



Safety Information: Petzl ZIGZAG mechanical prusik april 15th 2013

On Friday, April 12, Petzl was informed of an accidental fall in a training center in Germany. The injured person was moving at height using a Petzl ZIGZAG mechanical prusik. The first observations have shown that the fall was due to a failure of the rope end attachment hole. After hospitalization, the injured person returned home on April 14. We are deeply concerned and we wish him a very quick recovery.

Current information regarding the accident (as of April 15):

As of today, Petzl has been able to gather the following information:

- photos of the Petzl ZIGZAG and the rope end attachment hole
- a preliminary telephone account by the injured person

This information seems to indicate that:

- The upper carabiner may have been cantilevered and cross loaded
- The injured person was descending while performing repeated, sudden stops while using the device in a training center.

Nevertheless, to have a clearer vision of the accident's cause, Petzl is in contact with the injured person to obtain the following missing information and equipment as quickly as possible.

- a description of the complete system used by the injured person
- the ZIGZAG, the two connectors, the rope and any other devices that may have been used.

Technical reminders

- ZIGZAG design:

- The ZIGZAG is CE-certified PPE and designed to resist static loads greater than 15 kN.
- The side plates are constructed with the same materials and adhere to the same side plate requirements as similar products (ID, GRIGRI, RIG).

- Use of connectors:

A carabiner should always be loaded on its major axis. If it is cross-loaded, side-loaded or loaded off axis, it can:

- break under low loads (ex: gate breakage at 1 to 2 kN)
- or if cantilevered, it can transmit very high loads (4 to 5 times the applied load)

- Note:

Sudden stopping during a descent could transmit dynamic loads up to 3 to 4 kN. The combination of both incorrectly loaded carabiners and sudden stops could generate dynamic forces greater than 15 kN and exceed the minimum breaking strength of the attachment points of the connected device.

On-going testing

-Taking into account the information that we currently know of this incident, Petzl is now conducting a battery of tests to understand the precise causes of this accident. To date, our preliminary in-house tests do not show this potential failure even under high loads (cross-loaded, side-loaded or loaded off axis) of 10-15 kN. We are continuing different testing scenarios to try to understand the failure.

Follow-up action and Recommendations

-Petzl takes this accident and safety of its users very seriously. We will communicate the final results of our tests and our conclusions on our website by Tuesday, April 23, 2013.

- Until then, you can continue to use your ZIGZAG in accordance with the technical notice, ensuring that the attachment carabiner remains oriented on their major axis.

- As an additional measure of precaution, we recommend that you put in place a connector retaining solution that keeps the connectors oriented on their major axis.

Reminder:

We draw your attention to the following points, which are applicable to all metallic PPE:

- Inspect before use:
 - the absence of cracks or fissures
 - the absence of product deformation.
Here is an example of a ZIGZAG that should be retired →
- Verify during use that your carabiners are always correctly loaded on their major axis.
- Ensure the compatibility of all components in your system.

