# The Fundamentals of Putting

# **Episode 1 - Setup and Aiming**

A proper setup position is a prerequisite of a good putt. Setup includes body posture, gripping the putter, alignment of body relative to the ball and the target line, and aiming of the putter itself. In a neutral setup with a square putter face you can simply swing the putter back and forth like a pendulum to start the ball on the intended line. The setup is in particular important for direction control in putting.

#### **Basics**

For a neutral setup all body lines need to be aligned parallel to the intended target line, in particular the feet, hips, shoulders, lower arms and the eye-line. The left eye should be positioned over the ball, which supports seeing the target at the right position. The ball should be positioned a ball width to the left in the stance.



Example of a good setup with a shoulder-width stance, eyes over the ball, body lines parallel to the target line and hands are hanging below the shoulders. Because of the lefthand-low grip the right arm is slightly angled.

The hands should hang relaxed under the shoulders in a neutral position and the elbows are only slightly angled. The putter is gripped in a way that the putter grip runs through both life lines. Both thumbs are positioned underneath and centered on the front / top of the grip. The lower arms are aligned with the target line. The upper arms can be freely moved, but are still connected to the trunk/torso.

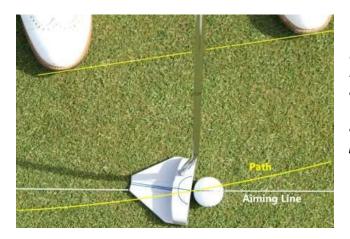
To achieve an adequate setup position often the putter needs to be properly fit, in particular for proper length and lie. As a guideline it can be assumed that the adequate putter length for a golfer with a height of about 1.80 m (6ft) is only about 33 inches.

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#### Frequent errors and consequences

Many amateurs are not only improperly aligned but they also show a significant lack of consistency of aiming. This can also be the consequence of playing a putter with the wrong length. In consequence their short putts often miss the hole to the left and the right. To test your consistency on short putts, play ten putts towards a hole or target and leave all the balls on the green. Afterwards, take a look at the shot pattern. Which side did you miss on or was there an inconsistent pattern?

Normally the swing path will tend to follow the mis-alignment of the shoulders. To compensate for swing path errors to the putter face at impact needs to slightly point into the opposite direction. Another compensation strategy is to manipulate the swing plane and to push or pull the putter through impact. The problem of compensations is that in most cases the consistency of your putting will decrease.



Body alignment to the left often results in a path also pointing to the left which is compensated by an open putter face pointing to the right.

Mis-aiming the putter can also be a consequence of an inadequate technique of looking to the hole. If the head is not rotated to the target (like a wheel on an axis), but is tilted upwards while looking to the hole, then the eye-line tilts to the left and the hole moves down right relative to the visual field.



**Left picture:** turning the head correctly to the target.

Right picture: Inadequate technique of looking up to the hole.

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# Ways to improve Setup and Aiming

# Putter Fitting

Using the right drills and fixes the problems in setup and alignment can be significantly improved. Before working on your setup please check if you play a putter with the right length.



The putter length can be checked as follows: Get into a comfortable position without a putter, back spine not too upright or too bended. Then walk back/forth to set the eyes over the ball (using a mirror). Let the arms hang down relaxed with the hands below the shoulders. Then let someone else put a putter behind the ball and grip the putter at the position where the hands actually are. Compare with your normal hand position.

#### The mirror

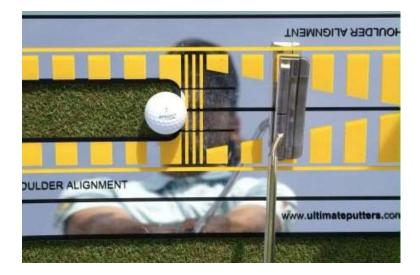
A mirror is a perfect tool to provide accurate feedback on alignment. With the left eye over the ball the body lines (feet, hips, and shoulders) should be aligned square to the target line. The putter should also be exactly square, otherwise the grip may need to be adjusted. Now a putt is played with a neutral shoulder rocking movement. The putt should start exactly on the intended target line. This can also be proven by hitting some putts with eyes closed.

If the ball starts to the right, then check if the right hand is positioned too much inside. The ball might also be positioned slightly more left in the stance. If the ball starts to the left, check if the right hand is positioned too much outside. The ball might also be positioned slightly more right in the stance.

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Please also check the grip assembly: In some cases the grip is simply not mounted correctly onto the putter.

As soon as the putts on the mirror are consistently played straight down the line, more and more putts without mirror should be played in between, to allow transfer from the feedback condition to normal putting.



The mirror provides perfect feedback on shoulder, hip and eye-line alignment. With the correct grip the putter is also square to the body alignment. A neutral putting stroke will then start the ball exactly on the intended target line.

# The string line

A string line provides excellent feedback for improving setup and aim, and can also be used in conjunction with a mirror. The string is stretched at a height of about 20 cm exactly over the ball to the center of the target (on straight putts) or to the aim point on breaking putts. During setup the golfer aligns himself square to the string line. The string line allows the golfer to perfectly control the initial starting direction of the ball. The corrections are the same as for the mirror.



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#### Lining up the ball

Reference points like intermediate targets, lines on the putter or a line on the ball can help to improve aiming. Indeed these aiming techniques also need to be practiced and tested for effectiveness. Lining up the ball to the target is a trick which is often used on the PGA Tour. But the procedure needs to be done very carefully. If the eye is not directly positioned over the ball, the curved line on the round surface seems to point either left or right into a wrong direction.

Lining up the ball can help in particular on short putts where ball direction is of highest importance. Because the line on the ball requires a decision for the intended target line, there is often less doubt and a mental relief during the putt. To test if the line on the ball helps for aiming the putt, play ten putts from 3-4 meters with and without lining up the ball and then compare the results.

We hope you enjoyed our first episode of 'The Fundamentals of Putting' and could give you some ideas on how to improve your training.

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