

Ringette Forehand Shot Checklist

General:

The forehand shot can be either a left handed shot or a right handed shot, depending on which side of the body the ring is released from, and is a personal preference of the player. The forehand shot can be taken from one of several positions: while skating in toward the net the shot may be taken while facing the net; while skating across in front of the net the shot may be taken while the trunk is sideways to the net; or while stationed in front of the net facing the ring the player can take the shot while stationary after receiving a pass.

Ready Position:

- Hands shoulder width apart on the stick with the front (lead) hand on the top of the stick
- If carrying the ring in toward the goal the athlete is sideways to the goal
- 2-3 steps are taken towards the net in order to increase the horizontal velocity of the body and also the ring
- The athlete assumes a low position while carrying the ring, with the trunk flexed forward and the knees and hips flexed at least 40 degrees
- The ring is being handled out in front of the athlete and guarded from the defender by the player's body

Backswing:

- The backswing is initiated as the athlete draws the ring back towards their rear heel by horizontally adducting the lead shoulder and horizontally abducting the rear shoulder
- These shoulder movements will help rotate the shoulder girdle (a line joining the shoulder joints) backwards, to produce a longer backswing of the trunk and stick
- The ring should be drawn back to at least at the level of the back foot at the end of the backswing, and preferably at a level behind the back foot to give the longest distance to apply force to the ring
- If there are no defenders nearby, the athlete will be able to draw the ring farther back in order to increase the linear distance over which to move the puck during the force producing action, and increase the release speed of the ring
- The ring is drawn further back by rotating the shoulder girdle further back and adducting the top arm further across the body
- The player may assume a position in which the hand of the front arm is further back than the hand of the rear arm, increasing the range of motion of the front arm
- The legs may be spread well apart during the backswing, to give a greater distance over which to make the shot
- Knee flexion in the rear knee should increase to approximately 50 degrees in order to help to shift the weight onto the rear skate and preload the quadriceps for knee extension
- Trunk (shoulders and hips) will rotate away from the net in order to increase the stretch on the anterior chest muscles and increase the range of trunk rotation into the shot. The shoulder girdle will undergo a greater range of rotation than the hips, or pelvic girdle

- At the end of the backswing the player will have all her weight on the back foot, the stick and ring located behind the back foot, and the trunk flexed forward toward the ring
- Trunk will also flex forwards to approximately 45 degrees from the horizontal in order to increase the moment arm for hip rotation; or the distance from the axis through the front hip to the ring



Figure 1: Backswing position with ring near back skate



Figure 2: Angle of knee flexion at end of backswing

Force Production:

- Force production is initiated as the athlete takes a small step towards the target on their front foot (or slides the skate forwards) allowing for the athlete to transfer their weight from their rear foot onto their lead foot
- The ring is brought forward toward the target and closer in towards the athletes body with a low sweeping motion



Figure 3: Note the low sweeping motion of the ring as it is brought from a position behind the rear skate to a release point in front of the lead foot.

- The trunk remains flexed forward throughout the shot to maximize the lever arm for rotation of the trunk around the front hip
- The front leg is held rigid with the lead skate angled slightly towards the target to allow for a more complete body rotation,
- This lead skate should continue to move forward as the athlete shifts her weight forward; so she is gliding forward on her lead skate as she is delivering the shot
- Front knee should have around 40 degrees of knee flexion in order to absorb the weight transfer onto the lead skate
- Most shooters will retain from 40-60 degrees of knee flexion in the front knee to help maintain balance as well as allow the athlete to maintain a low flat arc on the stick to increase the accuracy of the shot.
- Some athletes will shoot from an extended front knee with the front leg forming a rigid axis about which to rotate
- The arms perform a sweeping motion forward with the stick and the ring, while the arms remain extended at the elbows the shoulders perform rapid horizontal adduction and abduction
- The sweeping motion of the arms is driven by the rapid and forceful rotation of the trunk from a position sideways to the goal to a position facing the goal
- The power for the shot is derived primarily from the shoulder and trunk rotation, aided by the forceful horizontal adduction and abduction of the arms at the shoulders
- The bottom arm holding the middle of the stick is extended at the elbow and flexed and abducted at the shoulder to transfer power into the shot
- The top hand should remain slightly in front of the bottom hand during initial force production and then be pulled into the body leading up to release
- The arms act together to maximize the speed at the end of the stick, with the top hand pulling the top of the stick backwards towards the shooter, while the bottom hand pushes the stick forcefully forward
- These two arms together work to maximize the linear velocity at the end of the stick

- At least 40 degrees of trunk flexion should remain during the force production phase to allow for maximal rotation of the trunk and maximal length of the moment arm for spinal rotation

Critical Instant:

- Front skate should remain rigid in order to allow for complete trunk rotation; although the front knee may be slightly flexed or extended at release
- Trunk should remain flexed forward to approximately 45 degrees in order to increase the length of the moment arms for rotation about the lead hip and spine in order to increase the torque
- Ring should be released well in front of the body at full extension of the bottom arm and the stick
- Bottom arm should be in complete elbow extension in order to increase the length of the moment arm from the spine and from the shoulder joint at release
- The top arm is tucked in to the chest at release with the elbow flexed as it has just completed pulling back on the stick



Figure 4: Note the rigid skate position of the front foot as the hands move well in front of the body at release

Follow through:

- The correct follow through should be with the stick parallel to the ice and both arms extended out in front of the body
- The follow through should occur over a large distance and time in order to decrease the risk of injury to the athlete- the stick will be extended well in front of the player, or even wrapped around to the opposite side of the player (however it must remain low to the ice)
- Hips, trunk and shoulders complete the action of rotation towards the target and should be facing the goal

- The athlete will often continue to skate forward through the release, as their skating velocity is added to the speed of the ring

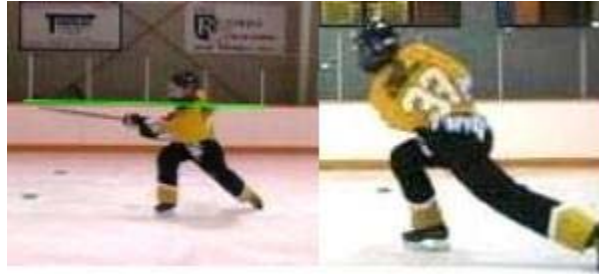


Figure 5: Note the position of the stick at the end of the follow through.

Shot Variations – Shooting with the back foot Forward

When performing the forehand shot, it is not uncommon for the player to take the shot with their weight on their right leg (for a right handed player) or on the leg which is closest to the ring (see Figure 6).



Figure 6: Shot taken with opposite foot forward.

Backswing:

- During this shot, the backswing is initiated as the athlete slides their foot closest to the stick forward as shown in Figure 6. This movement allows the athlete to leave the stick and ring well behind her body and therefore create a large stretch on her trunk muscles.
- The athlete will continue to utilize a high degree of trunk lateral lean in order to position her upper body over top of the ring during the force producing action of the shot.



Figure 7: Note the high degree of trunk lean over the ring as well as how far the athlete has rotated her shoulder girdle away from the net for the shot.

Force Production:

- From this position, the athlete will attempt to use a similar motion to the previous shot, whereby her hips and shoulders will rotate forward while all of her weight remains planted on the foot which is positioned in front of her body (or the opposite foot)
- Often the athlete will completely unweight the rear skate in order to have all of her weight positioned on the forward foot



Figure 8: Note how the athlete has completely unweighted her right (or rear foot) at this point in the skill (just prior to release).

- The athlete will flex the shoulder and extend the elbow of the bottom hand in order to drive the ring forward in front of her body, while at the same time, she will flex the elbow and extend the shoulder on the top hand in order to speed up the velocity of the ring at the end of the stick
- The athlete's shoulder girdle will rotate to face the net (and potentially even more) in order to square the shooter up to the net.

Critical Instant:

- The critical instant occurs with the ring positioned well in front of the athlete's foot.



Figure 8: Critical Instant of shot taken with opposite foot forward.

- The athlete will release the ring with the front foot still gliding along the ice in order to allow for a complete trunk rotation through the shot and add their linear velocity to the ring at release.

Follow through:

- It is important for the athlete to emphasize a full follow through with the stick kept below shoulder level. It can be beneficial during the follow through to continue to rotate at the trunk in order to increase the distance over which to slow down the stick. The greater the distance over which the stick is decelerated, the less chance of injury occurring from stopping the movement too quickly and producing a muscle strain injury.