

Since the recall of the ZIGZAG (reference D22) in April 2013, Petzl has been working on a new version, to be available in January 2014, as announced. This new version has been tested and field-proven in different countries (United States, England, Germany, Sweden, France).

The following is a complete summary of the changes this product has undergone.

1. Redesigned attachment holes to help keep the carabiners loaded correctly on the major axis.

a. Rope end attachment hole



It has a flexible elastomer ring that helps keep the carabiner in its optimal working position, thus reducing the risk of poor positioning (cantilever and/or reversal).

b. Harness attachment hole (swivel)



It has been enlarged to reduce the risk of poor carabiner positioning. This change also helps prevent carabiner sleeves from snagging.

• Important:

- These two changes were tested and approved using OK (TRIACT-LOCK) and Am'D (TRIACT-LOCK/BALL-LOCK) carabiners. Other carabiner models of similar shape may be used, but their compatibility must absolutely be verified by the user.
- These two changes do not exempt the user from needing to be vigilant about the proper positioning of carabiners, whose strength is greatest when loaded on the major axis.

2. Increased strength of the rope end attachment hole:



In normal use, the flexible positioning ring helps keep the carabiner from tilting. This tilting could be caused by an inappropriate movement or by rubbing against a branch, for example. This is why the rope end attachment hole has been reinforced to increase its strength for such an event.

The following tests were performed to precisely measure the strength associated with different cases of poor positioning. These tests were performed using OK (TRIACT-LOCK) and Am'D (TRIACT-LOCK/BALL-LOCK) carabiners.

• **Test 1: rope end carabiner slightly askew:**



• **Test 2: cantilevered rope end carabiner:**

Cantilevered, rivet end of the gate, combined with a reversal

Cantilevered, spine side of carabiner, combined with a reversal

Cantilevered, frame side of carabiner, no reversal



- Test 3: cantilevered harness attachment carabiner:



The lowest value obtained in these tests for poor carabiner positioning was always greater than 12 kN.

3. Additional improvements:

a. Rope path exit



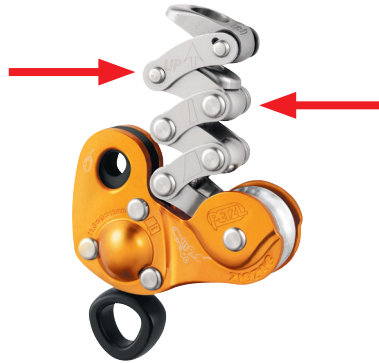
The side plates have been extended to better guide the rope in the sheave. They are also now flared to ensure smooth operation even if the rope rubs on the side plates.

b. Chain stop



The side plates have been modified to improve the chain stop contact surface and to increase the angle.

a. Riveting



The rivets have been modified to facilitate assembly during production. This change has no effect on product performance.