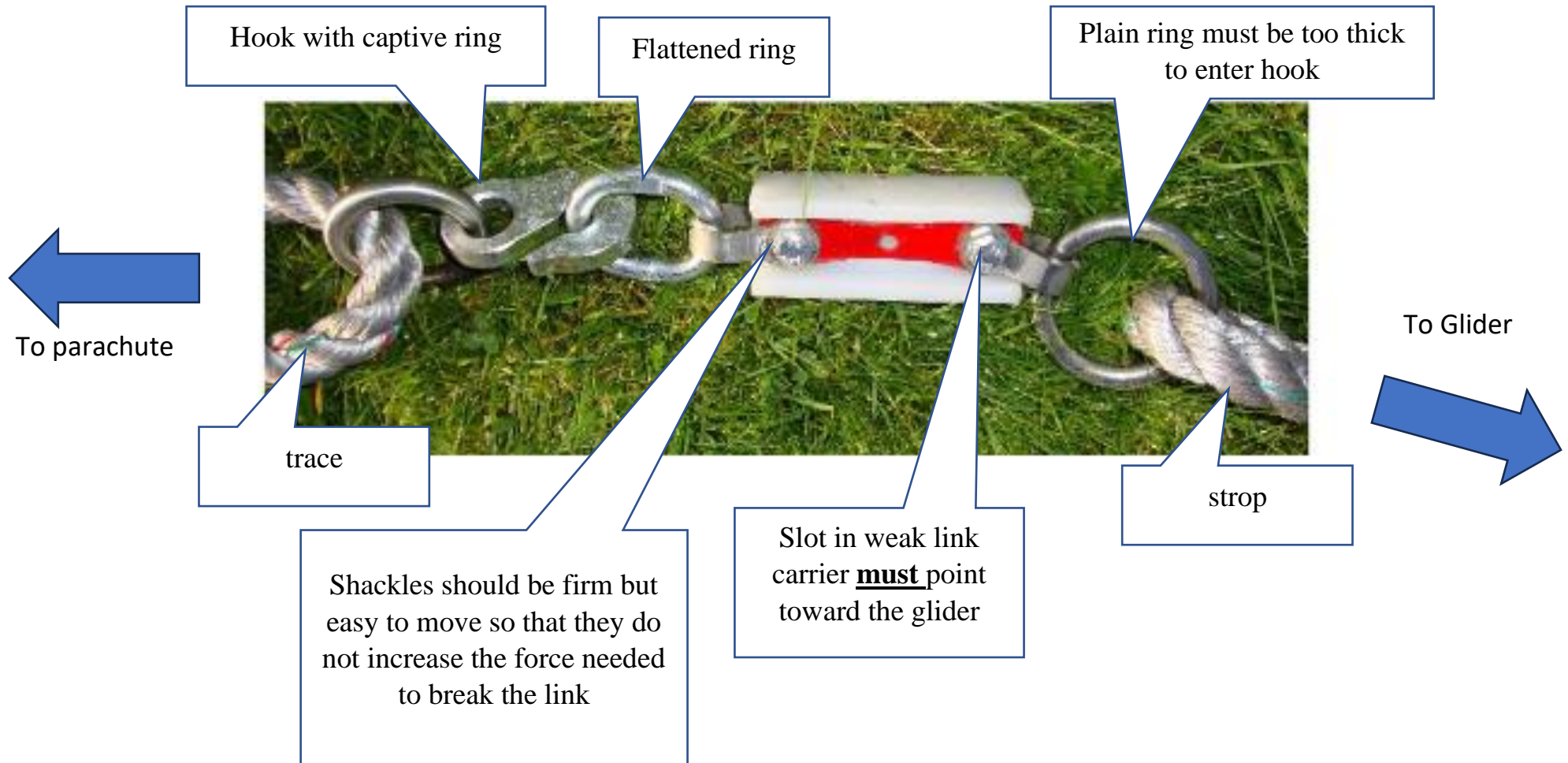
The other end should have a **plain** ring in the splice, to which we shackle the weak link.

This end must have colour-coded heat-shrink to identify weak link strength.

It should also have an orange flag captive in the splice to help us find it in the heather.

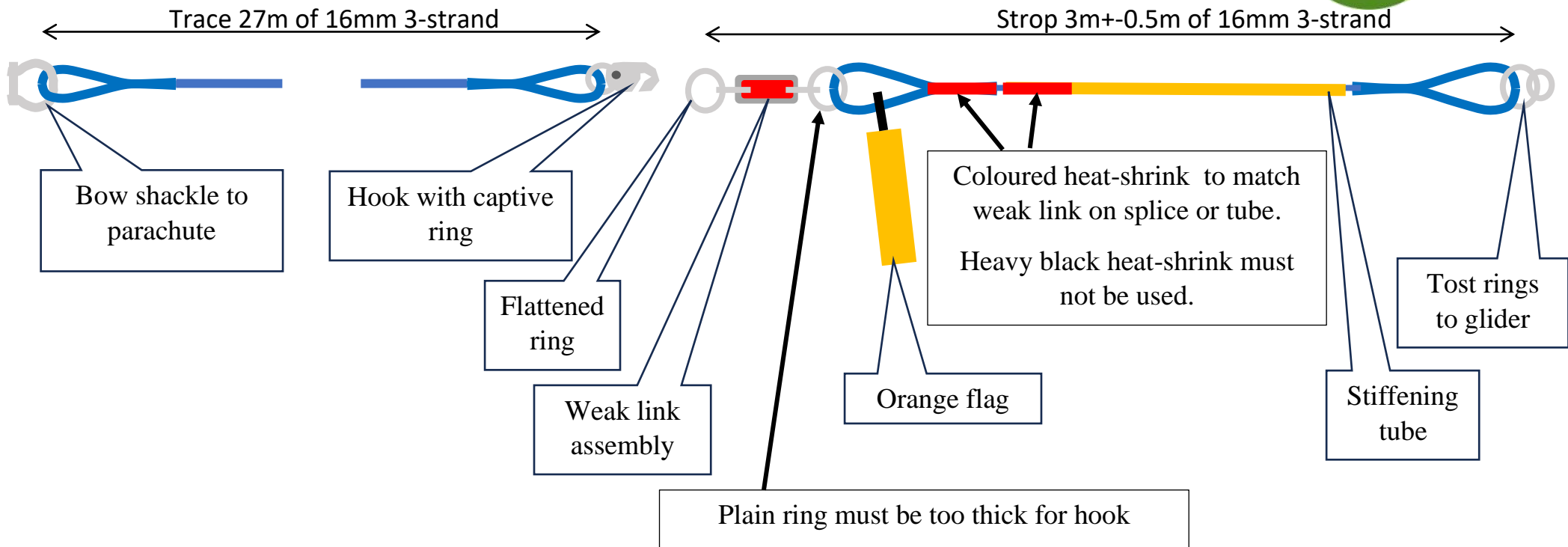
IMPORTANT this flag must be at the weak link end, not at the glider end in case it gets trapped.

Do not use the rings with a flattened section in the splice





Strop and trace repair/construction is only to be undertaken after training.



The splice length in our 16mm synthetic rope should be 5 tucks. If you unlay 1 large fid length of the bitter end, that should be right. Hot knife and/or tape the strands.

Size of the loop is not critical, but overall length is important. 27m is from the bench to the main doors **AND BACK**.

Markings on the front face of the bench show the length at which to cut to achieve a finished strop length of 3m, and also a check for 3m +/- 0.5m. Measurements are from the wall.

Strops should be kept reasonably short. 3m gives enough margin for one repair, so aim for 3m. The 3.5m upper limit should just be used to allow for errors.