Kick Double Pole

Classic technique's second gear. This technique can be a very effective one when the speed is right. Kick double pole requires good grip, so if the conditions are tricky, striding/running and double pole might be safer sub technique choices.

The key to this sub technique is to ensure the timing of bringing the arms back up in front of the body synchronized with the leg kick. These are the same motions that go into jumping from a static position, where you get more power through the body if you use the arm swing.

Since the arms and legs are not pushing/kicking at the same time it can be a bit confusing to understand when the athlete is in the power position in the kick double pole. Power position will be defined as the moment when the poles are in contact with the ground passing the balancing foot and the repositioning phase defined as when the poles are getting back to the next pole plant. However, it is important to understand that the kicking leg is creating power during the poles' repositioning phase.

Summary

- Press the foot about to kick a little forward just before the kick
- Time the reposition of the arms to happen fast at the exact same time as the kick
- Move body weight to the gliding leg early enough so the balance does not end up on the back half of the gliding foot.

BODY POSITION

A - Power position:

In power position, keep forefoot pressure on the gliding foot while the arms are working. Because of the kick, the upper body is standing relatively tall so both the legs and the arms get good conditions to create power. This means that the arms will be a bit further away from the body than in a double pole, much like in striding only that in striding the arms work individually.

B - Power line:

Important to keep the nose, knee, and toes aligned and shoulders and hips level. This way all the movements can go straight back and forth, instead of side to side or rotating which results in a loss of power.

C - Ski lift:

Always keep the body straight over the gliding foot. Kick must be completed just prior to the weight shifting from forefoot to full foot - this should result in getting a good amount of air underneath the ski at the back, before it pendulums back to the touch down on the next ski. Hips should stay over the midfoot and not get dragged behind the foot with the kick.

Timing

A - Pole plant:

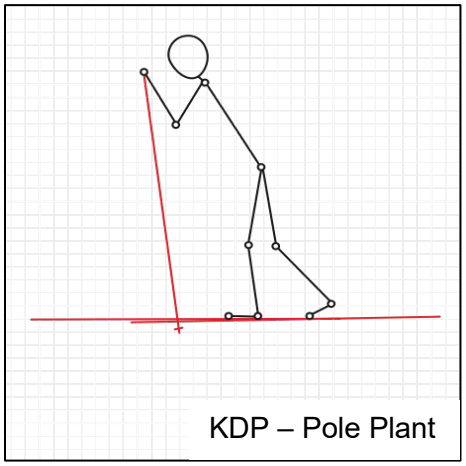
It is critical that the arms pendulum back in front of the body in time for the poles to swing into a vertical position - the preparation phase. The pole plant initiates after a micro pause at the top of the pole swing to ensure forward hip movement allowing for proper body position. The back leg pendulums forward again and the poles are planted and starting to move through the power position. Arm position relative to the body is very similar to striding, except they now are parallel like in double pole.

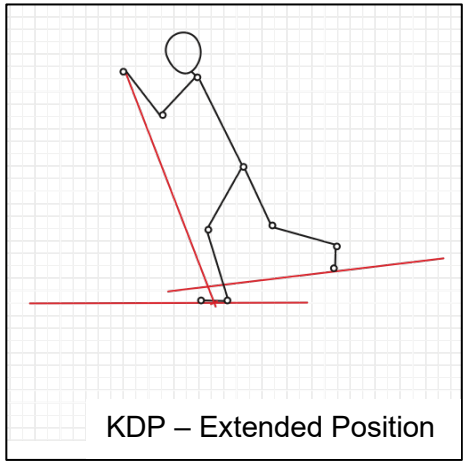
B - Leg kick/push:

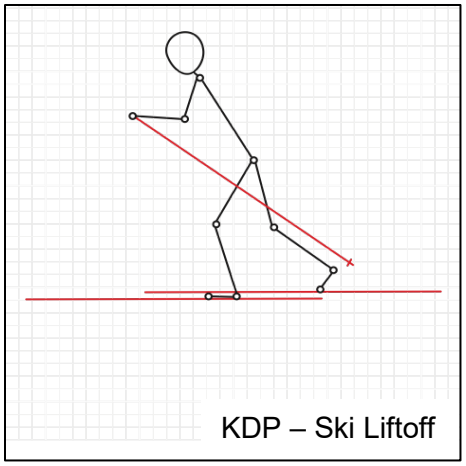
As mentioned in the kick double pole intro, this is the only sub technique that the kick (or push for that matter) is coming at the opposite time of when the pole push is. The movement starts approximately when the poles are lifted off the ground. The foot about to kick then gets pushed a tiny bit in front of the other foot. This little preparation movement is to give the foot a split second to have as much body weight on it by the time it is straight under the body when kicking. The kick impulse is short and explosive, before the ski lift happens while the body is still straight over the gliding foot, and then naturally pendulums up in the air.

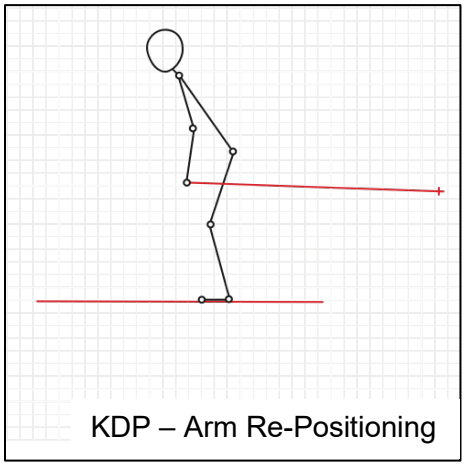
C - Reposition phase:

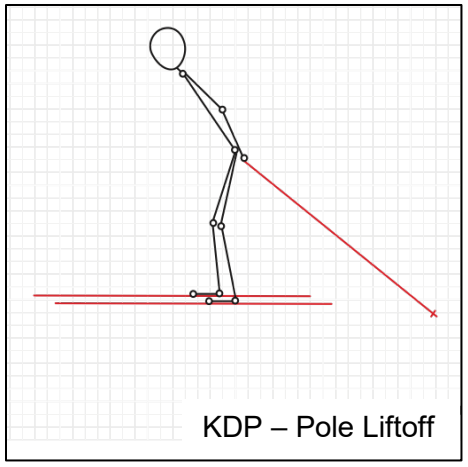
This sub technique stands out because the arms are repositioning as the legs create power, and then the legs reposition as the arms generate power. The important focus to have for the repositioning limbs is to perfectly move back while the working limbs apply power. Arms are actively brought fast forward at the same time as the power impulse from the kick, and the repositioning of the leg timed so it is brought back as the arms/poles are pushing.

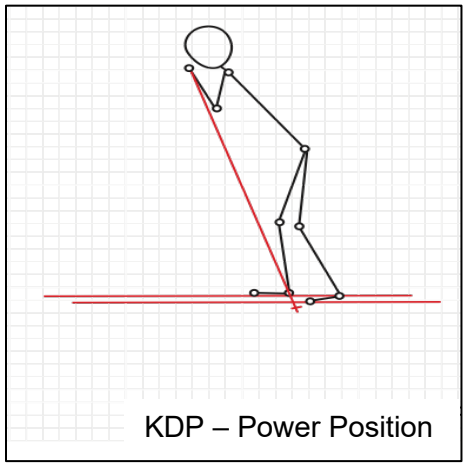

KDP – Pole Plant

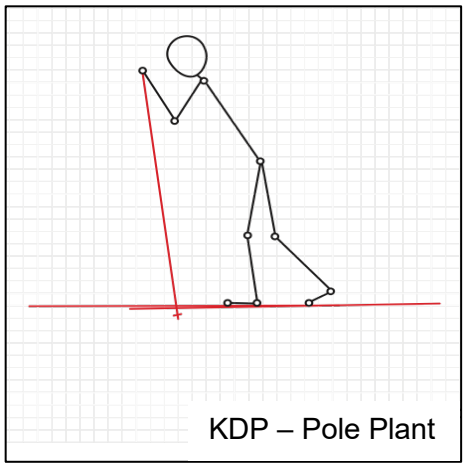

KDP – Extended Position


KDP – Ski Liftoff


KDP – Arm Re-Positioning


KDP – Pole Liftoff


KDP – Power Position


KDP – Pole Plant