

RangeMaxx[®]

User's manual

Commercial golf ball washer
(230V & 380V)



1. Index

1.	Index.....	1
2.	Foreword.....	2
3.	Warranty and responsibility.....	2
4.	Safety.....	3
4.1	CE marking.....	3
4.2	Safety instructions.....	3
4.3	Explanation of pictograms.....	4
4.4	Intended use and operation.....	5
5.	Survey.....	
6.	Installation.....	7
7.	How to use the ball washer?.....	8
8.	Maintenance.....	8
8.1	Periodic cleaning.....	9
8.2	Draining water in case of frost.....	9
9.	Disorders.....	10
9.1	In general.....	10
9.1.1	Insufficient water supply.....	10
10.	Trouble shooting.....	11
11.	Technical data.....	11
12.	Reparation and maintenance manual.....	12
12.1	Replacing the brush.....	12
12.2	Maintaining the motor.....	12
12.3	Oiling the reductor.....	12

© 2020 copyright Range King; all rights reserved, nothing from this edition may be copied or published without prior written permission of Range King B.V.

2. Foreword

You are in possession of a Range Maxx® Commercial Golf Ball Washer. We thank you very much for your trust in our product. With the design and the fabrication of the machine we have given our greatest attention to the quality and the durability in combination with affability for usage and maintenance. When you follow the instructions in this manual the Range Maxx® will serve you without for years.

This manual has been written for Range Maxx® Commercial Golf Ball Washers, these machines has been intended exclusively for dispensing golf balls. By change of use the CE marking is no longer valid.

3. Warranty and liability

Range King golf course equipment gives you a warranty on the new machine for the period of 12 months on the mechanism and the electrical parts.

In this warranty are not included failures, which occur by means of:

- a. not observance of the operation- and warranty instructions or other than the normal usage;
- b. normal wastage;
- c. alteration or reparation by or on behalf of the buyer executed by a third party, without a written permission of Range King;
- d. placing assemblies which are not delivered or placed by Range King;
- e. damage to the machine caused during the transport if this damage is not reported instantly after receipt of the machine. First examine the machine completely and report damage.

Always mention in all correspondence the serial number. This number you can find next to the control box inside the machine.

If anything is not clear to you with reference to this manual please contact:

Range King golf course equipment
Dirk Storklaan 23-24
2132 PX Hoofddorp
www.rangeking.eu

T +31(0)23 562 3855
F +31(0)23 561 0262
info@rangeking.nl

4. Safety

- Connect the machine to an earthen socket.
- Make sure the power cables don't come in contact with water.
- Several parts in the machine are under dangerous voltage; when opening the machine always disconnect plug from socket to prevent electrocution.
- Prevent severe injuries; do not approach moving parts and do not put your hands in a machine in operation.
- Incompetent uses can possible lead till material or physical damage.

Caution! Moving parts: do not place hands in machine when in operation.



Always disconnect power plug from socket when inspecting or repairing the machine.



Read this manual thoroughly.



4.1 CE marking

The Range Maxx® Ball Dispenser complies with the European guidelines of the machinery and the EMC directives. See declaration of conformity for details.

4.2 Safety instructions

In case of material damage or personal injuries, caused by incompetent usage or not observing this manual and safety instructions, we do not accept any responsibility.

The machine was in perfect condition when transported from the production factory. To maintain this state and guarantee a save operation, the intended use, the safety instructions and safety warnings ought to be observed.

Due to safety measures and admission-demands (CE) it's not permitted to make alterations to the machine or it's components with one's own hands without permission of Range King®.

Please refer to your supplier or a skilled craftsman when you have questions regarding to the working method, safety or connections of the dispenser.

Do not leave the packaging material unguarded; these materials can be hazardous for young children.

The dispenser can only be used under a roof in a sheltered place.

When it's assumed that a save operation is no longer guaranteed, the machine must be put out of order. A save operation is not possible when:

- the machine shows clear damages
- the machine does not function
- after long storage under unfavorable conditions

4.3 Explanation of pictograms

Warnings are frequently used in this manual. These warnings are indicated with pictograms, with the following meanings:



Caution! High voltage!



Warning! (In general)



Danger! Be aware, do not approach moving parts!



Tip or complementary information.

4.4 Intended use and operation

The Golf Ball Washer may only be used for washing golf balls.

The dirty balls are placed in the gutter. When the balls roll down thru the opening in the washing box they are sprayed with water. When they land on the 'grip disk' the balls will spiral to the outside of the washing box. The balls spin on the grip disk, powered by the electric motor. Because the balls are forced to the outside by this rotating motion, they are being washed by the brush. The dirt is soaked off and washed away by the constant stream of water in the washing box. When the balls reach the outside of the washing box, they leave the washer and are clean. (In the illustration the washer is represented without ball gutter).

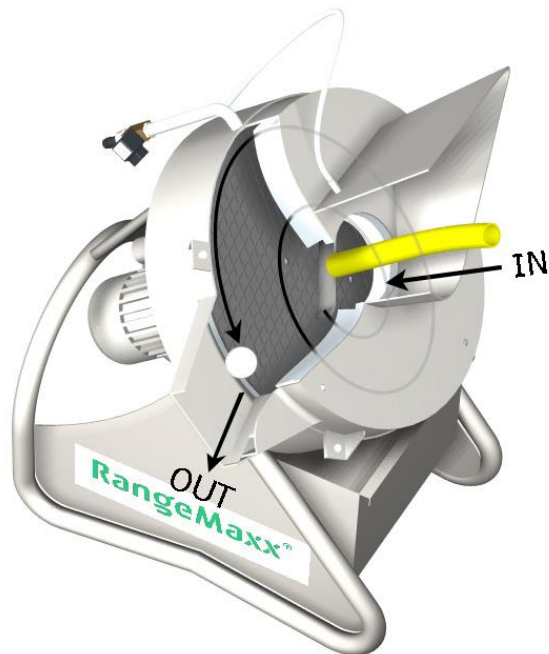


image 3.1, functioning washing mechanism

5. Survey

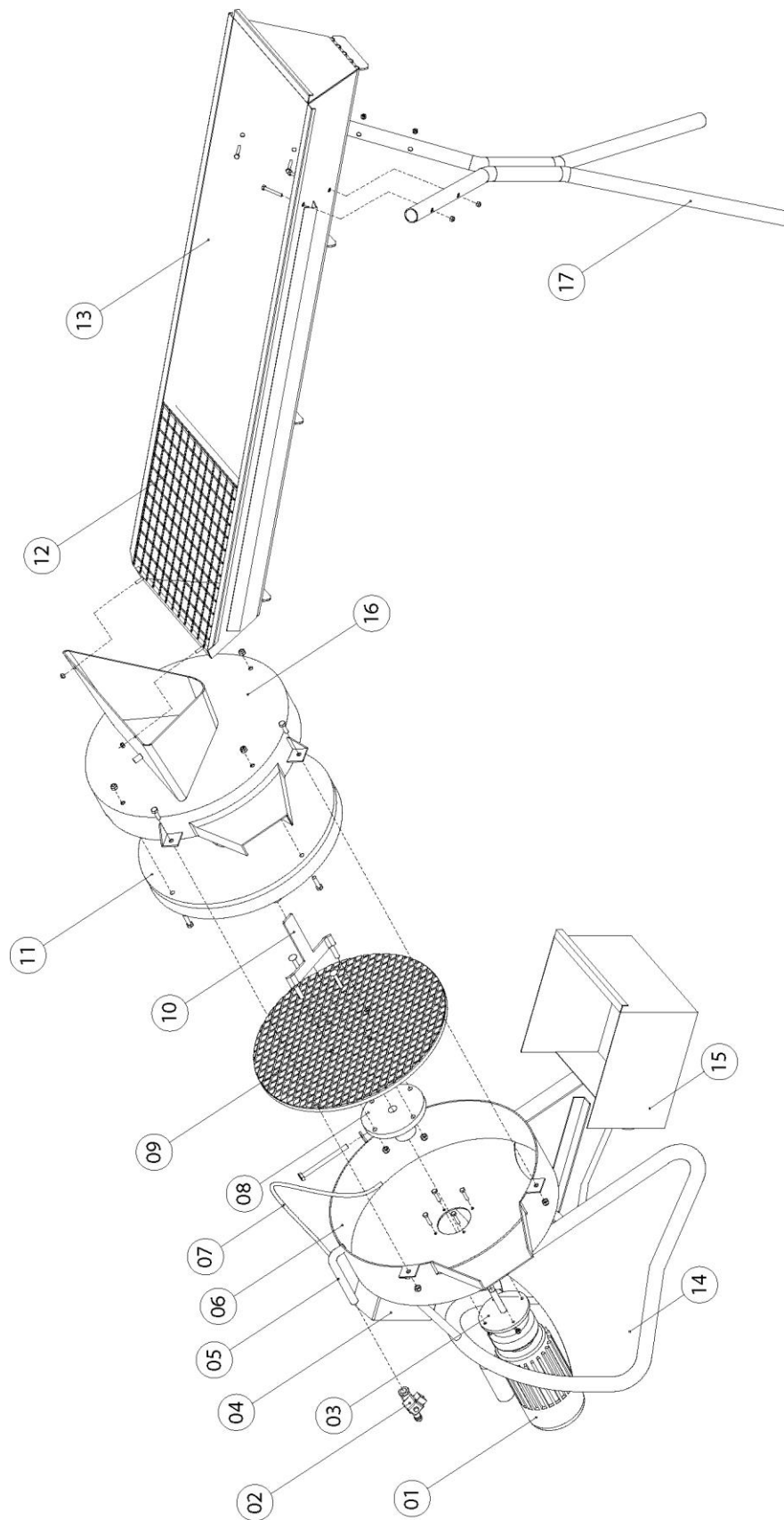


image 4.1, survey

- | | |
|---------------------------------------|------------------------|
| 1. Electric motor | 10. Flow stimulator |
| 2. Water valve (only on 230V version) | 11. Brush |
| 3. Reducer | 12. Safety grill |
| 4. Switch (START/STOP) | 13. Ball hopper |
| 5. Water pipe to sprinkler | 14. Frame |
| 6. Washing drum | 15. Waste reservoir |
| 7. Water hose to pre-sprinkler | 16. Front washing drum |
| 8. Mounting cylinder | 17. Legs |
| 9. Grip disk | |

6. Installation

- Assemble the legs and bolt them with the four connection bolts
- Connect the gutter to the washing box
- Place the machine on a water leveled and solid foundation, bolt down if necessary
- Connect a 1/2" water hose conform the regulations of the supplying water company. Also connect the 40 mm drainage.
- Connect the power cord to an earthen socket.

The machine may only be connected to an earthen socket!



Take care of the power cord; it may not dangle loosely and may never lie in a water puddle!



Always turn off the water tap if the machine is expected not to be used for some time.



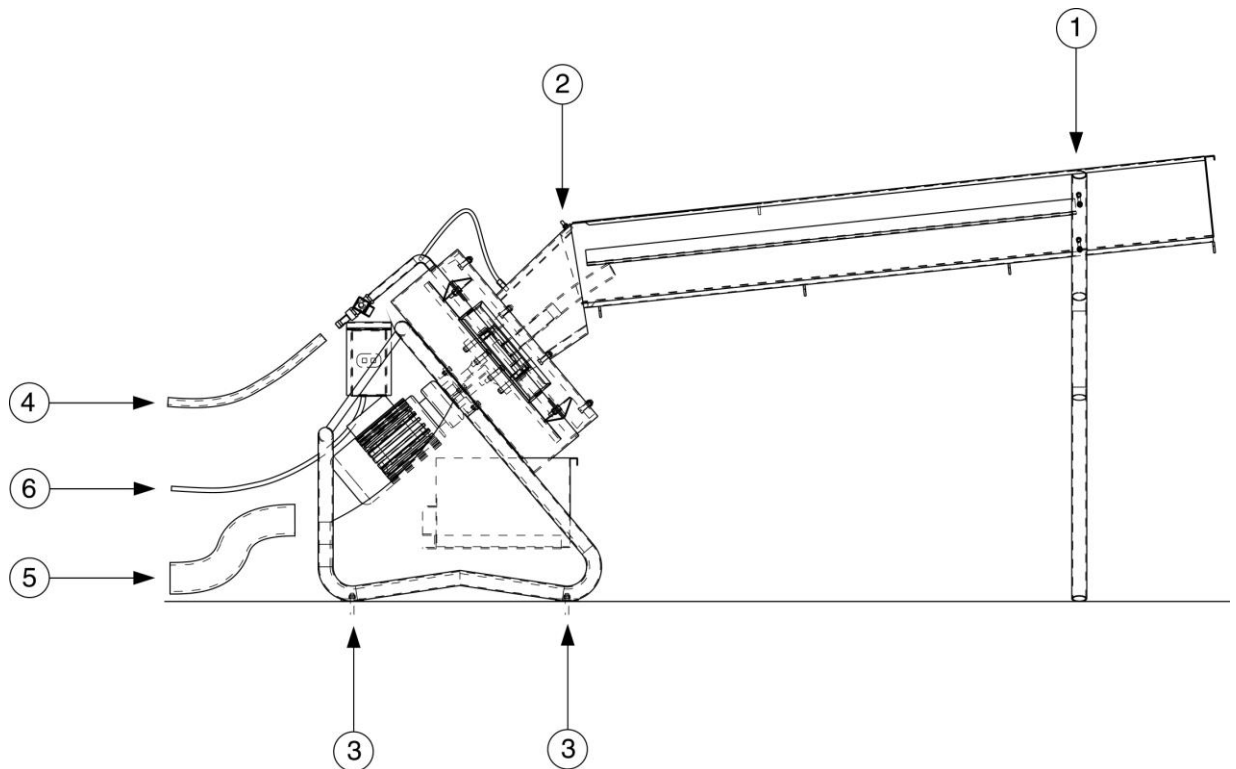


image 5.1, installation steps

7. How to use the ball washer?

- Put the dirty balls in the gutter
- Open the water tap (the 230V version has an electric water valve; valve opens automatic)
- Turn the washer on by pressing the START button; the washing mechanism starts to spin and is supplied with water
- When all the balls are clean and the washing box is as good as empty, the machine can be turned of. Press the STOP button.
- Close the water tap (not necessary on 230V version)

8. Maintenance

Remove the plug from its socket before you start maintenance. Various parts are under voltage when the plug is in.



The outside of the machine can be cleaned with a moist cloth and a not-aggressive cleaner. Do not use aggressive solvents because they can damage the lacquer. Touch up little lacquer damages in time, then further damage will be limited.

The electrical parts like motor (3), switch (13) and water supply (2) may not connect with water.

Never use a water hose to clean the machine.



When filling the machine with balls, prevent any other objects such as twigs, stones, sand, leaves or other things from being also put into the gutter.

Empty the waste reservoir in time; the reservoir will overflow when too much waste is inside.

8.1 Periodic cleaning

Monthly:

To maintain the optimum cleaning action of the washer, the washer also ought to be cleaned inside. Open the washing box by taken of the gutter and unscrewing the connection bolts on the front. (See figure). Remove grass and other objects from the brush.

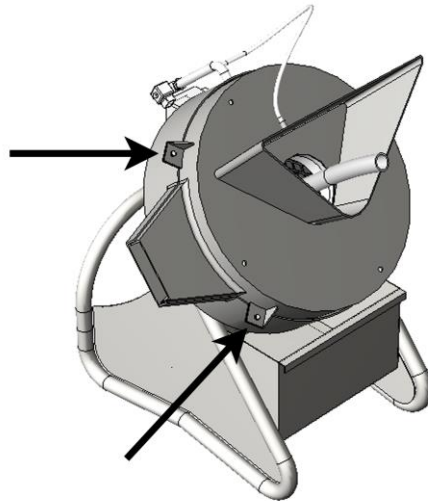


Image 8.1, position of the connection bolts

Annually, on march 1st:

Clean the sieve of the water valve. Check the oil level in the reducer, refill up to the fill-openings.

8.2 Draining water in case of frost

The machine needs to be protected for frost. In case of temperatures below zero, the water needs to be drawn from the washer



- Close the water supply
- Take of the water hose from the machine, let the water out and turn on the machine for a minute so that the remaining water will flow out.

9. Disorders

Before opening the machine always remove the plug from its socket.



Always consult the “trouble shooting guide” before calling a technician for help. Often it is possible to solve the problems yourself or if you cannot solve it yourself, a technician might give you a good advice.

9.1 In general

9.1.1 Insufficient water supply

There is a sieve inside the water hose swivel head of the water supply (2). Clean the sieve in the swivel when there is too little water (when the water supply is fully opened). Turn off the water tap and unscrew the swivel. Never remove the sieve from the swivel.

The sieve filters the water, so the sensitive water valve doesn't block.
When the sieve is removed, the water valve soon gets dirty and will not close anymore.



Check if the sprinklers aren't blocked. These are easy to reach and can be cleaned with blowing dirt off.

10. Trouble shooting

Symptom	Possible cause	Solution
The balls come out irregular	The washer is (partly) clogged with dirt	Remove dirt, open washing box if necessary
	The brush is worn out	Check the brush for wastage and irregularity in the brush hair pattern. Repair the structure or replace brush.
There's not enough or no water at all in the washer	The water supply is closed	Open water tab.
	The water valve is defect	When the washer is turned in, the water valve makes a clicking sound. When this not happening, the valve needs to be replaced.
	The sieve is silted up	Clean the sieve in the water valve
The washer will no longer operate because the switch keeps turning off machine	The grip disk is blocked	Open the washing box and check for (blocking) objects or broken balls. Remove them.

11. Technical data

Range Maxx® commercial ball washer	
Power	230 VAC/380V / 550 Watt
Weight	55 kg
Dimensions	66 x 200 x 100 cm
Washing capacity	± 15.000-20.000 balls / hour
water usage	4 l/min (max)

12. Reparation and maintenance manual

The reparations and maintenance in this part of the manual may exclusively be executed by skilled craftsmen.



Always remove the plug from its socket before you start maintenance. Various parts are under constant voltage when the plug is in.



12.1 Replacing the brush

When the washer does no longer clean the balls as intended, it is likely that the brush needs replacing. The brush shows visible wastage in an irregular pattern.

- Before starting maintenance or repairing, remove the power plug from the socket.
- Disconnect the gutter from the washing box
- Unscrew the connection bolts and open the washing box
- Take the old brush out of the washing box by unscrewing the four connection bolts
- Put the new brush in place with the shorter hairs on the side of the opening
- Bolt the brush tightly to the base of the washing box
- When washing box lid is closed the gutter can be connected again
- Plug in the power cord and test the washer with some golf balls.

12.2 Maintaining the motor

- Keep the cooling ribs and the motor's fan free from dust to prevent overheating
- The motor is provided with ball bearings which under normal circumstances do not need lubrication.
- Clean the motor with a brush and a moist cloth; never use a jet of water.

Avoid electrical parts from coming in contact with water; never use a jet of water to clean the motor!



12.3 Oiling the gearbox(reducer)

The toothed wheels in the gearbox should be lubricated at all times. Therefore the oil level needs to be checked twice a year, and filled up if necessary. In case of leakage the gasket needs to be replaced.

- Before starting maintenance or repairing, remove the power plug from the socket.
- The two fill-openings are placed on the sides of the reducer. The openings are closed by hexagonal socket head cap screws. To gauge the oil one needs to be unscrewed.

- The correct oil level reaches the fill-openings; when filling up the oil, prevent wasting oil by keeping the washer tilted.
- Beware that the openings are sealed by the screws again when finished.
- Plug in the power-cord
- Test the motor

EU-declaration of conformity

Manufacturer: Range King B.V.
Address: Dirk Storklaan 23
2132 PX Hoofddorp
The Netherlands

Declares, under own responsibility, that the product:

Range Maxx® commercial golf ball washer

Model:

Date of man.:

Serial no.:

about which this declaration concerns, is in conformity with the standards

- EN 292-1, EN 292-2, EN 292-2A, EN 1050, EN 1599

and in conformity is with the essential health and safety requirements of the

- directive for machinery 98/392/EG
- directive for EMC 89/336/EEC

.....
Hoofddorp

.....