

north american distribution

Dear Bonnie:

May 2, 2004

Thank you for your very detailed report of the March 27, 2004 grotto training incident in which a Petzl ascender (Model Ascension B17-L) unexpectedly became detached from the rope. I have attempted to answer your questions and concerns below. Note that the information presented assumes that the reader is familiar with the details of your report. Unless otherwise noted, the word “ascender” refers to a frame-loaded, toothed cam ascender of the type generally used by cavers, climbers, and mountaineers (e.g. Ascension, Jumar ...). This discussion does not address cam-loaded models such as Gibbs ascenders.

Redundancy

It is well known that ascenders can unexpectedly come off the rope, normally due to misuse. For this reason, redundancy is necessary in any rope ascent system. One should never use a single ascender for a rope ascent system; a minimum of two ascenders with appropriate connections to the harness (e.g. chest ascender and/or other ascender with lanyard connection) is required to achieve an adequate level of safety. With a redundant system, the accidental detachment of one ascender should not create a significant hazard as the user remains attached to the second ascender. It is the user’s responsibility to anticipate and prepare for situations where the unexpected detachment of an ascender may create a serious hazard.

Interference

When using ascenders, one should take care to avoid unnecessary contact between the ascender and anything that might interfere with its operation (rock, vegetation, etc.). When such contact is unavoidable, precautions should be taken to reduce the chances of accidentally opening or blocking the cam or safety catch. Normal precautions include making sure the safety catch does not contact the rock or other obstacles, using your arms and legs to push away from the rock, and keeping loose straps, clothing, etc. away from the moving parts of the climbing system. Those who feel the need to take additional precautions may clip a carabiner through the two holes* at the top of the rope channel on the Petzl Ascension and Basic ascenders. With this carabiner in place (through the two holes and around the rope - see “Progression on a structure without direct rope aid” on page 2 of the Ascension technical notice), it is practically impossible for the ascender to come off the rope in normal use. The carabiner also helps prevent the safety catch from contacting the rock, thus acting as an additional safeguard against unintentional disengagement of the cam. A disadvantage of this configuration is that ascender attachment and removal is slower and more complicated.

Ease of use

The Petzl Ascension is designed to provide simple, one-handed operation. This is an advantage for many cavers and big-wall climbers, who take their ascenders on and off rope quite frequently, and for mountaineers, who often use ascenders while wearing bulky gloves. Speed is a vital part of safety in many vertical activities, and equipment that is fast and easy to use can help contribute to user safety. It is possible to design an ascender that is more resistant to unintentional disconnection, but it would also be more difficult to use, creating disadvantages for the user groups mentioned above.

Perspective

It is rare that an ascender comes off the rope inadvertently, but it can and does happen. When it does, a proper climbing system with adequate redundancy helps prevent harmful consequences. The user should always take steps to avoid such incidents by practicing awareness, using good technique, avoiding obstacles, etc. At the product level, users have a reasonable expectation that ascender designs should provide a good balance between security and ease of use. We think Petzl ascenders are very well designed in this regard, and have no plans for a recall or design review in light of the reported incident. Those wanting to gain a more secure connection to the rope – at the expense of speed and utility – may elect to use the technique mentioned above under **Interference**.

Again, thank you for taking the time to let us know about this incident. Reports from the field are invaluable in helping us discover new ways to improve our products and techniques. I hope that this information has been helpful to you and please do not hesitate to contact me with additional questions or comments.

Sincerely



Hank Moon
Technical Information Manager
Petzl America

* These holes are generally used when self-belaying on fixed lines and for setting up haul systems; see the Ascension technical notice for more details: http://www.petzl.com/ProduitsServices/PS_123_1.pdf



Petzl B17-L Ascension