Gear & Safety Warning

Highline Safety - Buddy Check Advisory

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Due to a number of reports of leash and harness errors during highlining, the International Slackline Association wishes to remind the community of the benefits of buddy checks. Reported attachment mistakes include incomplete knots, knots tied only through the lower loop, failing to double-back harness straps, attaching the leash to a gear loop, and use of carabiners as an attachment point.

Cause

Often, incorrect leash attachment arises from distraction on the part of the highliner. Many reports describe the highliner in conversation with friends while tying in and failing to request a buddy check.

Documented Leash Attachment Incidents

- Leashfall, failed to double-back harness, waist belt slipped, hanging by knees. No injury.
- Leashfall, failed to double-back harness, only lower loop, hanging by knees. No injury.
- Accidental free solo, leash tied incorrectly and slipped through while walking. No injury.
- Ground fall from midline/waterline, attached leash with carabiner to gear loop. No injury.
- Ground fall from carabiner failure, carabiner used as attachment to highline. Fatality*.

This leash was originally tied correctly and verified by multiple official riggers in the previous days. During the last day of the festival, a participant noticed this leash error. No one is certain why the knot was changed but it seems to have been done by a participant who failed to finish retying the knot. Festival goers often assume the knot to the rings is secure and fail to double check it since it is not usually adjusted once it is tied.

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An unknown person climbing near a highline festival asked to try a highline, claiming to have one year of highline experience with friends. He tied in unattended and without a buddy check. The leash was attached incorrectly with a carabiner clipped to a gear loop, an unrated attachment point. During a leash fall the gear loop broke and he fell 10 meters to the water below narrowly missing hitting his head on a boulder.

Both of these incidents occurred at highline festivals. With more and more people learning to highline in a festival environment, it is crucial to encourage standard buddy checks and other safety behaviors. In an ideal festival environment, designated people are present at each site/line to perform buddy checks and monitor for rigging issues. When this is not the case, participants should take extra caution and accept the responsibility of performing buddy checks for each other. Even in a non-festival environment, highliners often approach the line alone or without requesting a buddy check. Double and triple check yourself when alone; double check yourself and then have a buddy check you when in a group or festival setting.

Prevention - Proper Buddy Checks

Leash attachment mistakes can easily be mitigated by buddy checks. Regardless of experience level, everyone is susceptible to distraction and complacency leading to mistakes. Buddy checks should consist of visual and tactile inspection of five points (below in bold).

1) **Harness** – Harness should be tight around the waist and sitting above the hip bones. Pulling down on the belay loop should not cause the harness to slip over the hips. Leg loops should be comfortably tight. Waist and leg straps should not be twisted. Remove any unnecessary equipment from the gear loops, especially any items that may damage the line during a catch. **Harness buckles** – Waist belt and leg loop buckles must be doubled back. Many modern harnesses include non-adjustable leg loops and/or automatic double back buckles. Check that these are secure and appropriately tight.

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2) **Knot tied to highliner** – Must go through both the waist and leg tie-in loops, not through the belay loop (aka the two hard-points on the harness). Knot should be a Figure 8. The Figure 8 is recommended because it is easiest to inspect and more commonly known among the community. The tail of the rope can be tied off if possible with an overhand or Fisherman’s knot. If no tie off is possible, leave at least 10 cm (4 inches) of tail as the knot will adjust when loaded. For more information on this knot: [Figure 8](#).

3) **Inspect the leash rings & knot** – The leash ring should be a solid forged ring, either aluminum or steel. Commonly used rings have an inner diameter (ID) of 46mm to 76mm (1.8” to 3” ID) and are usually used in pairs to distribute the impact across a larger surface area. The rings can be inspected by running a finger along the inside surface to check for nicks or dings, sharp edges, or other damage caused by impact with the weblocks or by storage with other metal gear. **Check the knot attaching the leash to the rings.** This knot should be a Figure 8 and should have at least 10 cm (4 inches) of tail, and can be tied off in an overhand or Fisherman’s knot. Especially in a festival setting, it is common for the ring knot to be tied once and left in place for the duration. Regardless, this knot should still be inspected as it may be damaged overtime or may be modified by participants throughout the event.

*Remember! When rigging a highline, always account for the possibility of a mainline failure. Have a plan for how to rescue an injured or unconscious highliner and keep all necessary rescue equipment on hand.*

**Related reading:**

- [10 Points of Highline Safety](#) *(Available in English, German, French, Portuguese, Dutch, Italian, Russian)*
- [Highline Injury Report – Catch and Leashfall Incidents (Jan 2016)](#) *(Available in English)*
- [Midlines – low highlines (Nov 2015)](#) *(Available in English, German, French, Portuguese, Dutch, Bosnian)*
- [Webbing slippage in low-tension highlines (Nov 2015)](#) *(Available in English)*

*This incident happened in Slovenia in 2011, and is the only recorded fatality in highlining. An analysis of this incident is found here ([Klettermaterial (Karabiner) in der Highline 4. Mai 2011 Christian Katlein - DE](#)).

Photos: Sonya Iverson, Raf Bridi; Graphics: Sonya Iverson

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