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It's a good idea to keep rubber or leather guards on the pick, adze, and spike, particularly on an ax that's as sharp as it should be.  
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Your risk of falling during the ascent or descent of a steep snow slope is highest when you are moving or when you are in an out-of-balance position.  
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## SNOW CLIMBING

# Techniques

### Using the ice ax



### Snow Climbing: Techniques: Using the Ice Ax

Knowing the technique of planting the ice-ax shaft to help guard yourself against falls while snow climbing is as important as knowing what to do if it occurs. This technique is called self-belay. **How to Carry an Ice Ax.**

Carry your ice ax carefully. Keep in mind what its sharp points and edges could do to you or your partners. Whenever the ax is not in your hands, be sure it's secure against slipping down a snow slope or cliff.

1. **When you're on the move and don't need the ax**, slip it through the ice-ax loop on your pack and strap it down.
2. **If you're simply carrying the ax in one hand**, grasp the shaft at the balance point (shaft parallel to the ground), the spike forward and the pick down.
3. **During travel on snow that alternates with rocks or steep brush where you need both hands free**, you can get the ax out of the way by sliding it diagonally between your back and the pack. The spike is down and the pick, between the two shoulder straps, is well seated, clear of your neck and pointing in the same general direction as the angle of the shaft. The ax can be stowed and retrieved quickly, and this works fine for short stretches. Don't forget to retrieve it before taking off the pack or you may lose it.

#### How to Grasp an Ice Ax.

How you hold the head of the ax when climbing in snow depends on your preference and on the climbing situation. There are 2 principal ways to grasp the ax.

1. **Self-arrest grasp:** The thumb goes under the adze and the palm and fingers go over the pick, near the shaft. As you climb, the adze points forward.
  - o *Pros:* Puts you in position to use the ax to brake a fall down a steep slope. However, you're not going to fall very often.
  - o *Cons:* All the pressure of planting the ax as you climb is concentrated where the narrow top edge of the pick meets your palm. That hurts after a while, and you may not plant the ax as securely as you might otherwise. This compromises the safety of your self-belays.
2. **Self-belay grasp:** The palm sits on top of the adze and the thumb and index finger drop under the pick. As you climb, the pick points forward.
  - o *Pros:* Much more comfortable because the pressure of placing the ax is spread over the wide, flat top of the adze, where your palm now rests. Adequate self-belay should reduce the probability of a fall to almost zero.
  - o *Cons:* If you fall, you'll have to immediately flip to a self-arrest grip. You should practice this move during self-arrest drills.

#### How to Self-Belay.

Self-belay is the technique of planting the ice-ax shaft to help guard yourself against falls while snow climbing. It lessens the likelihood that a simple slip or misstep on a snow slope will turn into a long fall. It is used to safeguard the ascent or descent of a steep snow slope when the potential for a fall is the highest: when you are moving or when you are in an out-of-balance position. You can use either a self-belay grasp or a self-arrest grasp on the ax, though you'll probably find more power and ease with the self-belay grasp.

1. Be sure both feet are secure (in the position of balance described in the next section).

2. Jam the spike and shaft of the ax into the snow and continue to grip the head of the ax with one hand as you move a step forward with each foot.
3. When both feet are again secure, pull the ax out and replant it farther along.
4. Continue this procedure until you feel it's safe to proceed without it.
5. If you slip, keep one hand on the head of the ax as you grab hold of the shaft at the surface of the snow and trust your weight to it. The key to a successful self-belay recovery is the grabbing of the shaft right where it emerges from the snow, so that your pull is against the buried shaft while the hand on the head of the ax minimizes the risk of it levering out.

Used like this, the ice ax is ready as a safety post as you are moving your feet. To be reliable, the shaft must be placed deep enough, in snow that's firm enough, to hold your full weight. Practice this technique on a slope of hard snow with a safe run-out to develop the confidence to know when a self-belay will hold while you replant your feet after a slip. If you're on a climb and begin to doubt your self-belays, it's time to make a critical decision: whether to back off, to rope up, or to climb on, recognizing the risk you're taking.