# eCutter 2.0

# the electric hole cutter



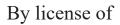
# **MANUAL**



Perfect holes - every time







# **GOLF**MACHINES

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# **CE Declaration of Conformity**

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents: EN60745 according to the provisions of the directives 2004/108/EC, 98/37/EC (until 28 Dec 2009), 2006/42/EC (from 29 Dec 2009).

Finn Skade Hansen Managing Director

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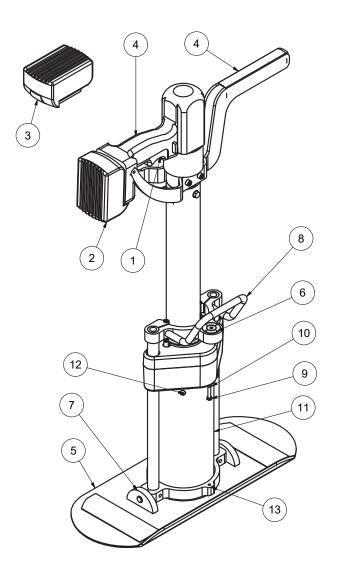
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# **Operating Instruction eCutter 2.0**

#### **Machine Elements:**

- 1. On/Off switch
- 2. Battery
- 3. Battery unlocking button
- 4. Grip
- 5. Footplate
- 6. Bubble Level
- 7. Hinge point
- 8. Transportation handle
- 9. Adjusting screw (depth)
- 10. Adjusting nut (depth)
- 11. Shell
- 12. Bolts
- 13. Stopping point



#### **Intended Use**

The eCutter 2.0 is a hole cutter, intended for the cutting of holes in greens on golf courses. The holes have a diameter of max. 4" / 108 mm and a depth of max. 7.8" / 200 mm.



# For Your Safety - read carefully

Safe usage of the machine presupposes that the instructions for use and safety are read carefully and observed.

- The machine and battery are to be checked before use. If there are any defects, the machine should not be used. Repairs must be undertaken by a professional. Do not open the machine.
- When the machine is not in use (storing, repairing etc.) the battery must be removed. Unintentionally activating the On/Off switch can cause injuries.
- Ensure that the battery is in the correct position before use.
- During usage hold both hands on the grips and place feet on the footplate
- The machine must never be operated by children.
- Golf Machines can only guarantee a correctly working eCutter 2.0 when original spare parts/extra equipment are used.



#### **Battery and Charger**

- NEVER open the battery. The battery must be protected from shock and impact. It must be kept dry and in a frost-free environment.
- Batteries heated from use must be cooled off before recharging.
- The battery must be protected against heat, frost and fire: Danger of explosion! Do not place the battery on heated surfaces such as radiators e.g. and keep the battery away from direct sunlight. Temperatures above 120F/50°C are not recommended.
- Batteries must not be disposed of into household waste, nor may they be burned. Please see "Protection of the Environment" for further information.

#### Before using the eCutter

#### **Charging the battery:**

Charging begins as soon as the battery is placed in the slot on the plugged-in charger.

Due to the intelligent charging method, the charging condition of the battery is automatically detected, and the battery is charged with the optimum charging current, depending on battery temperature and voltage. This protects the battery and keeps it fully charged, while being kept in the charger.

#### **Starting Operation**

Inserting the battery.

Gently push the battery down into the eCutter 2.0's battery slot.

DO NOT activate the On/Off switch (1) at the same time.



# **NEVER** remove the split in the rotational direction switch in the drill unit!

#### **Start and Stop**

To start the machine, press the On/Off switch (1) and keep pressure on it.

The machine runs with variable speed between 0 and maximum, depending on the pressure applied to the On/Off switch (1). Light pressure results in a low speed thus allowing smooth, controlled starts. If too much strain is applied to the eCutter 2.0, it will overload and come to a standstill. To switch off the machine, release the On/Off switch.



## **Operation Instructions**

#### Cutting a hole with the eCutter 2.0.

- 1. Carry the eCutter 2.0 onto the green by lifting the machine by the transportation handle (8).
- 2. Place the eCutter 2.0 at the hole's intended location and, by the help of the bubble level (6), adjust the eCutter into the correct horizontal position.
- 3. Place feet on the footplate, with heels on the turf for optimal stability(5), pull the grip and, using the level, adjust the eCutter 2.0 to the correct position. Please note when standing on the footplate, it is only possible to adjust the shell (11) straight back and forth over the hinge points (7)
- 4. Hold the machine firm in the grips (4) and activate the On/Off trigger (1). Put a gentle pressure on the grips (4), while keeping pressure on the On/Off switch, and let the shell (11) go down.



- **5. IMPORTANT:** Observe the bubble level all the way to cut a perfect hole.
- 6. The hole is complete when the adjustment screw (9) reaches the stopping point (13). Then release the On/Off switch (1).
- 7. Remove the feet from the footplate (5) and carefully lift the eCutter 2.0. *Please note:* To ensure that the plug of earth stays in the shell (11) pierce the plug with the vacuum spear to equalize the pressure.



NEVER activate the on/off trigger, when the vacuum spear is stuck into the turf inside the blade. This will cause major damage to the eCutter 2.0 and can lead to serious personal injury!

#### Replacing the plug in the previous hole.

- 1. Take the eCutter to the previous hole and place the shell (11) in the hole.
- 2. Place your feet on the footplate (5) and lift the eCutter in its grips (4). (*Please note:* Keep your back straight and use your legs to lift!) and activate the On/Off switch (1) at the same time as lifting up in the grips (4).

On our website: <a href="www.fshmachines.com">www.fshmachines.com</a> you can also find a video demonstrating how to operate the eCutter.

TIP: To ensure the best quality please keep the edges of the shell sharpened.



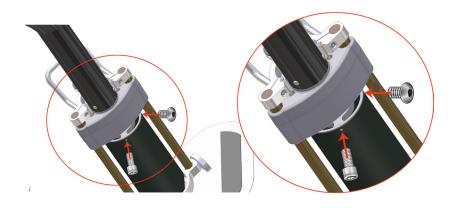
#### Replacement of the Cutting Shell

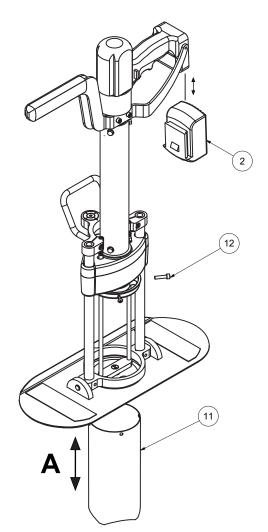


The battery must ALWAYS be removed, before undertaking any work on the machine!

- 1. Place the machine on an even surface.
- 2. Loosen and remove the four bolts (12).
- 3. Pull the shell (11) in direction A downwards out of the footplate (5).
- 4. Insert the new shell in the same way up through the footplate.
- 5. Replace the four screws (12) through the holes in the shell (11) and tighten them.

**IMPORTANT:** The long screws must be installed in the deep threads, the short screws must be installed in the short threads.





### Adjustment of the depth of the hole

The battery must be removed, before undertaking any work on the machine.

Loosen nut (10) and adjust the adjustment screw (9) until the depth is correct. Tighthen the nut (10) to fix adjustment screw (9), in its position.

### Cleaning the eCutter 2.0



The battery must be removed, before undertaking any work on the machine. High pressure water <u>must not</u> be used during cleaning of the machine.



# **Troubleshooting**

Problem	Solution
Motor will not run	<ol> <li>Recharge battery</li> <li>The allowed battery temperature of 70°C is exceeded; the electronic control switches off the eCutter until the temperature is in the optimum range again.</li> <li>Clean the poles on the battery slot (see below)</li> </ol>
Plug will not stay inside shell	Use the vacuum spear
Plug is too high after replacing it	<ol> <li>Do not start motor when ejecting the plug.</li> <li>Use lower speed when cutting the hole.</li> <li>Lower the blade again</li> </ol>
Hard to pull eCutter up from the ground	Observe the level all the way up.
Uneven depth of holes	Rotate the eCutter 360° before pulling it back up.
eCutter is spinning around when cutting	Drill a hole in the upper corner of the footplate, and insert vacuum spear when cutting holes.
eCutter is losing power	<ol> <li>Battery is empty.</li> <li>Protection against overloading is enabled.         Remove the battery for a few minutes. Then reinsert it and try again.     </li> </ol>

#### Keep the battery slot clean

With time verdigris can build up between the poles/pins on the battery slot. (ill.1.) Also, if the air humidity is high, a thin, almost invisble, membrane can develop.

This can lead to the eCutter 2.0 short-curcuiting or not starting at all.



Ill. 1. Verdigris build-up

#### How to solve this

- 1. Remove the battery
- 2. With a screwdriver, scrabe between the battery slots poles/pins, to remove the verdigris and/or break the membranes surface, so the moisture can escape. (ill. 2.)
- 3. Clean with contact spray.
- 4. Spray with a silicon coating spray to help prevent further build-up.
- 5. Replace the battery and start the eCutter 2.0



Ill. 1. Use a screwdriver

#### **Protection of the environment**

Batteries must not be disposed into household waste, water or fire.

Batteries must be collected, recycled or disposed of in an environmentally friendly way.

Power tools, accessories and packaging should be sorted for environmental-friendly recycling.

Please dispose the battery according to local rules and regulations.

#### **Only for EC countries:**

Do not dispose of power tools into household waste! According to the European Directive 2002/96/EC on waste electrical and electronic equipment and its incorporation into national law, power tools that are no longer suitable for use must be separately collected and sent for recovery in an environmental-friendly manner.



#### Instructions from USGA & R&A

The Royal and Ancient Golf of St Andrews (R&A)
The United States Golf Association (USGA)

#### **Definition of a Golf Hole**

The hole must be 4 inches (108 mm) in diameter and at least 4 inches (101,6 mm) deep. If a lining is used, its outer diameter must not exceed 4 ¼ inches (108 mm). The lining must be sunk at least 1 inch (25.4 mm) below the putting green surface, unless the nature of the soil requires that it be closer to the surface.\*

\*(https://www.randa.org/rog/definitions)

#### **Selecting a Hole Location**

(Cited from: https://www.randa.org/en/pace-of-play/manual/6-appendices#10-appendix-j)

#### 6.11

#### **Appendix K. Selecting Hole Locations**

The locations of the holes on the putting greens can have a considerable effect on scoring and the pace of play during competitions. Many factors go into the selection of hole locations, with emphasis on the following points:

In selecting the locations, the ability of the players should be considered so that the locations selected are not so difficult as to slow down play significantly or so easy as not to challenge better players. The speed of the greens is a significant factor in choosing the location of the hole. While a hole location may work well for a slower green, it may prove to be too severe when the speed of the greens is increased.

The Committee should avoid placing a hole on a slope where the ball will not come to rest. When the contours of the green allow, holes should be placed where there is an area of two to three feet around the hole that is relatively level so that putts struck at the proper speed will stop around the hole. Some additional considerations include:

Setting holes where there is enough putting green surface between the hole and the front and sides of the putting green to accommodate the approach on that particular hole. For example, placing the hole immediately behind a large bunker when a long approach is required by the majority of the field is usually not recommended.

Balancing hole locations for the entire course with respect to left, right, centre, front and back locations. An area of two to three feet around the hole should be as level as possible. Effort should be made to ensure that holes are not positioned within three paces of a very severe slope or ridge or of a recently used hole. If the design of the green dictates that the hole be positioned on a slope, the hole should be cut vertically, not with the slope. A player putting from above the hole should be able to stop the ball near the hole.