



Access
the
inaccessible®



ACCESSBOOK n°2

How do I prepare
for ski touring?





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Access the inaccessible. You have aspirations and our job is to help you realize them.

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

This booklet aims to help you prepare for ski tours. Here you will find technical equipment and advice for your next tours.

Happy reading and a good ski season to you!

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THE DAY BEFORE THE TOUR

Preparation and the basics of packing

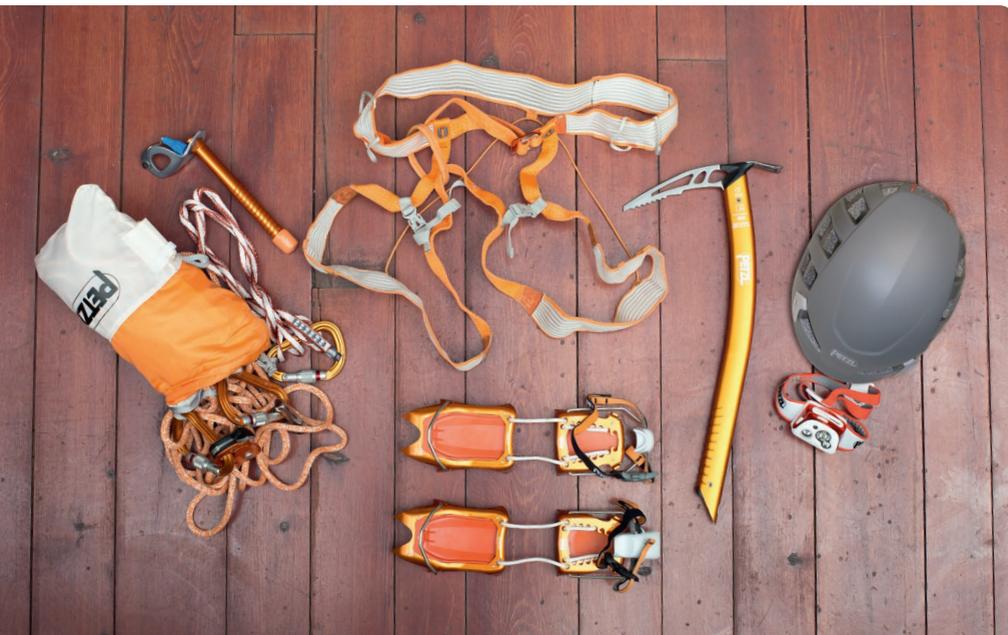
Before going out to enjoy a day of skiing in the mountains, it is essential to prepare for your tour the day before:

- Check the weather and avalanche bulletin for the area where you are going
- Prepare your route using a guide and/or map
- Prepare your pack and equipment

Packing basics

- Warm clothing: down jacket, waterproof jacket, gloves, hat
- Sun protection: sunscreen, sunglasses, ski mask
- Food and drinks (water, thermos of tea)
- Emergency kit with medicine, survival blanket, emergency headlamp
- IGN map, telephone with spare battery

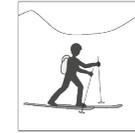
Example of technical equipment for a glacier tour.



© Petzl / Lafouche

THE DAY BEFORE THE TOUR

Technical equipment



Basic technical equipment

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- (*)



To take if rappelling

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To take if doing glacier travel

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- (*)
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- DVA, shovel and probe
 - Helmet
 - Headlamp
 - Ice axe / crampons
- * You decide whether to take based on snow and terrain conditions, your comfort level...

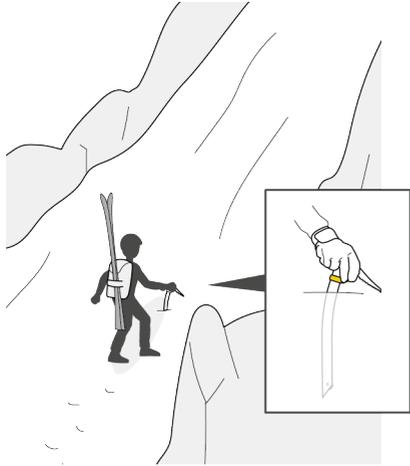
- Harness
- Locking carabiners
- 120 cm slings
- Single rope or RAD LINE.

- Ice screws
- Crevasse rescue kit (e.g. MICRO TRAXION / TIBLOC / PARTNER pulley/ cord) or RAD SYSTEM
- Lanyard

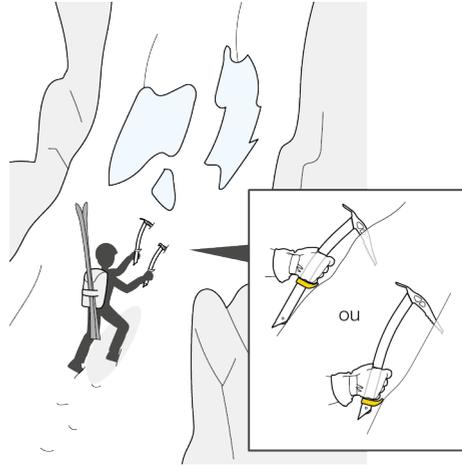
CLIMBING A STEEP SLOPE

Using and carrying an ice axe

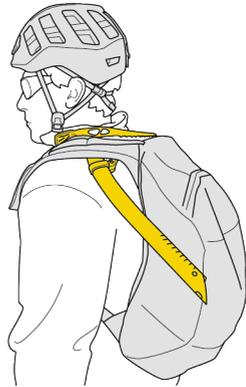
Climbing a snow slope



Climbing a steep section or hard/icy snow slope



On steep slopes, during the descent, keep your ice axe within reach.

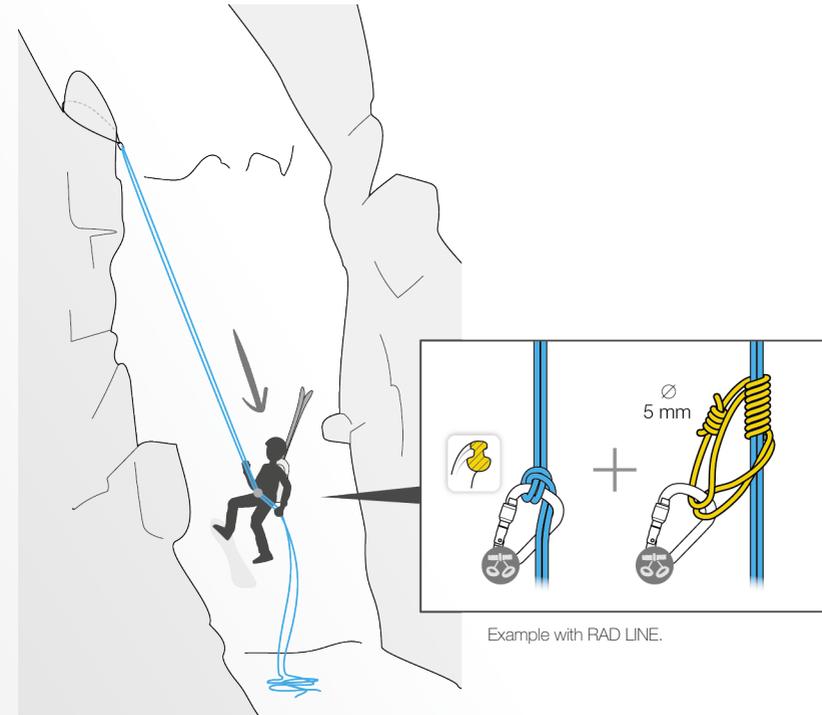


Ice axe under a pack shoulder strap.

- + Accessibility in case of emergency.
- + Comfortable and reliable.

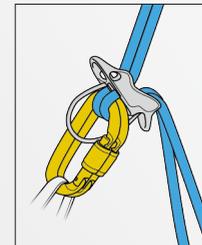
CROSSING A BULGE OR STEEP SECTION

Rappelling



Example with RAD LINE.

Rappelling with RAD LINE and a REVERSO®



With the 6 mm RAD LINE cord, the braking capability of the REVERSO® is insufficient. While rappelling, if the user needs to cross difficult sections, free a hand and/or untangle the rope, there is a risk of losing control of the rappel.

Even so, there is a way to use the REVERSO® with the RAD LINE cord: set up your REVERSO® with two braking carabiners.

The advantage of the REVERSO® is its simplicity of use, especially for a beginner with poor Munter hitch skills. It also twists the rope less than the Munter hitch.

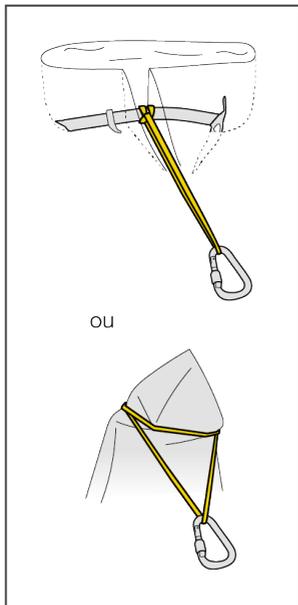
Helping a partner

If you think your partner may have difficulty descending a couloir, stay above him/her with the rope and equipment for belaying and assisting the descent.

Start by finding an anchor

Solution 1: make a temporary anchor in the snow (example: ice axe deadman).

Solution 2: find a natural anchor (example: rock horn, tree...).



Example of anchors



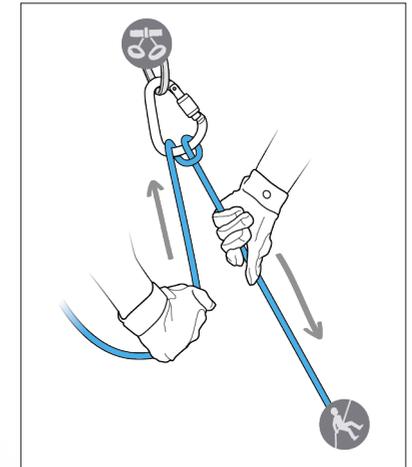
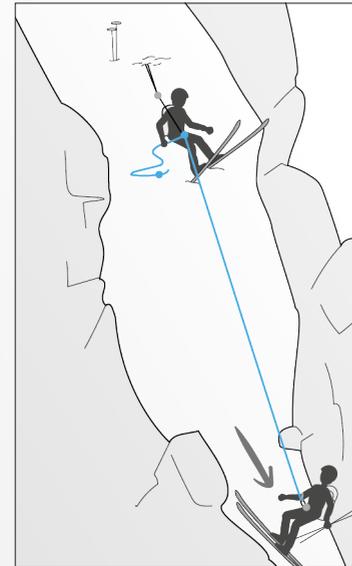
Once tethered to the anchor, you can throw the rope with a carabiner so that the first skier can easily attach him/herself.

Helping a partner

Lowering your partner

Do not belay directly off a temporary anchor of dubious strength.

The belayer is tethered to the anchor, keeping the tether taut to reduce the chance of shock loading. The belayer takes a braced stance, possibly on a platform dug in the snow, and belays off the harness.



Belaying is done with a Munter hitch as it offers adequate friction in any position.

Movement of the second

On a fixed natural anchor, the second can set up a rappel to descend the difficult section. Otherwise, he/she should downclimb or ski.

Preparing the rope and equipment

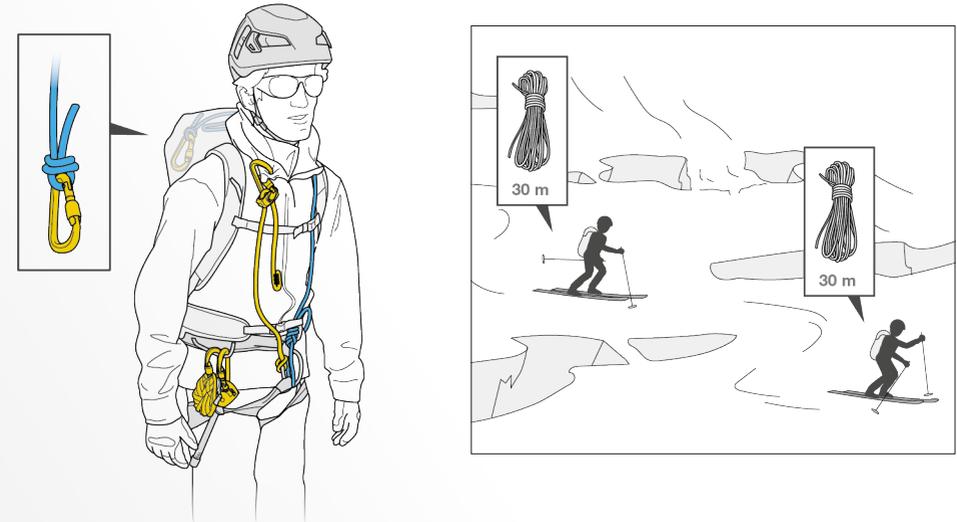


Organizing your equipment

- Ice screw and crevasse rescue equipment attached to the harness
- Ice axe attached to the pack
- Rope and crampons easily accessible in the top of the pack

Unroped travel

When skiing, it is common to travel unroped on a glacier. However, the rope must be easily accessible and ready for use. Be sure to properly pack the rope to avoid knots and attach a carabiner to the rope end. If a skier falls into a crevasse, you must be able to quickly send him/her a rope with a carabiner, so that he/she can quickly attach him/herself.



© Petzl / Marc Daviet

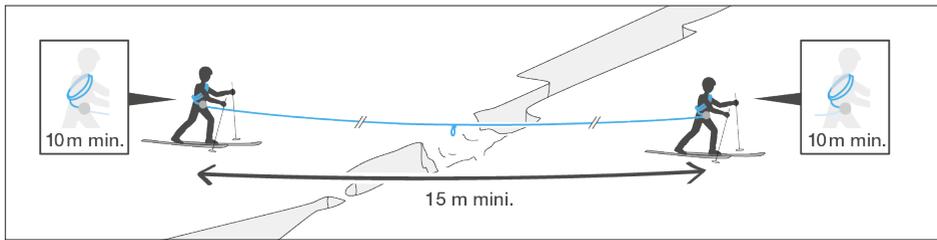


Roped travel

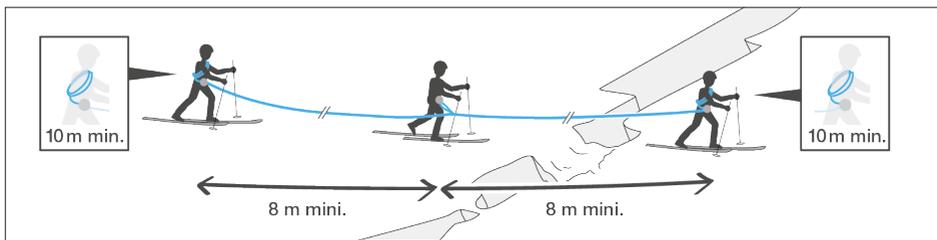
Tie-in distance and reserve rope

Sufficient tie-in distance not only allows having only one teammate exposed to the crevasse, but also gives the belayer enough space for a fall-arrest maneuver. Each teammate must have reserve rope on him/herself to be able to set up a haul system.

Two person rope team



Three person rope team



WARNING: be sure to always keep the rope taut



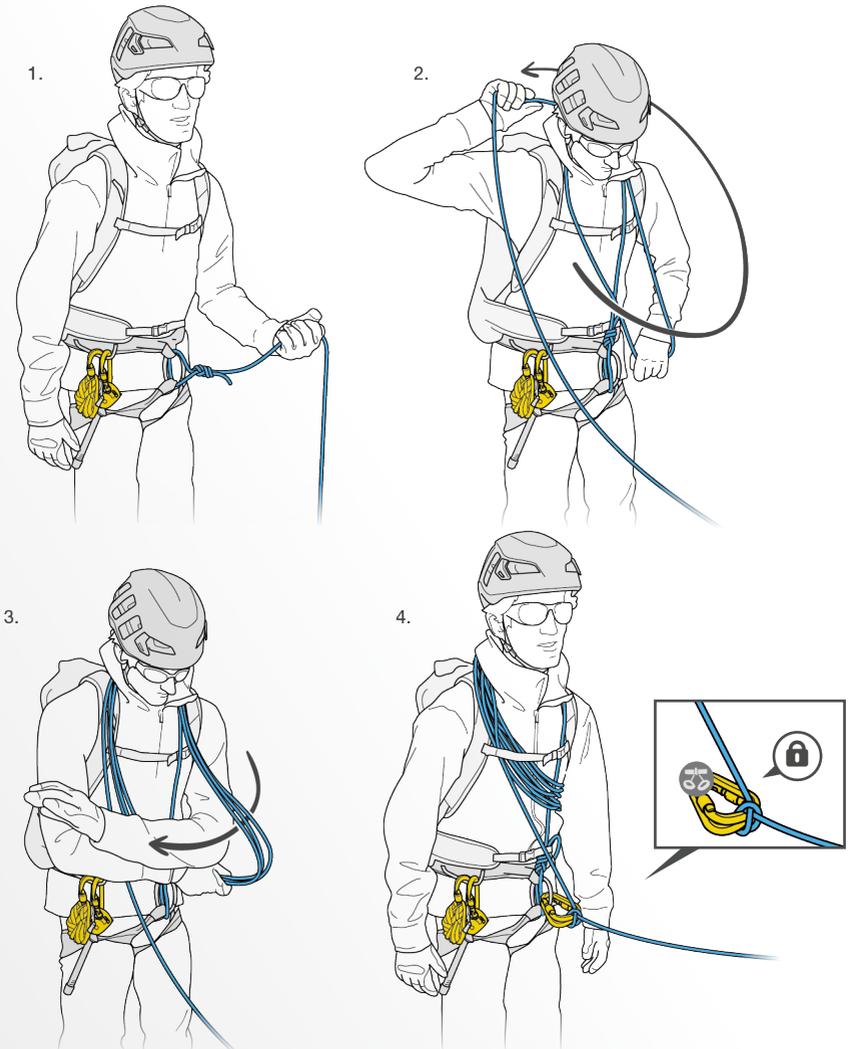
If traveling in soft snow and/or with a significant difference in weight between team-mates, you can put knots in the rope. More info available at petzl.com

Roped travel

Tying-in at the ends of the rope team

Solution 1. With chest coils

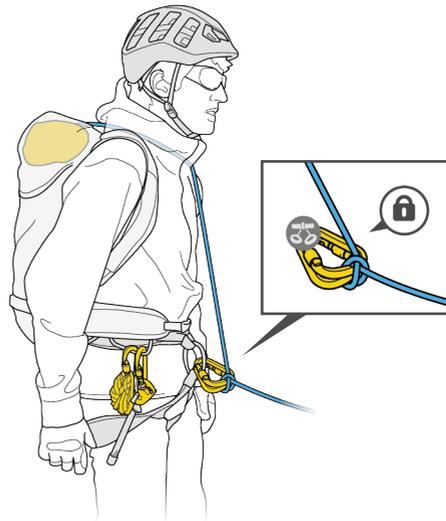
For terrain requiring frequent adjustments to team member spacing.



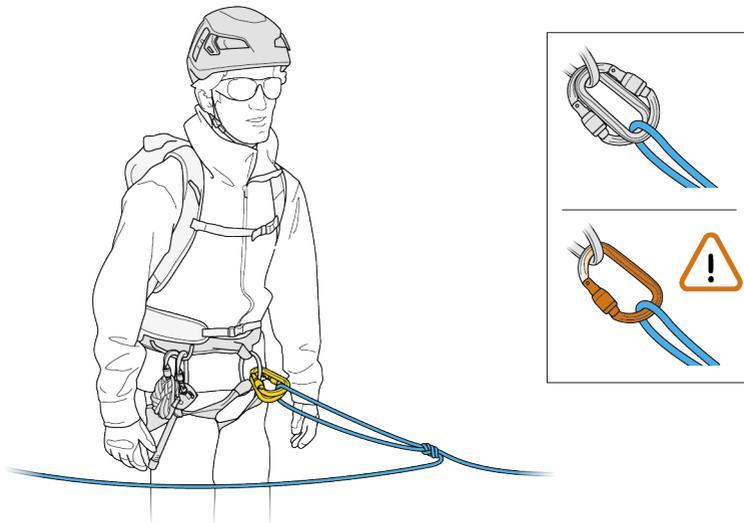
Roped travel

Solution 2. With rope bagged and stowed in the pack

Fixed configuration for long walks.



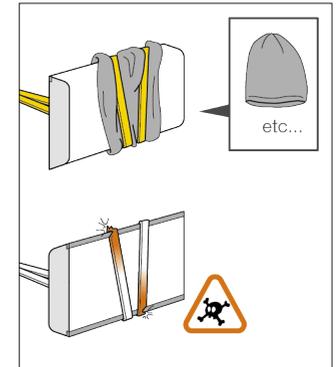
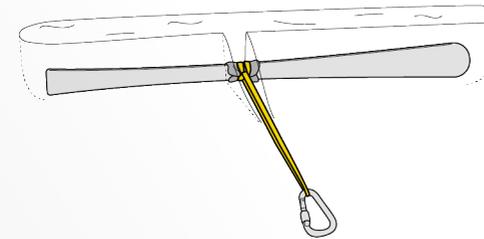
Tying-in at the middle of the rope team



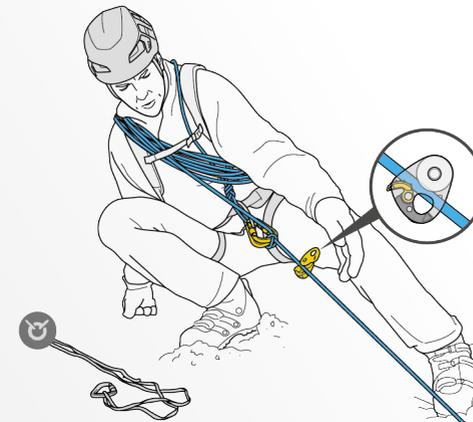
Transferring the victim's weight to an anchor

Once the fall has been arrested, the person on the surface holds the victim by acting as a counter-weight. Rapidly creating an anchor allows unloading of the victim's weight to perform the rescue.

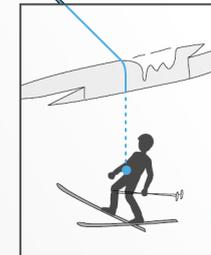
1. Creating a reliable anchor: ice axe or ski buried in the snow, or an ice screw in the ice. Connecting a sling to the anchor, while minding the direction of pull toward the victim.



WARNING: make sure to protect the sling.



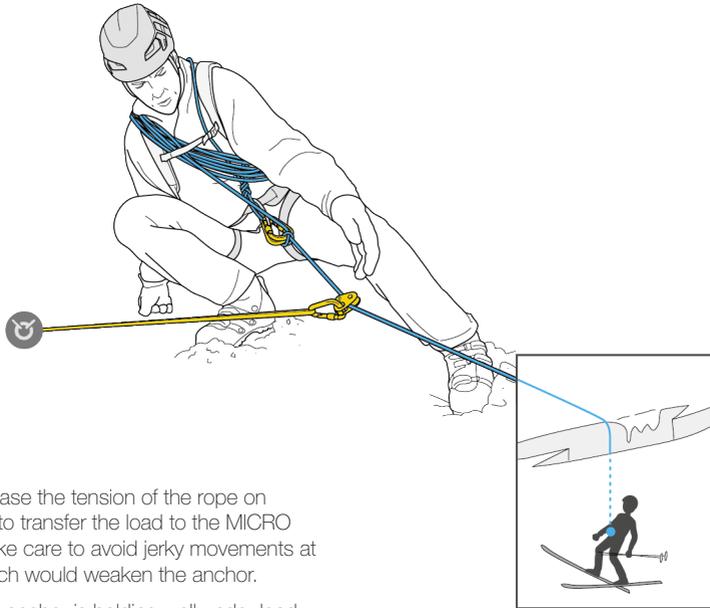
2. Install the MICRO TRAXION on the rope in the direction of hauling: it locks when pulled toward the anchor, and slides when moved toward the victim.



DOING A CREVASSE RESCUE

Transferring the victim's weight to an anchor

3. Connect the MICRO TRAXION to the anchor sling with a symmetrical locking carabiner. Extend the sling to its maximum length while sliding the MICRO TRAXION on the rope toward the victim.



4. Gently release the tension of the rope on the harness, to transfer the load to the MICRO TRAXION. Take care to avoid jerky movements at this time, which would weaken the anchor.

Verify that the anchor is holding well under load. Untie the rope from the harness and free the chest coils, while remaining tied in to the end of the rope.

DOING A CREVASSE RESCUE

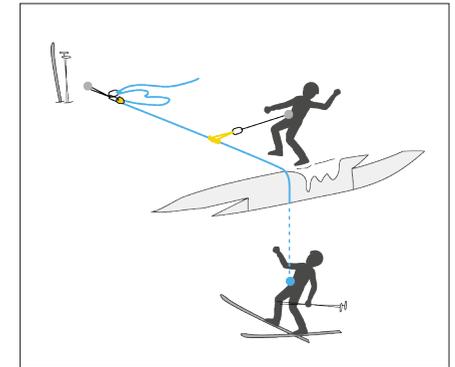
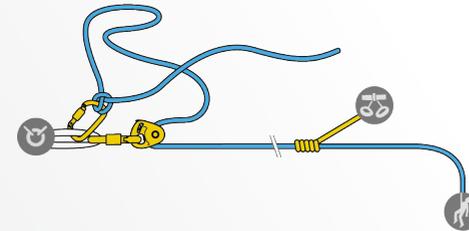
Accessing the edge of the crevasse to evaluate the situation

Once the fall has been arrested and the victim's weight transferred to the anchor, it is necessary to access the edge of the crevasse to assess the victim's condition before starting the haul.

The person on the surface, the "rescuer", must always be anchored. If creating a second anchor is not possible, the rescuer can use the same anchor as the victim. The rescuer's movements must be done with the rope under tension to avoid a shock load in case of a fall, which could weaken the anchor.

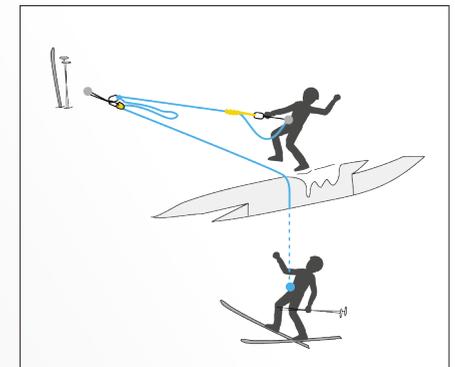
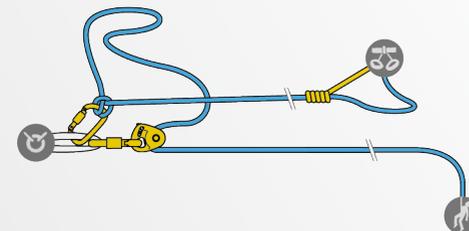
Moving with an autoblock knot on the victim's rope

If the "rescuer side" of the rope is too short, it is possible to move with the autoblock on the taut rope supporting the victim. The rescuer must tie in again as soon as possible after returning to the anchor.



Moving with an autoblock knot on the rescuer's rope

The autoblock allows the length of the rescuer's belay rope to be constantly adjusted, without needing to untie from the rope.



For more information...



Find more technical advice and videos on ski touring 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. In the mountains, the environment you are traveling in is inherently dangerous: You are responsible for your own actions, decisions and safety.

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