



Access
the
inaccessible®



ACCESSBOOK n° 5

Sport climbing: climbing
and belaying





Access the inaccessible. You have dreams and our mission is to help you realize them to the fullest extent possible.

Petzl's ACCESS BOOK booklets are designed to go with you as you prepare for and achieve your goals as a mountaineer, climber, skier... Each ACCESS BOOK covers one particular activity. It is a collection of selected technical tips from Petzl.com.

Sport climbers or belayers: this booklet is for you! It covers the basics of sport climbing. What gear to bring? How to belay properly? Which errors to avoid while climbing? What is the sequence to set up the rope for lowering from the top of the route? What to do if I don't reach the top of the route? ...Find all of our tips in this ACCESS BOOK.

This booklet does not cover multi-pitch or trad climbing.

Warnings:

- These booklets present an excerpt from the body of techniques for the activity
- Get training and practice in the techniques of the activity
- Carefully read the Instructions for Use of the products associated with the proposed techniques
- The environment and the activity itself are inherently dangerous. You are responsible for your own actions and decisions

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Sport climbing equipment

At the base of the cliff, consult the topo regarding the difficulty of the route and where it goes.

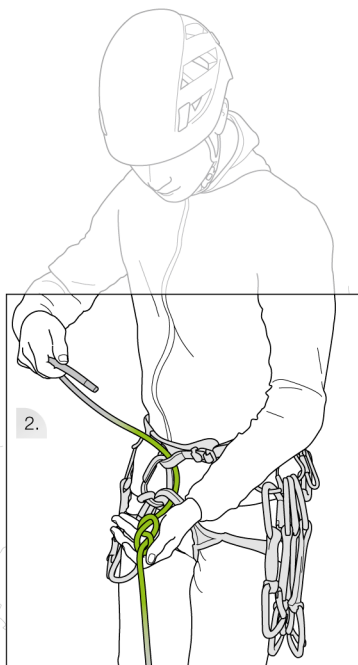
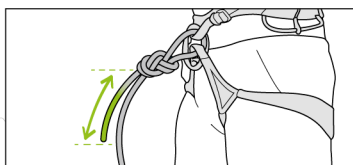
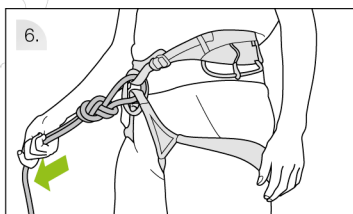
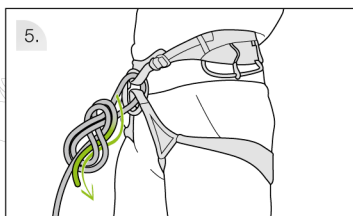
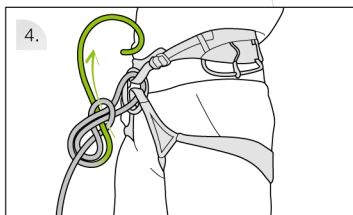
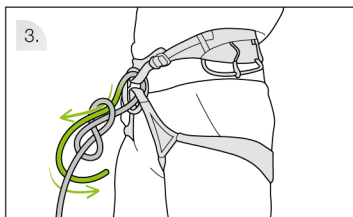
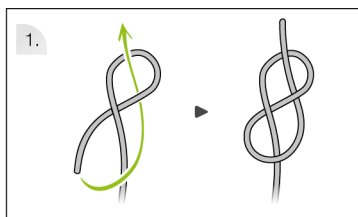


Basic technical equipment:

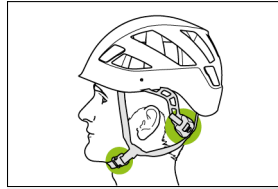
- Helmet
- Harness
- Rope bag
- Rope: correctly uncoiled to avoid twists, with a knot tied in the end of the rope. Be sure to take a rope that is long enough for the routes you plan to do
- Belay device: GRIGRI or REVERSO type device
- Locking carabiners: used to connect a belay device to the harness, at the end of a lanyard or for belay-station tasks
- Quickdraws: fourteen quickdraws are generally enough for most areas. Be sure to have several lengths. Quickdraws are placed on each side of the harness for easy access
- Lanyard: useful for performing tasks at the belay station
- Slings: multiple uses: building a top-rope anchor, extending quickdraws, foot loop in case of difficulty
- Quick links: useful if retreat is necessary
- Topo



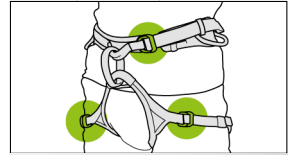
Tying in with a figure 8 knot



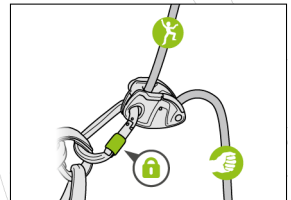
Partner check



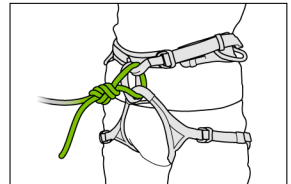
- Helmet properly adjusted on the head
- Chinstrap buckle fastened



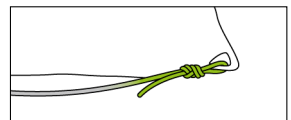
- Harness waistbelt above the hips
- Harness adjusted to fit snugly



- Rope installed in the proper direction (belay device function check)
- Carabiner connected to the correct place on the harness
- Carabiner is locked



- Tied in to the correct place on the harness
- The correct knot
- Knot finished and tightened



- Knot tied in the end of the rope

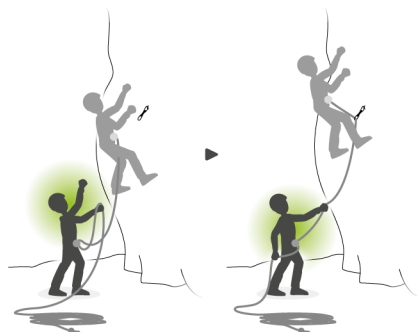


Belaying a climber

Spotting the climber at the start of the route:



Spot until the first point is clipped:



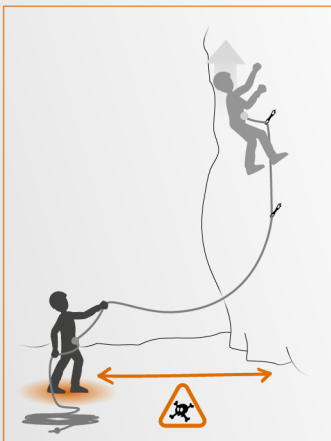
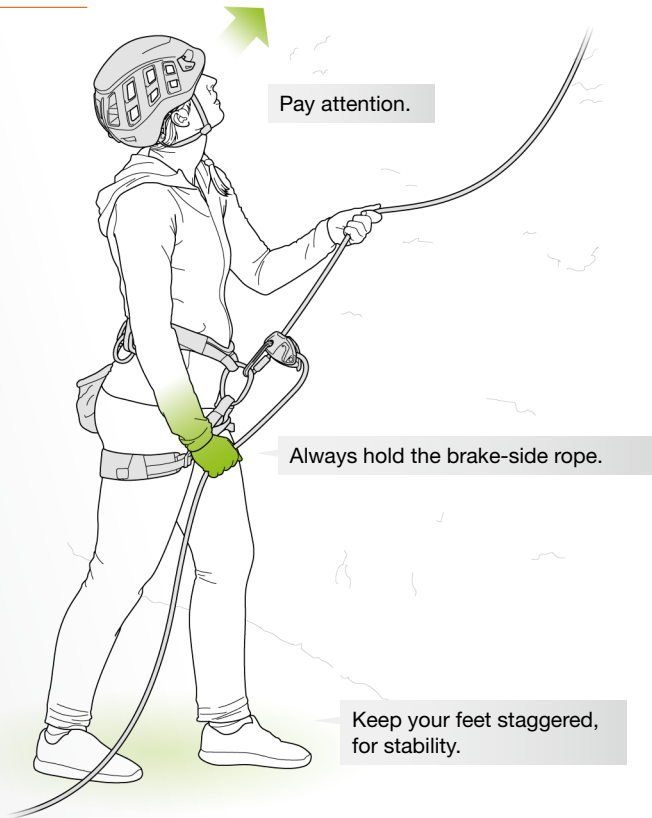
Be alert and mobile for the first points:



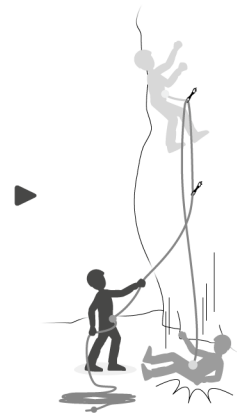
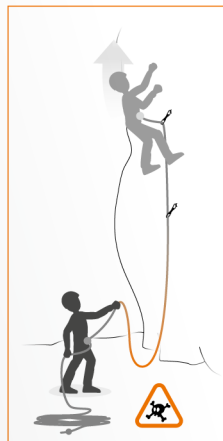
ON THE ROUTE

Belaying a climber

Primary belaying position

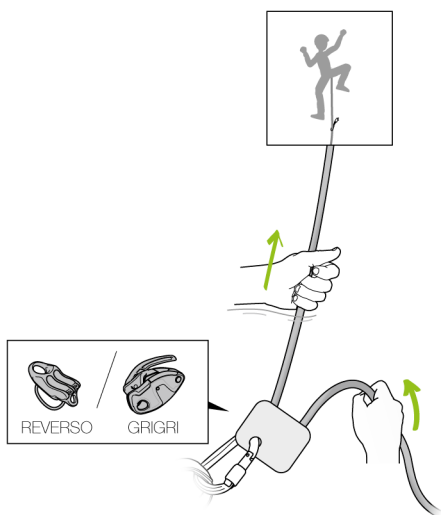


or

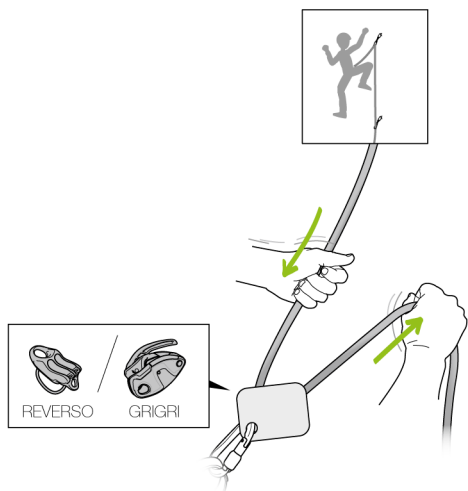


Belaying a climber

Technique: giving slack



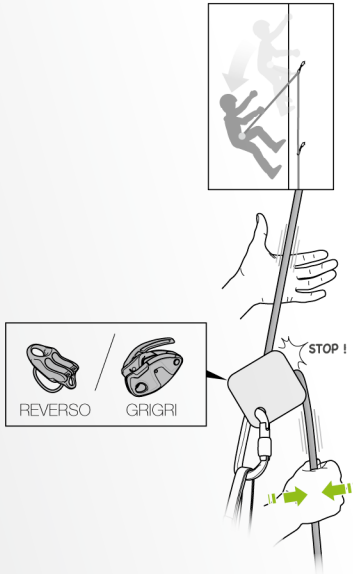
Technique: taking up slack



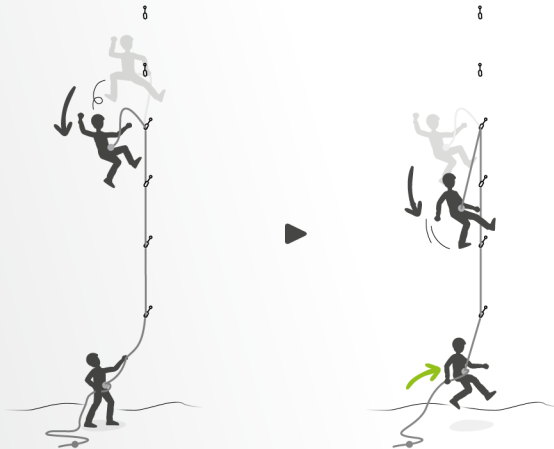
ON THE ROUTE

Belaying a climber

Technique: holding a fall



For a dynamic belay, do a small jump or take a step forward to reduce the impact force on the climber:

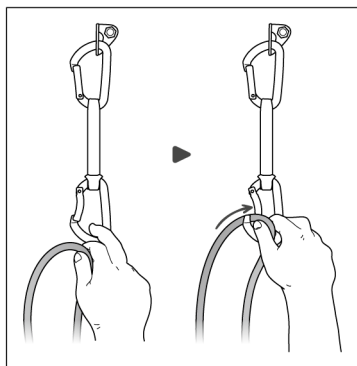
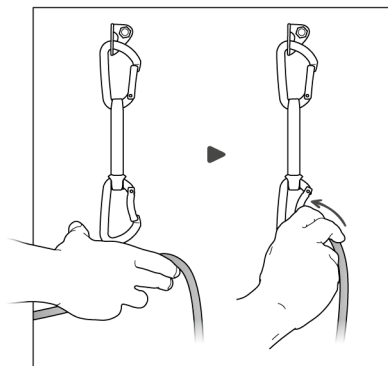


Clipping

Clipping at waist level:



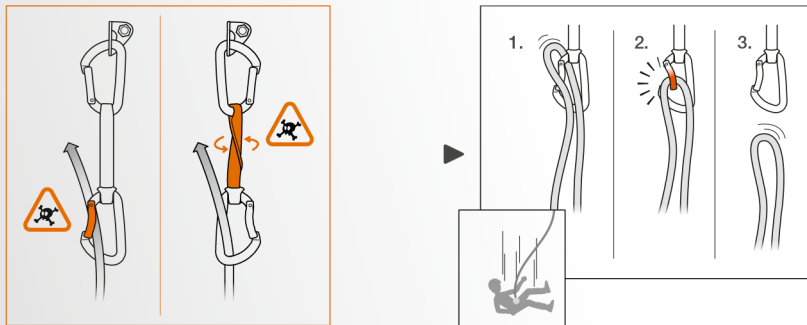
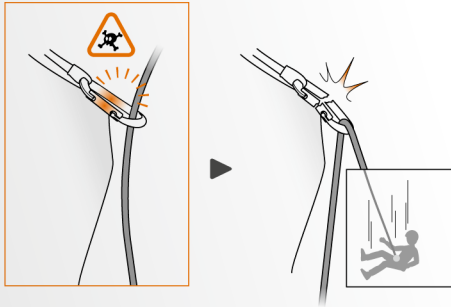
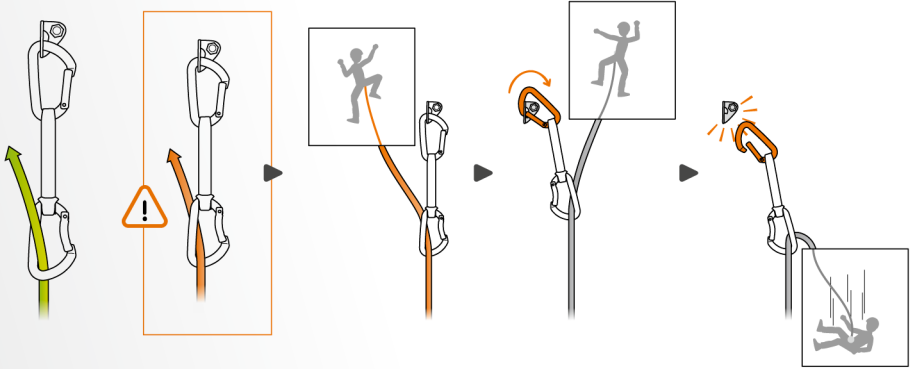
The most common clipping techniques (other techniques exist):



ON THE ROUTE

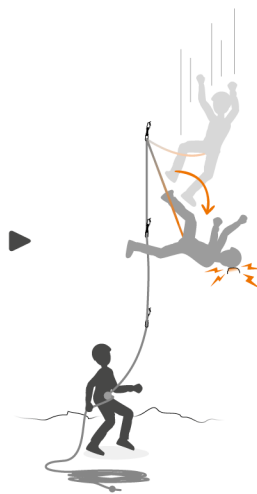
Clipping

Clipping errors to avoid



Errors to avoid

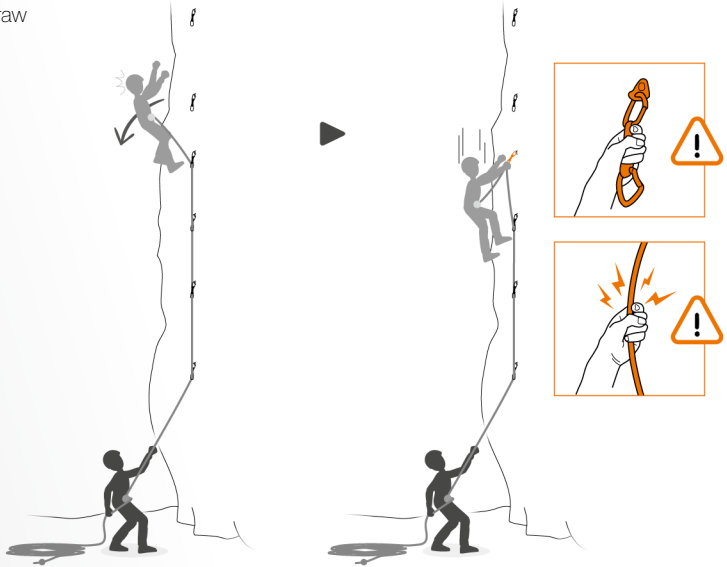
Rope behind leg



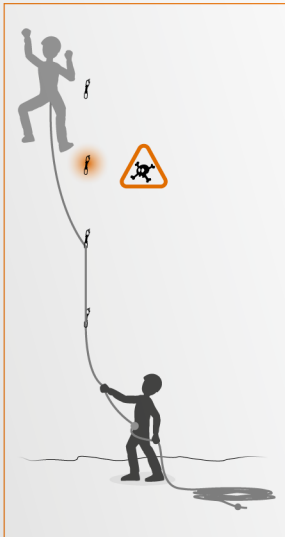
ON THE ROUTE

Errors to avoid

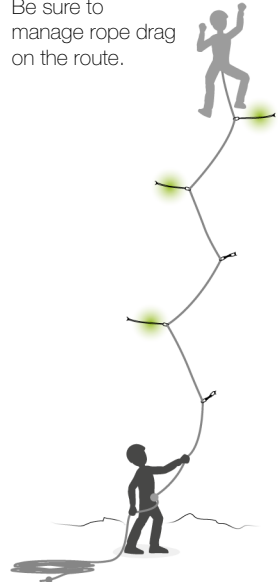
Do not grab a quickdraw when falling.



Do not skip a quickdraw.



Be sure to manage rope drag on the route.



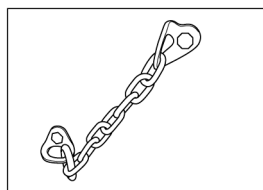
Setting up the rope for lowering

Regardless of the technique used, the belayer must continue to belay the climber throughout the entire sequence, never letting go of the brake-side rope.

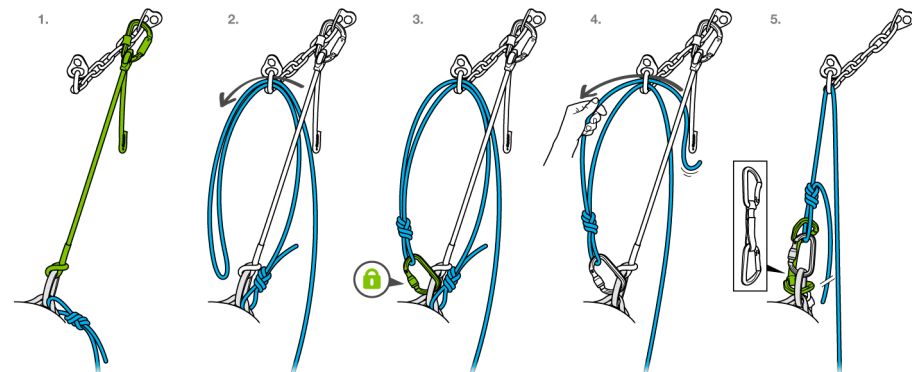
You may encounter different belay station configurations.

Case 1: belay station with points connected by a chain

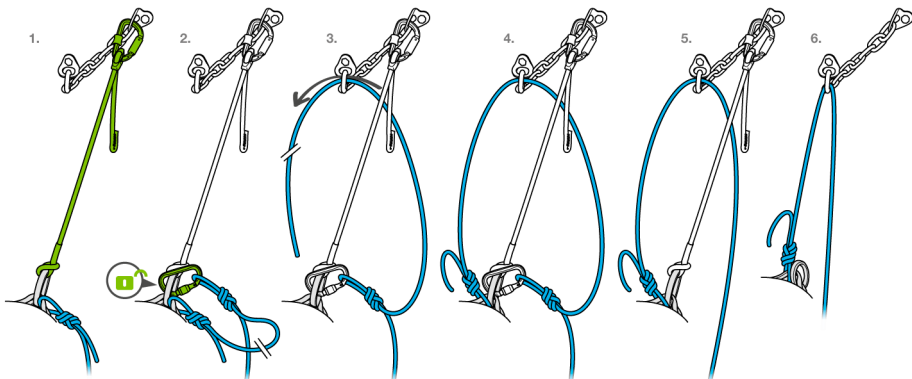
Example:



Technique 1: climber stays tied in during the entire sequence and is lowered on a carabiner

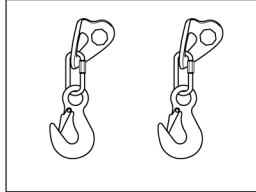
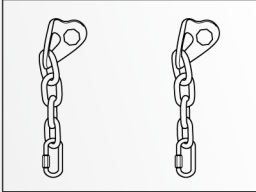


Technique 2: lowering on a tie-in knot

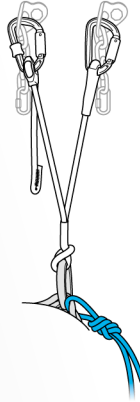


Case 2: belay with unconnected points

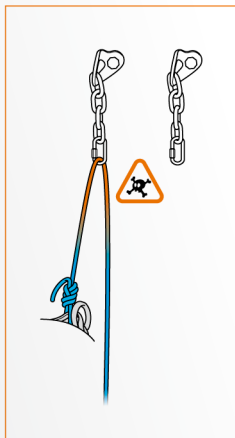
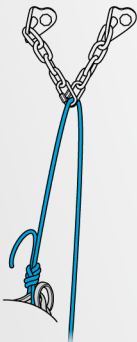
Examples:



1. Connect to both points with your lanyard:



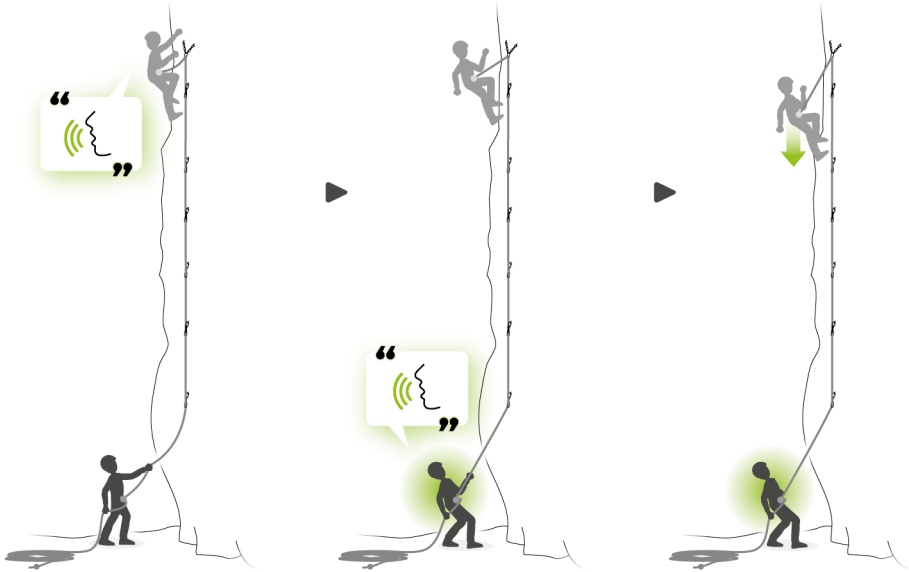
2. For the next steps, use one of the techniques previously described, running the rope through both points of the belay station:



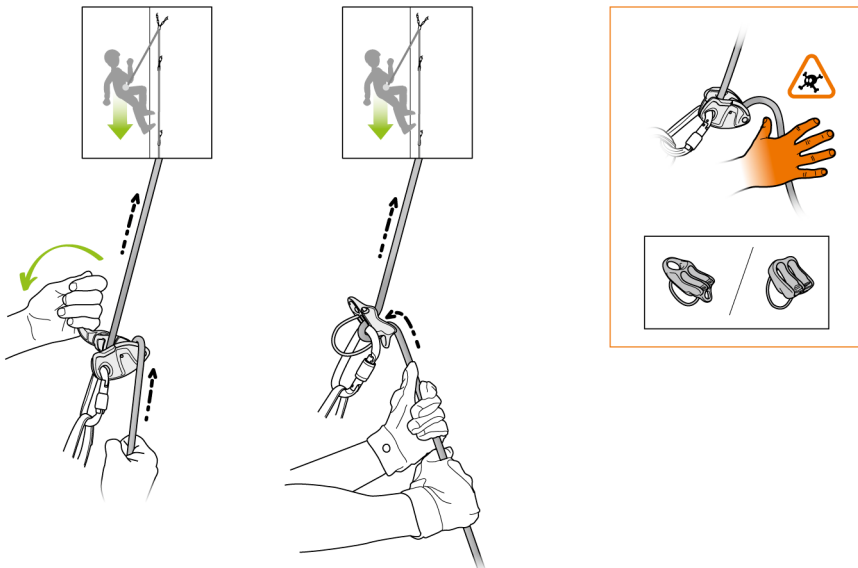
LOWERING

Technique: lowering

Communication before lowering



Technique: lowering

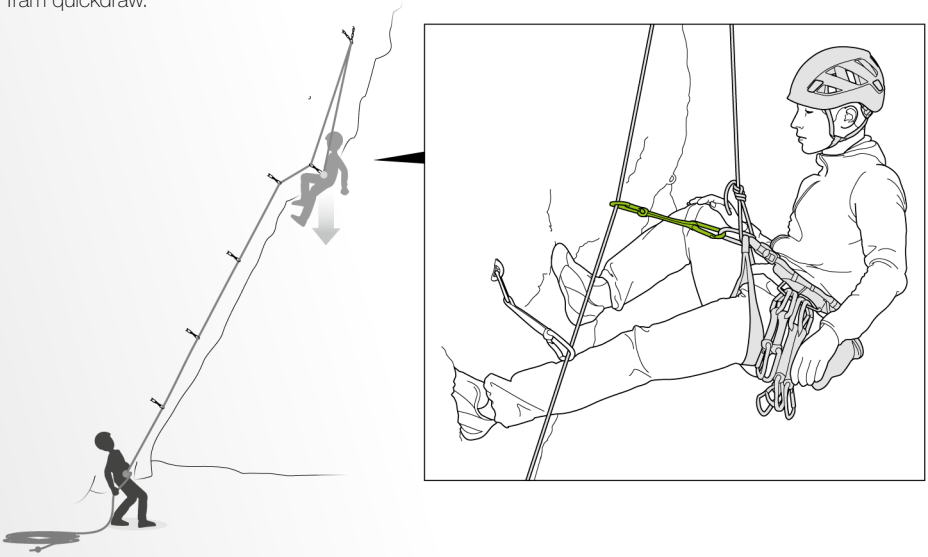


LOWERING

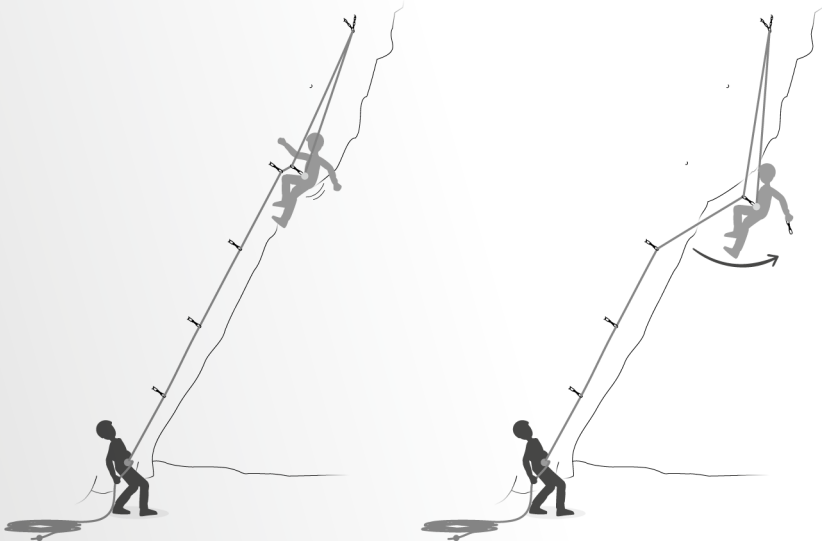
Recovering quickdraws while being lowered

Installing a quickdraw between the climber's harness and the belayer's side of the rope:

Tram quickdraw.



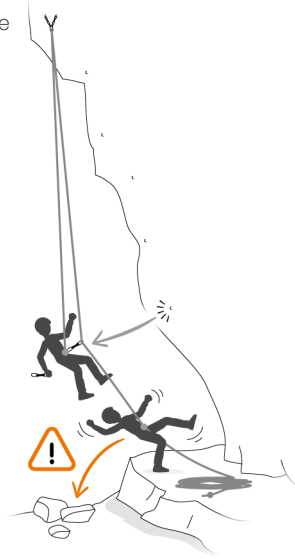
The climber holds onto the rock to disconnect the quickdraw.



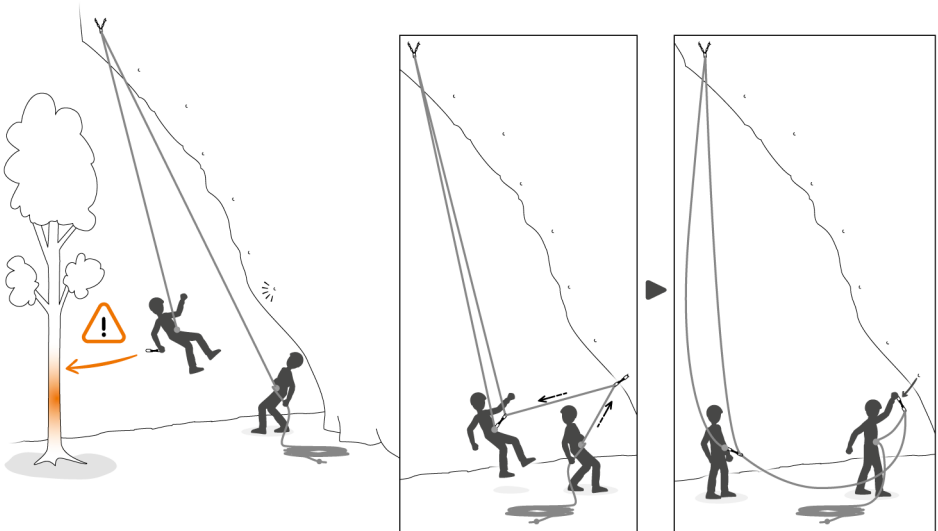
LOWERING

Recovering quickdraws while being lowered

When nearing the ground, remember to remove the tram quickdraw before disconnecting the last draw.



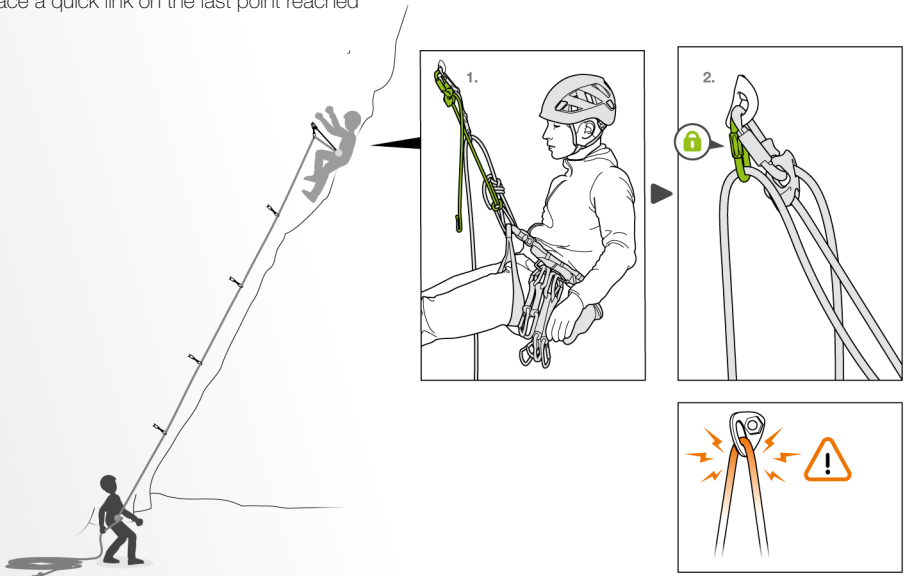
When an obstacle is unavoidable and the quickdraw is recoverable from the ground, the climber may be lowered with the last draw left in place. This technique works if the quickdraw is not too high or difficult to access.



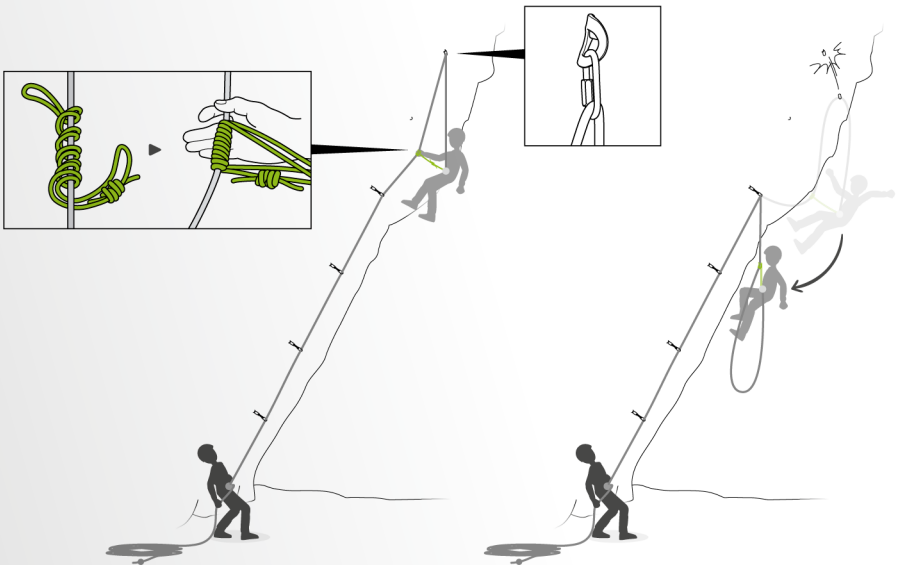
RETREAT

When you don't reach the top of the route

Place a quick link on the last point reached



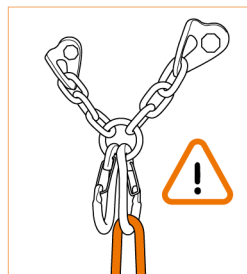
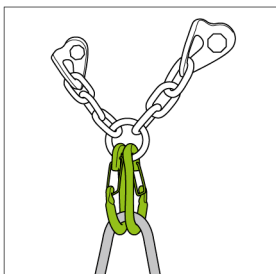
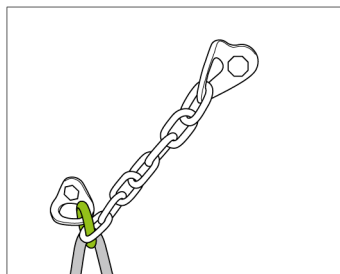
Recover the quickdraws while being lowered



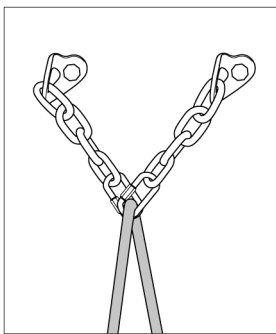
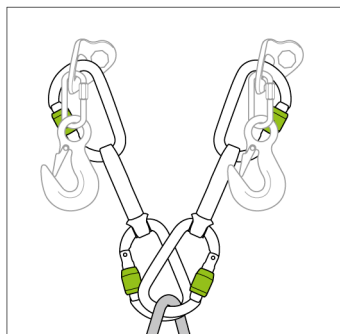
The specifics

Ways to set up the rope on the belay station

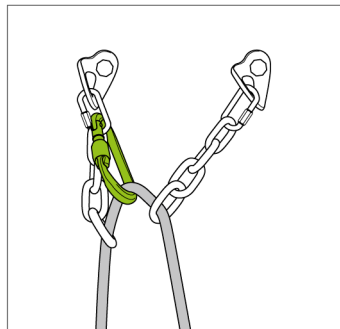
Examples of setting up the rope on a belay station with connected points:



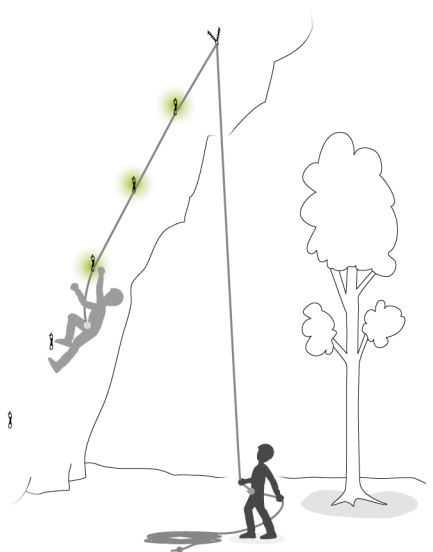
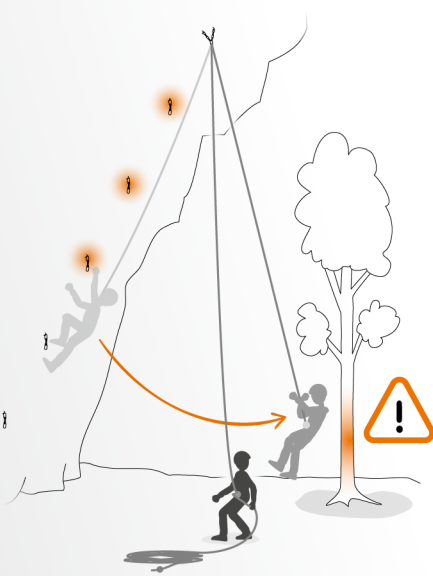
Examples of setting up the rope on a belay station with unconnected points:



To limit wear on chain links, you may, for example, use the following method:



For overhangs: climb on the rope strand that is clipped through the draws.



For more information...



Find more technical advice and videos on sport climbing at
www.petzl.com



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The information contained in this brochure is non-exhaustive.
See the Instructions for Use for the products, and their related
technical advice. Training is essential.
You are responsible for your own actions, decisions and safety.

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