



LAURA STAMM POWER SKATING

THE ROLE OF THE HIPS IN HOCKEY SKATING

In order to generate proper and powerful motion when skating forward, hockey players must push to the back and side. Pushing to the back and side requires that the hips are employed in three ways:

Abduction: The hips must open up (turn out and away from the center axis of the body) in order to push to the side.

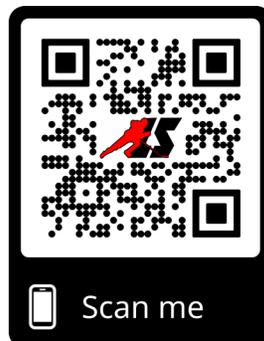
External rotation: The hips must turn-out (open-up) during the push.

Extension: The hips (and legs) must fully extend during each push.

When starting out from a complete standstill, hip abduction is not obvious. Skaters appear to push straight back. However, there is substantial abduction of the hips! There is also substantial external rotation of the hips (hips turn-out or open-up) and hip extension (full extension of the hips). While the push is primarily to the back when starting out, it is also somewhat to the side. In addition, in order to push properly and powerfully, the blade of the pushing skate must be sideways to (almost perpendicular to) the forward direction.

Hip abduction and external rotation (turn-out) also affects the push from the lower legs (knees, ankles and toes). Since these joints are connected, if the hips do not abduct and turn-out, the knees, ankles, and toes also cannot abduct and turn-out. Similarly, if the knees and/or toes do not turn-out, the hips cannot abduct or turn-out. The result of this is that the player is forced into a forward/backward (walking/running) motion instead of the proper out/in skating motion.

Note: Unlike running-based sports, in skating there is never a time when skaters extend their hips or legs straight backward (as in walking/running). Similarly, there is never a time when the arms move straight forward/backward (as in walking/running).



As skaters gain speed, the push is progressively more to the side, so abduction and external rotation become more obvious. Hip extension is always critical.

In my power skating system we teach that when skating straight forward or backward, players should move their arms straight forward/backward. However, we understand that the actual arm-swing is diagonally forward/ backward. When players move their arms straight forward/backward properly, the arms will coordinate with the diagonal out/in motion of the push/glide sequence, and will move in a diagonal forward/backward motion - in line with and on the same (diagonal) angle as, the legs. Players must avoid a side-to-side (pitching hay) motion of the arms since this encourages lateral (side-to-side) motion rather than forward motion. When players **want** to move laterally (side-to-side) they **should** move their arms side-to-side!

Other hockey skating moves involve hip abduction/external rotation/extension. Forward Crossovers are an excellent example.

Hockey skills other than skating also involve hip abduction, external rotation, and extension. For example, the force for shooting and checking originates when the blade is turned perpendicular to the line of force. Practicing hip abduction and external rotation while stick-handling on dry land should be encouraged. In addition, working on these movements while stick-handling helps players learn to reduce arm movement when skating with pucks.

Since the hips are a major source of power in the skating stride, hip abduction/external rotation/extension movements should be practiced in the weight room. Exercises for hip abduction/external rotation/extension should also be included in all off-ice training for skating.

Note: Traditional strength training programs were initially designed for running sports. For this reason they generally focus on hip and knee extension but not on abduction/external rotation.

Slide-boards are helpful training tools for abduction/external rotation/extension, but equipment is not always necessary. If off-ice training programs include explosive jumps that emphasize: (1) great knee bend (2) explosive abduction/external rotation, and (3) full extension of the hips, they will be of great benefit to hockey players.

Skate Great Hockey!