



## AAC Publications

---

### Fall on Rock — Probably Cross-Loaded Carabiner

Kentucky, Red River Gorge, Bald Rock Recreational Preserve

The bolt-end carabiner of this quickdraw broke in a leader fall, most likely when the gate improbably “nose-hooked” a glue-in, rod-stock-style bolt. Photo: Climber 1

**On October 8, I (Climber 1) was leading Grandpa Joe (5.9) in the Red River Gorge.** I climbed two feet above the fourth bolt, onto a slight bulge, and announced I was going to take a practice fall. I dropped, felt a snap, flipped upside down, and continued to fall toward my belayer. It was much farther than I anticipated. At some point I hit the wall with my left arm. Both of us were wearing helmets, though I did not hit my head. I stopped five feet above the ground.

We could see that the bolt-side carabiner of the fourth quickdraw was broken and no longer on the wall. I was quickly lowered to the ground and of course was very emotional and crying, as I had feared I was going to deck while falling.

#### ANALYSIS

The location of the carabiner break could be suggestive of nose-hooking. (I did not know about this possibility until the accident.) All I remember is that I placed the quickdraw in the correct orientation: rubber-gasketed, rope-bearing end down, with the gate facing opposite of the direction that I was climbing.

I wrote Black Diamond and they replied, “The ‘failure mode’ (looking at where and how the carabiner broke) is indicative of a nose-hook-type failure. We noticed that the wall you were climbing looks like it has fat glue-in-style bolts. Carabiners don’t tend to ‘hook’ onto this style of bolt very easily, but it can happen. It is more likely the carabiner simply became wedged in the bolt, or between the bolt and the rock. Even if clipped correctly, gear can move as you climb past it due to the forces of the rope pulling on it, or other forces. This is a very low-likelihood event, so probably (and hopefully) it will never happen to you again.” (Source: Climber 1.)

**\*Editor’s Note:** There were several similar accidents in 2023.

## Images



The bolt-end carabiner of this quickdraw broke in a leader fall, most likely when the gate improbably “nose-hooked” a glue-in, rod-stock-style bolt.

Article Details

Author	Climber 1
Publication	ANAM
Volume	13
Issue	77
Page	58
Copyright Date	2024
Article Type	Accident reports