

Sport climbing tech tips

Basics

1 Make sure that the people you're climbing with are competent and independent.

Check that both of you know:
 - how to tie in and belay correctly.
 - all the rope management techniques for descending.

2 Analyze the climbing environment

Critically evaluate the equipment, bolt placements, and the quality of the bolt. Is there risk of ground fall, before or after the first bolts? Spot, if necessary. Is there risk of the climber falling or of rock-fall? Don't hesitate to wear a helmet.

3 Check each other

With routine and fatigue, we become less cautious.
 Remain alert to:
 - correct tie-in: finished knot, tightened and attached to the tie-in point
 - rope loaded correctly in the device, locked and correctly positioned carabiner
 - the rope is running correctly through the quickdraws

4 To belay, always keep one hand on the brake end of the rope

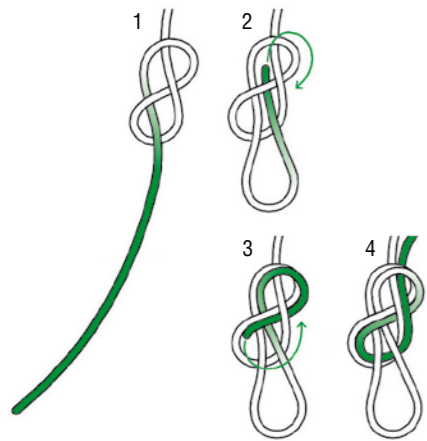
Always follow this rule, even when you have to feed slack quickly or when there is a loop in the rope.
 When the climber is manipulating the rope at the belay station, keep your belay device on the harness and your hand on the brake end of the rope.

5 Be alert when lowering on top-rope

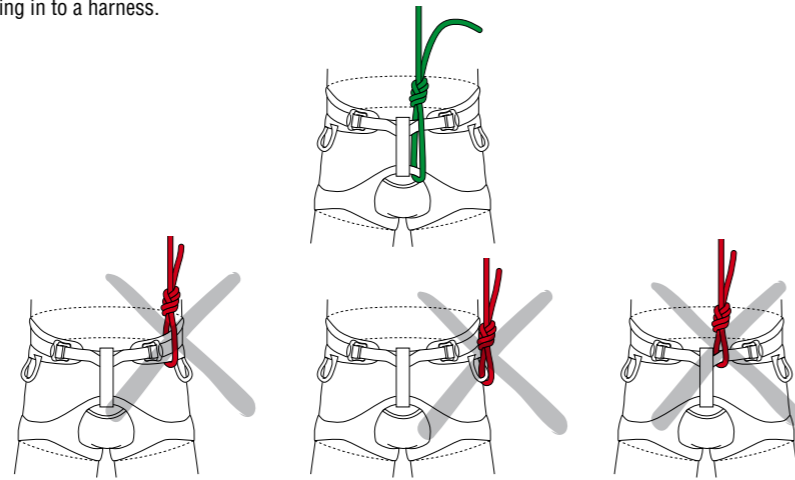
Check the length of the route on the topo. Always tie a knot at the end of the rope. Lower your partner at a reasonable speed.

A. Tying in

Figure-8 knot.

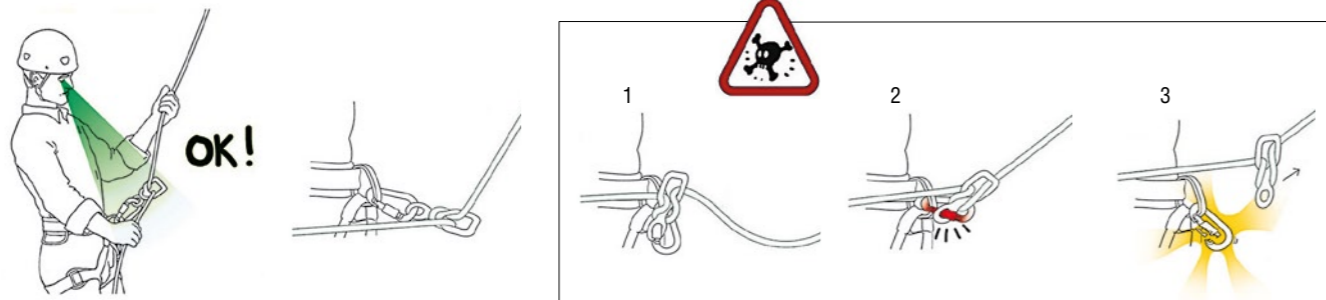


Tying in to a harness.



B. Connection between the belay device and its attachment carabiner

Be careful to properly position the attachment carabiner.



C. Basic belaying techniques

The same technique is used for all Petzl belay devices.

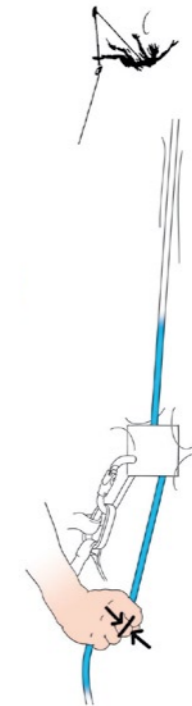
Giving slack.

The brake hand pushes the rope in the device.

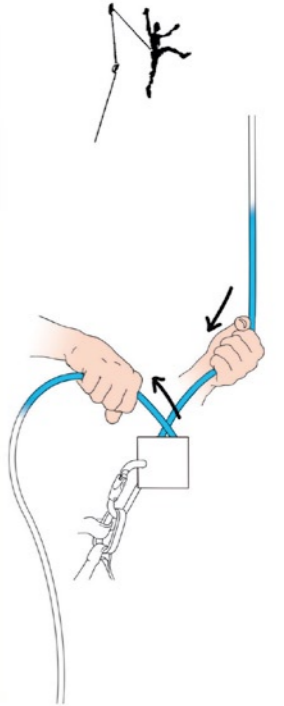


Stopping a fall.

To arrest a fall, the belayer holds the rope firmly downwards.



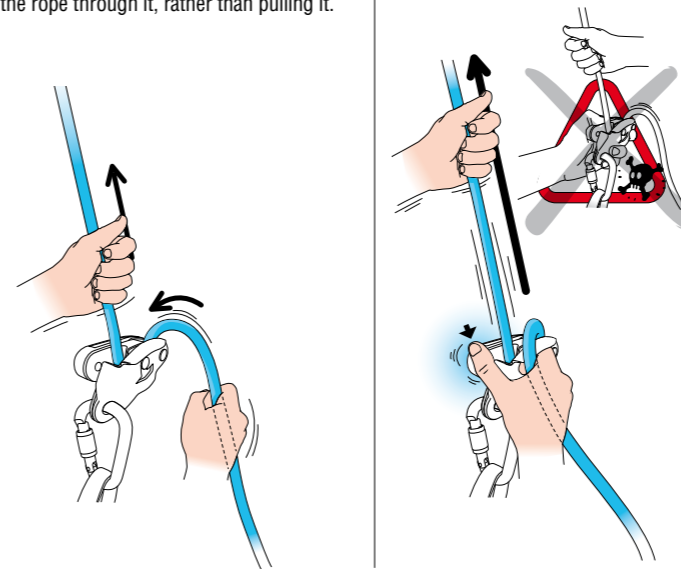
Taking up slack.



D. New GRIGRI technique:

Main position for belaying, giving slack

Get into the habit of keeping your hands in this position; it's the main position for belaying.
 To help make it easier to slide the rope through the device, it's better to push the rope through it, rather than pulling it.



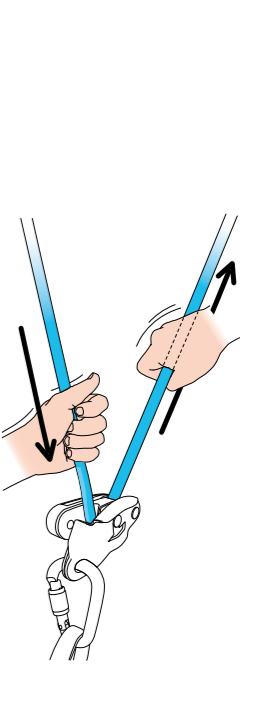
Short transitional position for giving slack quickly

Do not grip the device with your entire hand.

Stopping a fall

The belayer holds the rope firmly downwards. Perform a dynamic belay to absorb the fall.

Taking up slack

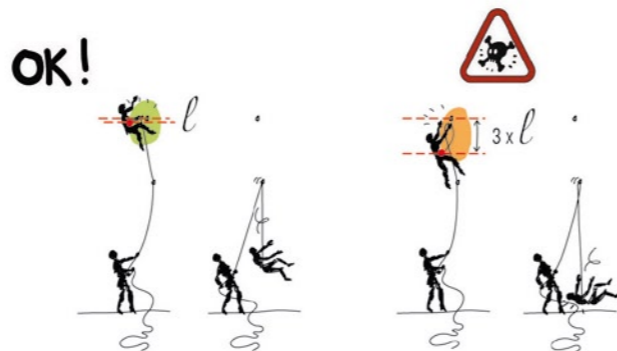


E. Positioning and stance

Spot the leader before the first bolt is clipped.



Clip the second bolt at waist level; this reduces the amount of rope out and thus helps prevent the climber hitting the ground in case of a fall before making the clip.



Stay directly underneath the first piece of protection.



Backing-up the belayer:
- weight difference

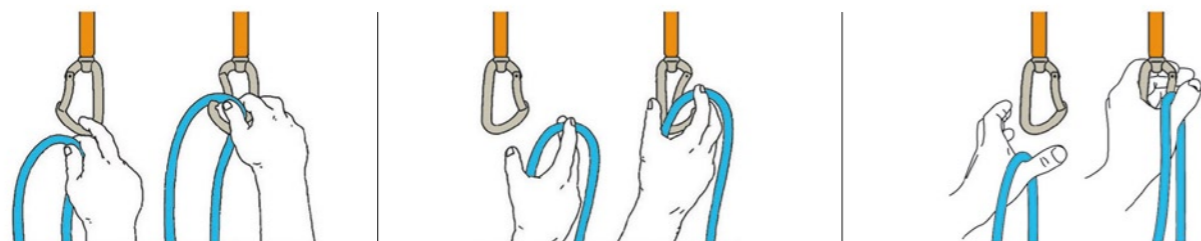


- belaying under a roof

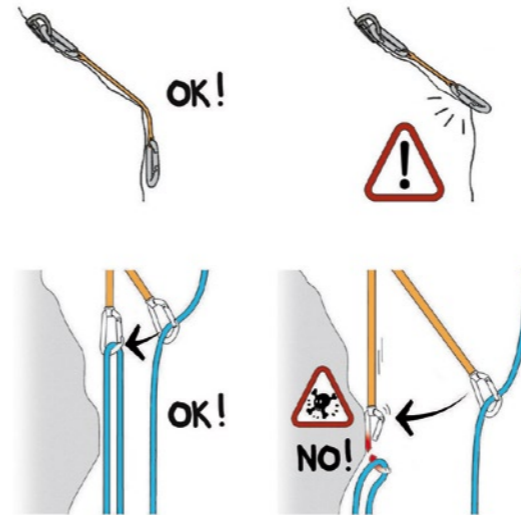


F. Clipping a quickdraw

Clipping methods.



Choose the length of the quickdraw according to the situation.

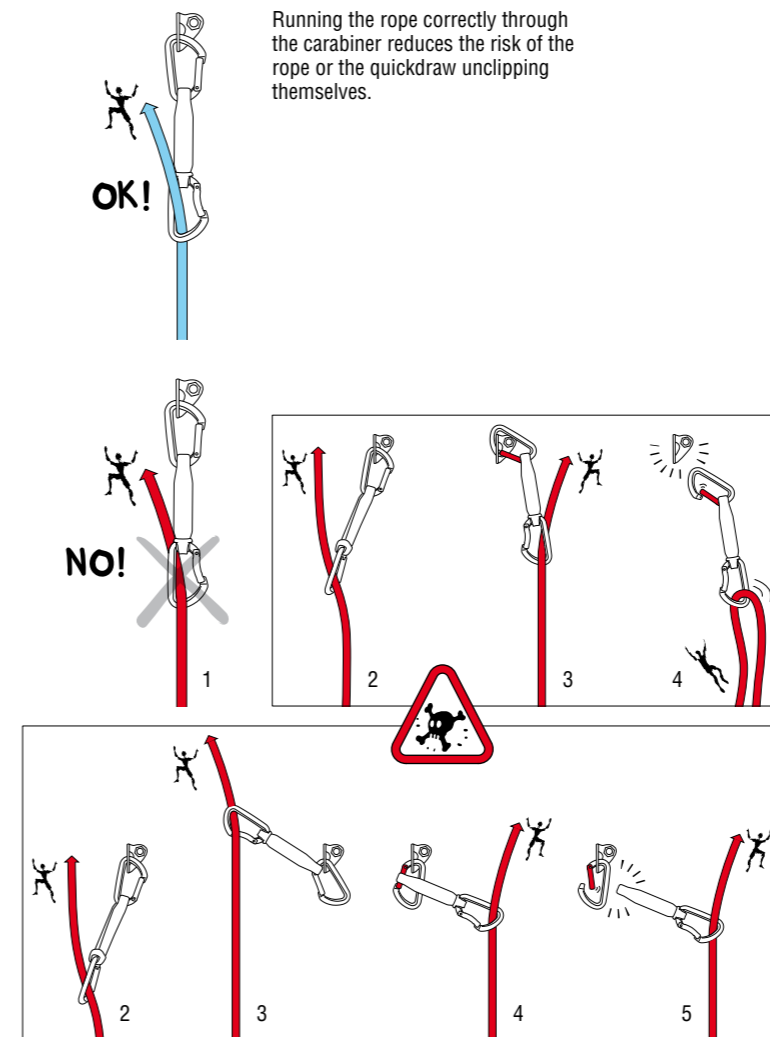


Extending an anchor with a sling to avoid incorrect carabiner loading.

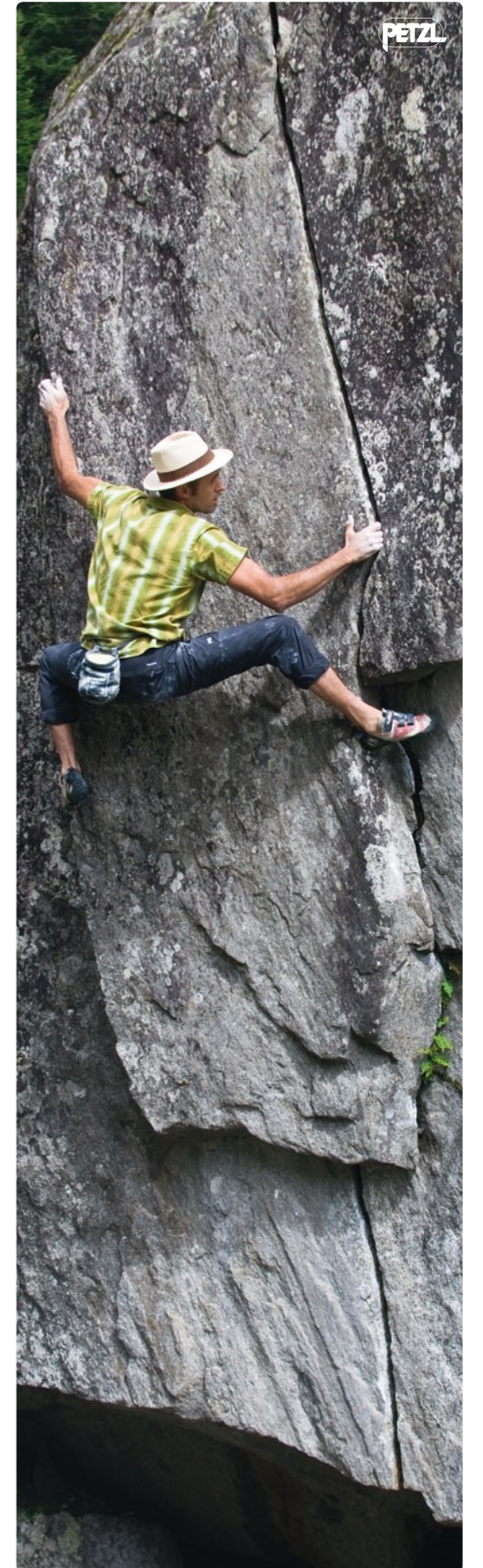


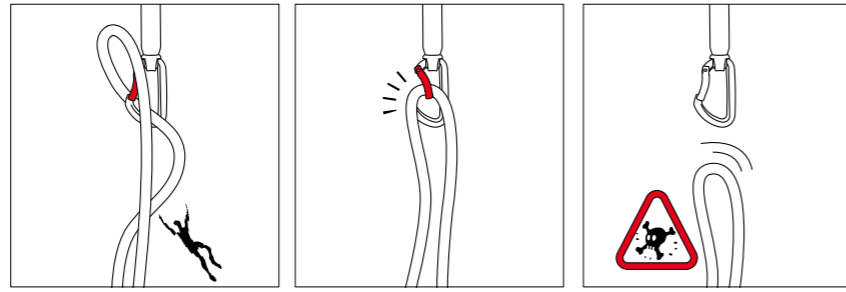
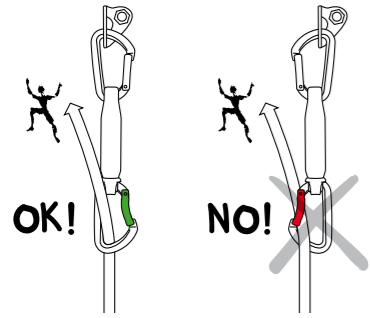
G. Rope path

Running the rope correctly through the carabiner reduces the risk of the rope or the quickdraw unclipping themselves.

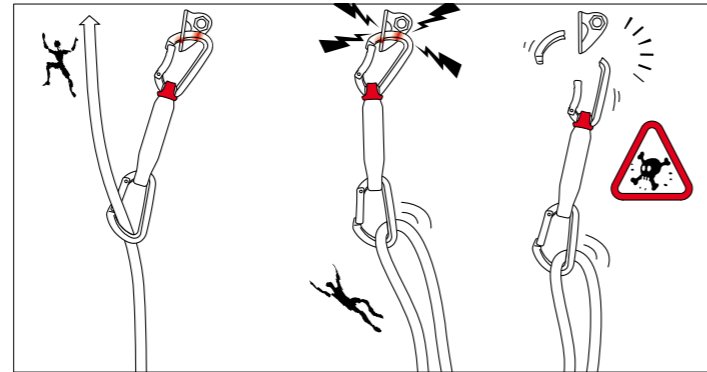
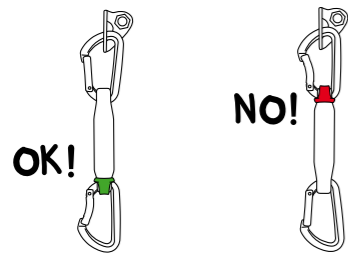


Between attempts on the Ultimate Route, Daniel Dulac takes it easy in Sundergrund. Don't worry about the landing...
Photo © Jocelyn Chavy



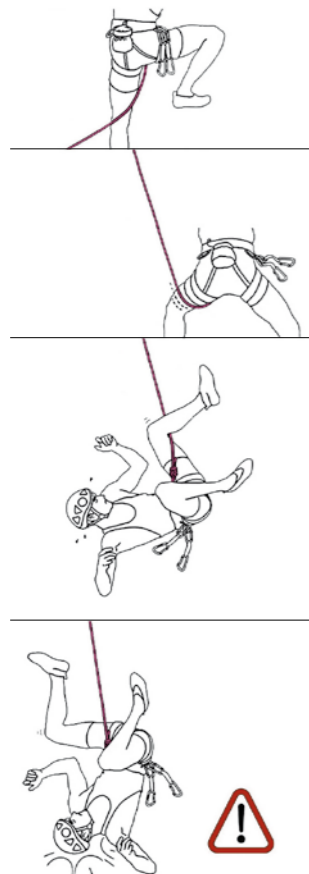


Do not clip a carabiner with a STRING directly into a bolt. The carabiner could become constricted.

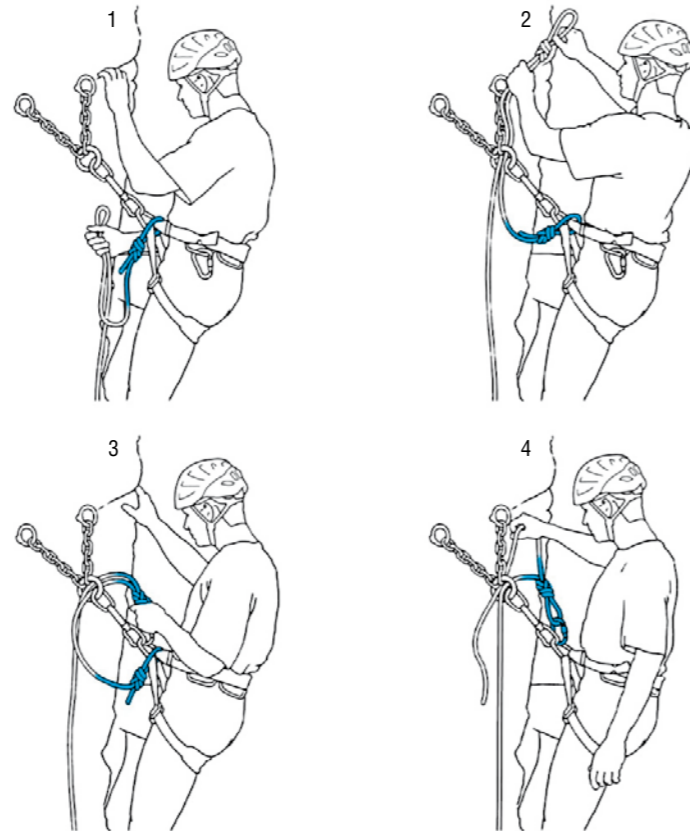


H. The fall

Warning: do not let the rope run behind your leg.



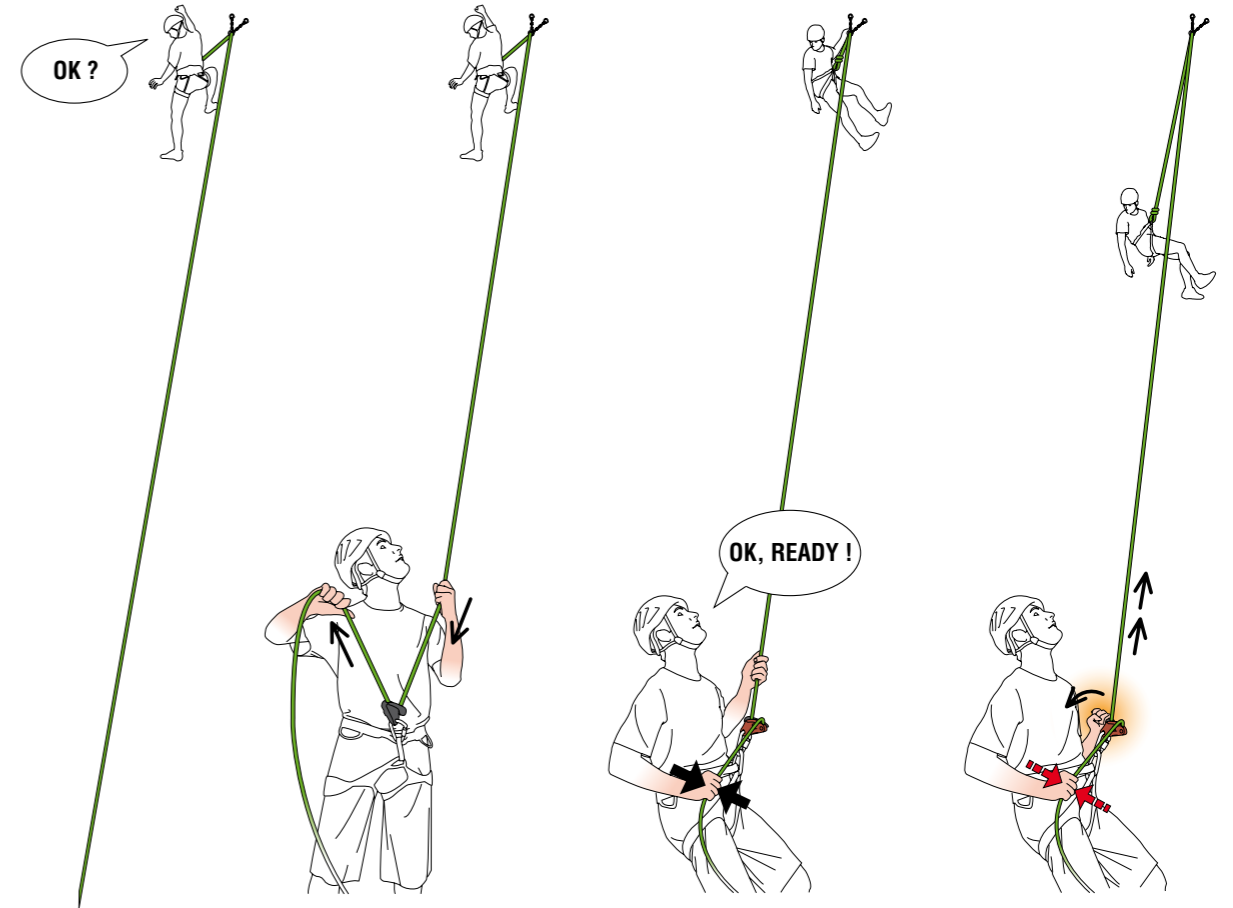
I. Setting up to be lowered without untying



Warning: do not use this method if you wish to repeat a section of the pitch: instead tie in directly to the harness.

J. Lowering with a GRIGRI and communicating with your partner

Lower slowly and always keep a hand on the brake end of the rope.



Liv Sansoz with the mascot of the Roc Trip. Photo © Jocelyn Chavy

