

On Balance

By Alistair

One of the elements of long glide is the ability to balance on a flat ski. This sort of balance is one of the aspects of skiing that you can practice almost anywhere, notably in front of TV (although subtitled dramas can be a struggle!!).

Whilst general balance improvement is good e.g slacklining, kneeling/standing on fitballs, kayaking, horse riding, you should also work on ski specific balance drills. Not only do these help train the body to the balance requirements of skiing they also help strengthen all those little muscles in the lower leg, ankle and foot that are used.

In both skate and diagonal stride techniques there are two extreme points of balance where you're stood (gliding) on one leg. One where the glide leg is nearly straight (stand tall) and the other where it's bent (low).

For all these drills the same key points apply:

- balance by moving hips sideways rather than leaning with shoulders ('bananaring'). Think about keeping toe-knee-nose aligned.
- tilting pelvis up and tense abdominals to help hold balance
- bend at ankle, not just knee. In low positions try to get knee ahead of toe, think push knee forward and weight on front half of foot, not sitting back.
- think upright torso. You will lean forward slightly in low position but not bent 90deg at waist.
- think keep hips square to front, don't let them twist back

These drills should be a slightly accentuated version of the position you'd expect to have on skis because you're in ideal conditions not on a narrow bit of composite bouncing over tarmac or snow!

The think items are the ones you should be trying to accentuate so that with the dynamics of skiing you're better able to maintain a good position.

When learning the feel of correct positions get someone else to look at you or check yourself in mirror.

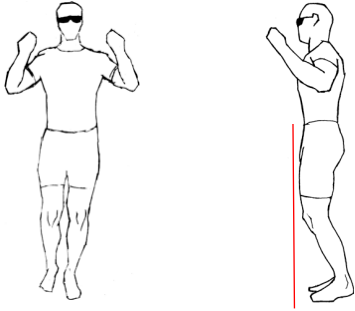
In the descriptions the glide foot is the one you're stood on. The propulsion foot is the one you've just stepped off (or pushed with, however you like to think of it).

Don't forget do the balances on both legs, not just your favourite side!

Stand Tall Position

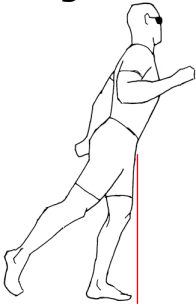
In general the glide leg should be nearly straight but have enough bend to unlock knee. Note the thigh is nearly vertical (shown by red line in diagrams), the lean forward comes from the ankle.

Skate



For skate stand with both feet together with the propulsion foot slightly off the ground. Hands raised at head height with elbows bent.

Diagonal



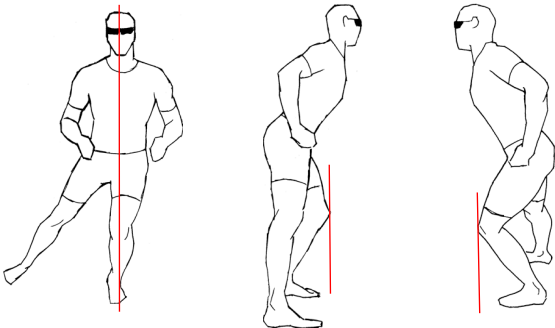
For diagonal stand with leg and torso in same position as skate. Push the propulsion foot behind. Hands in opposite position to legs i.e opposite hand behind to propulsion leg.

Low Position

For both techniques work on going as low as you can hold (whilst keeping good form). Whilst this is lower than your normal glide position on skis, when skiing you will be bounced around resulting in you dropping lower at points.

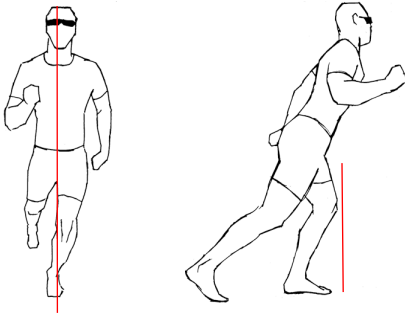
Red line in front view diagrams shows toe, knee, noses alignment. In side view diagrams it shows knee over toe.

Skate



For skate the propulsion leg should be straight with foot inline with the glide foot front to back. Hands at side of hips with elbows pointing back.

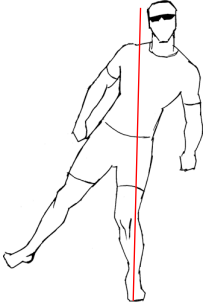
Diagonal



For diagonal keep propulsion leg straight and try to push as far back as possible without compromising amount of forward torso lean and squareness of hips. Hands in opposite position to legs.

What can go Wrong

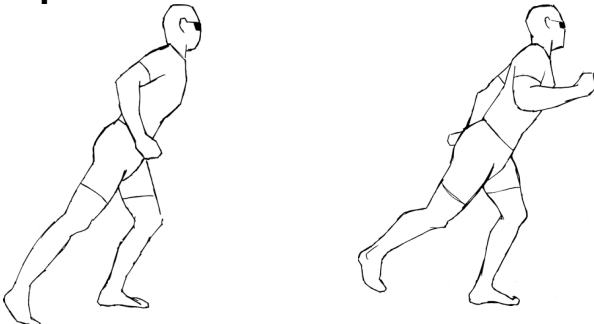
Bananaring



Bananaring (think curved line joining toe, knee, nose) is the result of trying to balance using the shoulders rather than hips (with vertical torso).

Whilst the position shown is balanced (yes it is) the main reason it is bad for skiing is that the knee tends to move inward towards the big toe which puts the ski on an inside edge reducing the glide. Another reason it is poor is because since the shoulders are so far from foot very fine movement is required to make small corrections of balance over the ski. Factor in that during skiing you constantly have to transfer balance to alternate skis and it can be seen why skiing this way is poor.

Hip Twist



Skate

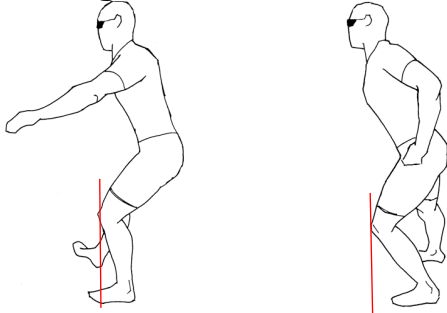
Diagonal

This is the tendency to twist the hips so the propulsion leg side is behind the glide leg side. This is more an issue for diagonal because you're pushing the propulsion foot backwards. In skate it is obvious because the

propulsion foot will tend to be behind the glide foot.

The main reason this is bad for skiing is again it tends to turn the knee inward over the big toe which puts the ski on an inside edge reducing the glide.

Sitting Back



Sat Back

Correct

This is the result of bending primarily at knee rather than ankle and knee. This tends to put your weight onto back of foot. On skis this unloads the front of the ski reducing its ability to track in straight line and, perhaps more importantly, increases your chance of falling over backwards when you hit uneven snow (or tarmac)!

More Advanced

Dynamic Drill

Work on transitioning (dropping and rising) between the stand tall and low positions (move hands as well). This will get you used to maintaining balance between the two positions.



Skate

Variations

Once you've mastered all that try some variations (in no particular order) to get even better:

- increase length of time you hold positions
- hold positions with eyes shut
- hold positions stood on a balance cushion*
- from 2 foot stand jump forward into and hold low position (move onto landing on balance cushion once happy)

I could suggest jumping forward into and holding low position on balance cushion with eyes shut but I expect that will result in a large number of

skiers being catapulted uncontrollably around their lounge furniture and walls!!

A final thought. If you think you haven't got time to do all this then even if you don't watch TV in the evening brush your teeth standing on one leg (think about not bananering). Swap legs during brushing or each session.

* Described using variations on 'air stability wobble balance rehab cushion'. Looks like...

