

# Skating Technique Basics

---

## [Skating Intro and Beginning Tips](#)

### [V Skating](#)

### [V2 Alternate \(open field\)](#)

### [V1 \(off set\)](#)

### [V2 \(both sides\)](#)

### [Diagonal V](#)

### [Marathon Skating](#)

---

*Important Note: All training and technique information posted on xcskiworld.com are suggestions only and should not be considered a substitute for supervised fitness programs or professional instruction. Use of such material is done at your own risk with full knowledge of the inherent risks of any fitness or exercise program. Before beginning and throughout any exercise or workout plan, readers should regularly consult with your physician, follow all reasonable safety precautions, have complete knowledge of all equipment, exercises, locations, and methods as well as your own fitness and ability levels.*

---

## **Skating Introduction**

As a general rule of thumb, most instructors encourage interested skaters to learn how to classic ski before they try to learn how to skate. Possible exceptions to this rule would be advanced/expert Alpine skiers or folks with extensive backgrounds with in-line skating, ice skating, or roller skating.

Balance and edging are the absolute keys to starting the skating motion. Once you get past those two things then you can begin to focus on power and glide. Beginners are often amazed how many of the same principles of motion crossover from the classic technique to skating.

Even more important than with learning classic technique, *start out on flat terrain and go to a groomed XC ski area your first few times!* It is virtually impossible to learn how to skate on anything but a groomed surface or a perfectly packed and smooth natural surface. In fact, the American Cross Country Skiers highly recommend going to a machine groomed area for at least your first 10-15 times skating...this is considerably different than classic technique where you could go off trail after just a day or two learning on groomed trails.

Finally, as with classic technique, renting equipment is a good idea for the first few trips out. After you know you like the motion and what kinds of equipment are available, then you can invest in some gear.

---

## **Beginning Tips**

- ? Rent some good equipment your first few times. Good modern skating boots and properly-sized skis and poles are essential!
- ? You may feel some cramping in your foot arch and ankles due to the stress of trying to balance on narrow skis. This is perfectly natural and usually has nothing to do with your equipment. Just stop and stretch your feet and ankles from time to time. Within a few

days the cramping will go away.

- ? Check out the description of the basic "High Hip Forward" forward section under classic Diagonal Stride. This position along with complete weight transfer from side to side is the foundation of ALL the skating techniques.
- ? The more time you spend getting your balance nailed down the faster you will improve-- true in classic technique and ultra-true in skating.
- ? Go easy while you are learning. Trying to win the Olympics your first time out will just leave you on your lips and you won't end up learning anything! Stay on really easy terrain and focus on long glides with good rhythm.

---

---

## V Skating

The basic V skate starts with a skier standing in a slight V position without poles (as with classic technique this aids in developing balance). Edge one ski to the inside edge and simultaneous push off that ski while driving out onto the other ski. Repeat the other direction. Keep on going until you can build rhythm enough to ski a full 50 meter loop without stopping.

This is the basic V skate. After awhile you can do the same test to feel the **high hip** position as described in the [Classic Diagonal Stride](#) section. After you have the basic edge and glide idea, you'll want to practice the same principles with an emphasis on driving over both skis utilizing the high hip forward concept. This essential V skate motion with the legs is the root of ALL the various V techniques used in Skating. Once you've got V-skating down you are halfway home with any technique. Now you are ready to add poles.

---

---

## V2 Alternate (aka--Open Field Skate)

In the V2 Alternate the skier utilizes a [double pole](#) arm motion on one side of the V skate and an arm recovery swing on the other side. Thus, the skier pushes on one side with the upper body and glides on the other side. I have found this is the most natural Skating technique involving arms for beginners to master. This is due to the relatively low amount of balance needed to generate forward motion. V2 Alternate is excellent for gradual up and down as well as flats. Start by simply thinking of a verbal "push and glide" rhythm. "Push" comes on the double pole AND skate side; "and" refers to the quick weight transfer motion to the other leg; "glide" means you drive your weight unto the glide side while recovering your poles to restart the sequence.

---

---

## V1 (aka--Off Set Skate)

Once a skier learns to V2 Alternate they will quickly find any kind of significant grade is pretty grueling in terms of maintaining momentum. Hence, the V1. Here the skier uses a slightly off-set double poling motion starting out almost identical to the V2 Alternate. The skier starts to compress over their poles, as in the V2 Alternate, but instead of quickly completely a double pole motion the skier continues the poling motion until the torso and trunk has shifted the drive onto the other ski. (See photo sequence) Then comes a quick pole recovery and drive shift back to the original side of emphasis. The off-set poling motion and the continuation of the poling motion are the primary differences between the V2 Alternate and the V1 (at least in a beginners eyes).

Here is a great look at the three phases of the V1 technique. Watch the lead skier in each photo!



1) Poling side with excellent upper body compression and weight shift.



2) Lateral weight transfer with continuation of the poling motion.



3) Superior weight transfer onto the glide side.

---

---

## V2 (both sides)

This is the most balance intensive of the skating motions and thus, it is generally the most difficult to master over a long distance. In the standard V2 motion, the skier makes a double pole motion *on both* sides of the V-skate... meaning they will pole on every skate glide.

Start out just like the V2 Alternate with a nice double pole compression as well as hip drive/weight transfer onto the ski side you double pole on. After you compress the double pole motion, you immediately recover your poles--while still gliding on the original glide side. Once your poles are into position, you then repeat the motion on the other side of the V-skate.

The hardest part of the V2 motion is being able to balance long enough (while gliding on one ski) to get your arms in position to pole on both sides of the V-skate. Most folks will find themselves doing fine for a couple strokes and then all of a sudden their balance goes south and they start doing a V2 Alternate--meaning they start to simply pole on one side of the V-skate and just glide on the other side. V2 is a fantastic technique for flats and gradual uphill as it provides a "middle gear" between V2 Alternate and the V1.

---

---

## **Diagonal V Skate**

Occasionally, conditions or individual fitness or just a wicked steep uphill will make the V-1 impossible. On these steep sections you can either use the classic [Herringbone](#) technique or you can use a combination of the classic Diagonal Stride and a basic V-skate.

Diagonal V-Skate simply involves V-skating with your legs while using a single opposite arm-opposite leg motion with the upper body. I find students learn this technique fastest when they think of a "one-one-one" verbal rhythm as they combine upper and lower body motions. Once you get it going, this is a really easy technique and a great way to get over just about any size hill.

---

## **Marathon Skating**

This is the technique American Bill Koch rode to the 82' Overall World Cup title and consequently, the main reason why XC Skiing involves as much skating technique as it does today. Although marathon skating is not as common as it once was, this is a good technique to have in your hip pocket for certain conditions.

Start with one ski in a Classic track and place the other ski at a slight angle away from the direction of travel. You then use the angled ski to "scooter" the ski left in the track while simultaneously utilizing a strong double pole motion. Make sure to really get your body over the pushing ski to maximize the power of both the pushing leg and your upper body. This technique requires very little balance compared to most skating techniques and can be a very nice learning drill.