eCutter 3.0

the electric hole cutter

MANUAL

Perfect holes - every time

GOLFMACHINES

By license of

GOLFMACHINES

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CE Declaration of Conformity

This product is made in accordance with the provisions in Directive 2006/42/EC and Standard EN62841

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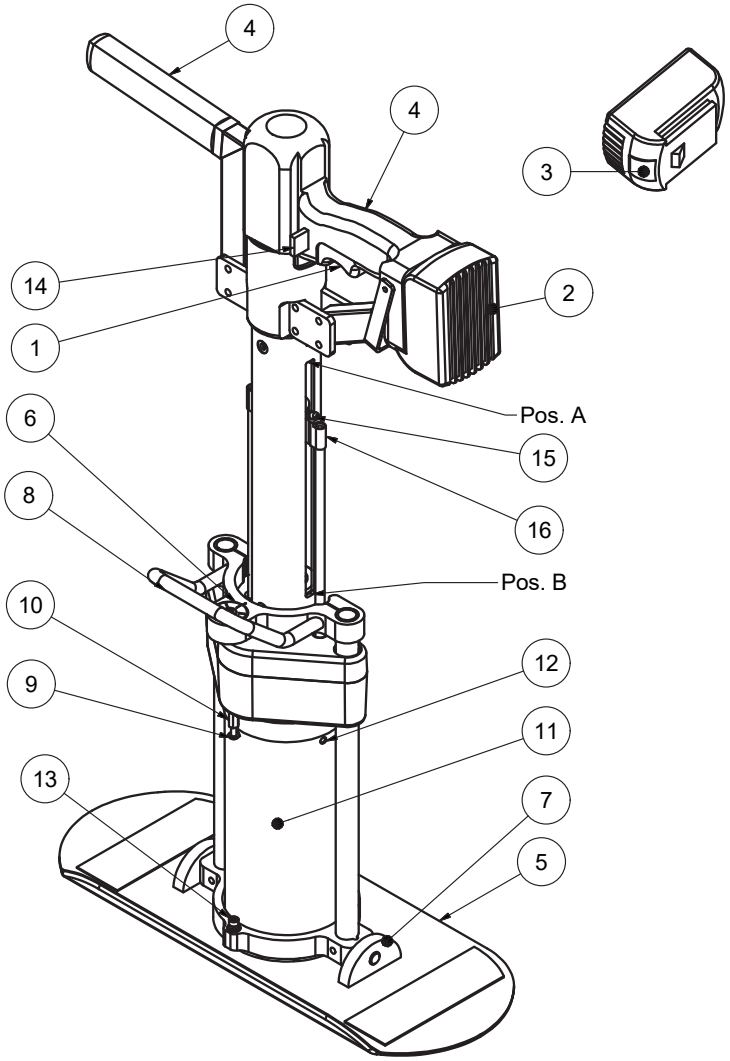
Operating Instruction eCutter 3.0

Machine Elements:

1. Start/Stop switch
2. Battery
3. Battery release button
4. Handle
5. Footplate
6. Bubble Level
7. Hinge point
8. Transportation handle
9. Adjusting screw (depth)
10. Adjusting nut (depth)
11. Blade
12. Bolts
13. Stopping point
14. Direction switch
15. Grease nipple
16. Ejection nut



Intended Use

The eCutter 3.0 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 eCutter 3.0 presupposes that the instructions for use and safety are read carefully and observed.

- The machine and battery are to be checked before use. If any defects are found, the machine must 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 Start/Stop switch can cause serious personal injuries.
- Ensure that the battery is in the correct position before use.
- During use hold both hands on the grips and feet on the footplate
- The machine must NEVER be operated by children.
- Only by using original spare parts and accessories can Golf Machines guarantee that the eCutter 3.0 will function correctly.

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 hot surfaces such as radiators e.g. and keep the battery away from direct sunlight. Temperatures above 120F/50°C are not recommened.
- Batteries must not be disposed of as household or general waste, nor may they be burned. Please see “Protection of the Environment” for further information. (Pg. 8)

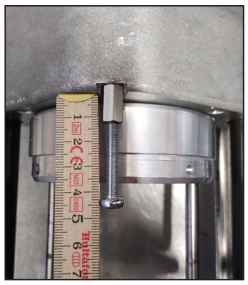
Before using the eCutter 3.0

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 process, 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.

Adjustment of the depth of the hole

The following must be done, before the first use of eCutter 3.0.

1. Loosen nut (10) and adjust the adjustment screw (9) to the desired depth. - **MINIMUM 45 mm / 1,78”**
2. Tighthen the nut (10) to fix adjustment screw (9),in its position.
3. Adjust the depth accordingly to the wear and tear of the blade.


Ill. 1. Minimum 45 mm.

Putting Green - Using the Depth stop pin.

When using the eCutter 3.0 to cut holes on the Putting Green, a depth stop is used.

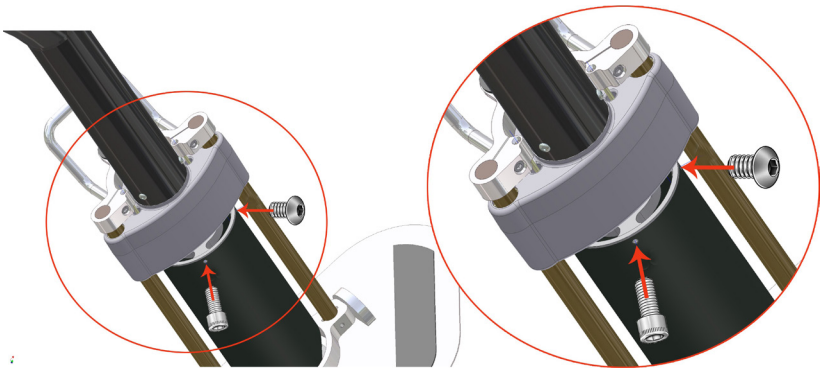
The end of the depth stop with the widest hole is placed over the stop point (13) so that the threaded end is facing up.(Ill.2)

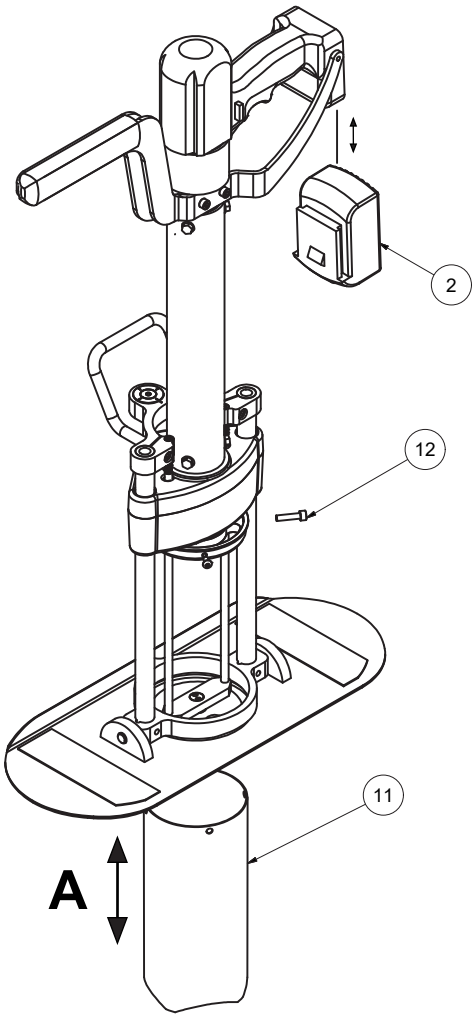

Ill. 2. Depth stop pin in use

Mounting and changing the blade

1. Place the eCutter 3.0 on an even surface.
2. Loosen and remove the four bolts (12).
3. Pull the blade (11) in direction A – downwards out of the footplate (5).
4. Insert the new blade in the same way - up through the footplate.
5. Replace the four bolts (12) through the holes in the blade (11) and tighten them.

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





Starting Operation

Inserting the battery.
Insert the battery into the socket and press it gently into place.
DO NOT activate the Start/Stop switch (1) at the same time.

Start and Stop
To start the machine, press the Start/Stop switch (1) and keep pressure on it.
The machine switches between different speeds between 0 and maximum, depending on how hard the Start/Stop button is held down. A light press causes a low speed and thus enables a smooth, controlled start.
If the eCutter 3.0, is subjected toi too much pressure, it switches off automatically.
Release the Start/Stop (1) to bring the machine to a stop.

Operation Instructions

Cutting holes with the eCutter 3.0.

1. Lift the eCutter 3.0 by the transport handle (8) and carry it onto the green.
2. Place the eCutter 3.0 at the hole's intended location and, by the help of the bubble level (6), adjust the eCutter into the correct horizontal position. (If cutting holes on Putting Green, see page 4, Ill.2)
3. To ensure optimum stability and control, place your feet on the footplate (5) so that your heels are still on the grass. Please note when standing on the footplate, it is only possible to adjust the blade (11) directly forward or backward in relation to the pivot point (7)
4. Hold onto both handles (4) and activate the Start/Stop switch (1). Then apply gentle pressure to the handles and let the blade (11) cut down to the stop point.
5. The ejection nut (16) must move towards (Pos. A) when the hole is cut.
6. **IMPORTANT:** Observe the bubble level all the way to cut a perfect hole.

7. The hole is completed when the adjustment screw (9) reaches the stopping point (13). Then release the Start/Stop switch (1).
   Please note!: *To ensure that the turf remains in the blade (11) especially ion a wet environment, pierce the turf 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 3.0 and can lead to serious personal injury!**

8. Remain standing on the footplate (5) while the blade (11) is pulled up from the newly cut hole, so that the blade is kept completely clear of the edge of the hole.
   Please note!: If neccessary, step off the footplate (5) for a short moment and rotate the eCutter 3.0 360° before pulling up the turf, to secure uniform depths.

Replacing the turf in the previous hole.

1. Move the eCutter 3.0 to the previous hole. Place the blade (11)in the hole.
2. Place your feet on the footplate (5).
3. Change the direction of the rotaion (14) so that the ejection nut goes towards (Pos. B) and activate the Start/Stop switch (1)
   Please note!: The height of the turf depends on the weight you put on the handles (4) while the eCutter 3.0 ejects the turf out into the old hole. The more weight, the shorter turf.
   This makes it possible to gat a turf below the edge of the hole, above the edge of the hole or at level with the edge.
   Important: When the ejector nut reaches one of the teo outer positions (Pos. A or B) the eCutter 3.0 will make a freewheeling sound. This is the intention. Just continue using the machine. The sound disappears as soon as the rotation direction is changed.

On our website: www.fshmachines.com 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.

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

Cleaning the eCutter 3.0

Under normal use, the eCutter 3.0 should be lubricated every 14 days. This ensures the machine it's best efficiency and durability.

1. Grease is applied with a grease gun via the grease nipple (15)

Keep the battery slot clean

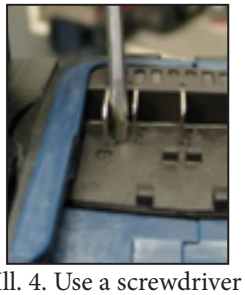
With time verdigris can build up between the poles/pins on the battery slot. (ill.3.) Also, if the air humidity is high, a thin, almost invisble,membrane can develop.

This can lead to the eCutter 3.0 short-curcuiting or not starting at all.


Ill. 3. 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. 4)
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 3.0


Ill. 4. Use a screwdriver

Environmental protection

The battery must be disposed of at a recycling station as "hazardous waste".
When scrapping, the eCutter 3.0 must be disposed of at a recycling station and sorted according to the regulations in force at the site.

Only for EC countries:

According to the European Directives 2012/19/EU and 2006/66/EC, discarded power tools and defective or used batteries must be collected separately and recycled in accordance with applicable environmental regulations.

Troubleshooting

Problem	Solution
eCutter does not ejec the turf	The depth stop is incorrectly adjusted, so the hole has become too deep, and the internal spindle has therefore run out of engagement: 1. Always remove the battery, before undertaking any kind of adjusting of the blade. 2. Remove the blade by removing the four bolt (12) and pull the blade out. 3. Replace the battery and start the eCutter, so the spindle engages again and the ejector moves downward again. (Towards position B) 4. Remove the turf partially or completely and reinstall the blade using the four bolts (12) 5. ADJUST THE DEPTH STOP to a minimum of 45mm/1,78” (see section “Before use” p.4) The depth stop should then be gradually adjusted as the blade wears.
Motor will not run	1. Recharge battery 2. 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. 3. Clean the poles on the battery slot (see “cleaning the eCutter” p. 7)
Hard to pull eCutter up from the ground eCutter is losing power	1. Rotate the entire machine 360° before pulling up the turf. 2. Puncture the turf with the spear. (**NEVER** while the eCutter 3.0 is on!) 3. Keep an eye on the bubble level while pulling up the blade.
eCutter is losing power	1. Battery is empty. 2. Protection against overloading is enabled. Remove the battery for a few minutes. Then reinsert it and try again.

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#11-appendix-k)

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.