

RangeMaxx®

User's manual

Small Golf Ball Dispenser

(Small)



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2. Foreword

You are in possession of a Range Maxx® golf ball dispenser. 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 the Range Maxx® Ball Dispenser Small.

This machine 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 By change of use the CE marking is no longer valid.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:

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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 use can possible lead to 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

De 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!

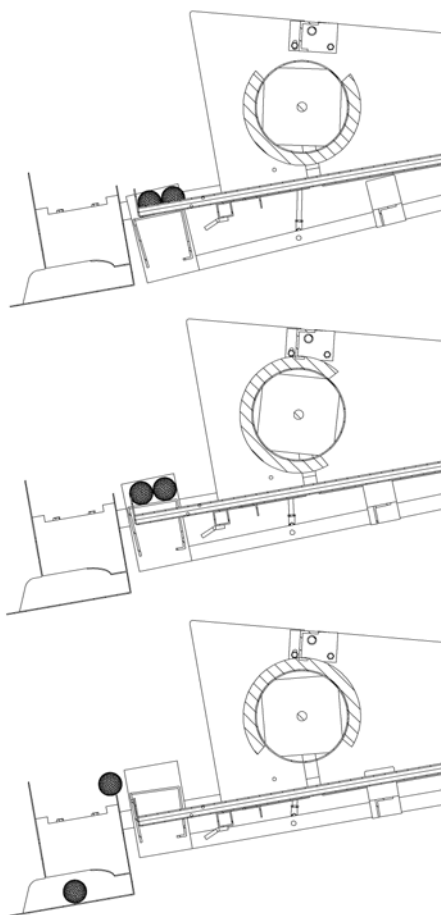


Tip or complementary information.

4.4 Intended use and operation

The Range Maxx® Ball Dispenser Small is exclusively intended for storing and dispensing golf balls. The golf balls can be loaded by hand or by a Range Maxx® Elevator or Turbo Blowing System.

The functioning of the Unique Ball Dispensing Mechanism is as follows: The balls are rolling on the base of the dispensing frame towards the brush. The brush turns in the opposite direction and cleans the balls. Also the brush regulates the dosage of the balls. When all blocking pins are removed, 2 rows of 6 balls (12 in total) will roll above the lift mechanism. When a user activates the dispenser (by paying) the lift will lift the first two rows of balls. The machine will dispense the balls through the ball outlet in the user's basket (or something like it).



5. Overview

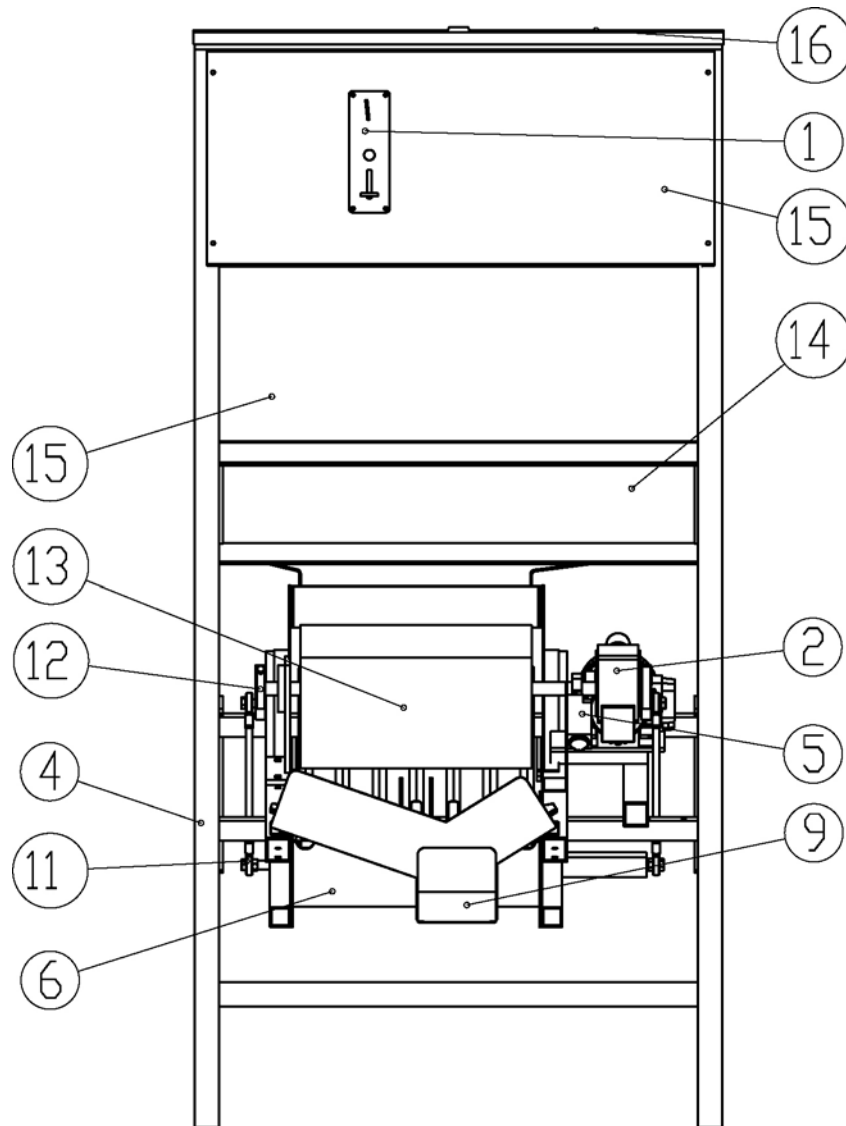


Image 5.1, overview

1. Coin insert unit
2. Electric motor
4. Mechanism connection bolt (2x)
5. Stop switch
6. Lift mechanism
9. Ball outlet
11. Rod (2x) and bearings (4x)
12. Axle eccentrics (2x)
13. Brush
14. Bottom plate
15. Ball storage
16. Top lid

6. Installation

Install the machine by following these instructions:

- Place the machine on a firm and water-level foundation; if the machine tilts it will not operate properly.
- Take the ball outlet (9) and connect it from the inside to the outside through the hole in the lower front plate. Secure it firmly with the 4 connection bolts and nuts.

Make sure the bolts of the outlet are tightly secured; the ball outlet keeps users out of (the moving parts of) the machine.



- Put the front plate back in place and lock it.
- Plug the power plug in 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!



- Insert a coin in the coin insert (1) and check if the machine runs as normal.
- Fill the ball storage (15) and place a basket under the ball outlet.
- Let the machine run several times by inserting coins, so that the whole base of the dispenser frame is filled with balls.
- With the blocking pins on both sides of the dispensing mechanism, in combination with the inputs of the control module, the exact number of balls to be dispensed can be adjusted. For details see 'Adjusting the number of cycles'.

6.1 Adjusting the number of cycles

The number of cycles can be adjusted by connecting the wire coming from the Coin Switch, to other inputs of the control module (I1, I2, I3, I4, I5). The amount of cycles correspondent with the input number (for example: I1 is 1 cycle, I3 is 3 cycles).

For changing the number of cycles, the Control Module can be removed easily:

- Use a small screwdriver to pull lip down till it clicks
- The module can now be lifted easy from the Din rail.

See figure below.

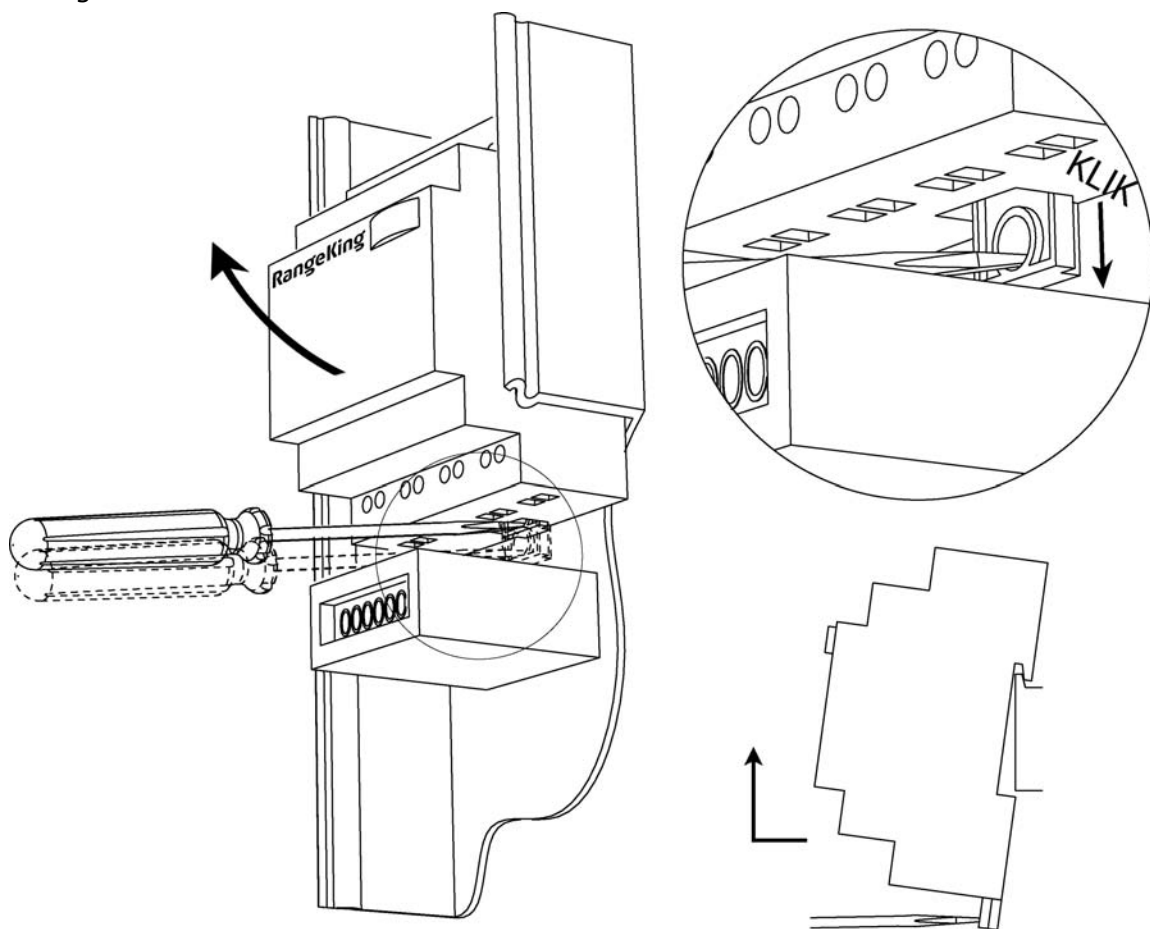


Image 6.1, removing control module

7. Maintenance

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



7.1

7.2 Cleaning in general

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 (2) and stop switch (5) 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 storage.

Remove big flaws out of the brushes.

7.3

7.4 Oiling

The following parts of the machine should be oiled on February 1, June 1 and October 1:

- The 4-rod end bearings (11) of the axle eccentrics' (12) on both sides of the lift mechanism.

7.5 Cleaning the coin mechanism

Clean the mechanism regularly with a moist cloth.

When it is very dirty you can take the mechanism out of its holder and clean it with water and a detergent.

After that, carefully wash it with warm water and dry it by using a hair-dryer or high-pressure air.

It is advisable to slightly dab the return mechanism with grease after cleaning. Do not use too much grease.

Make sure that no grease or oil is put on the track, which the coin follows. This is to prevent disturbance by obstruction and filthiness.



8. Disorders

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.

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

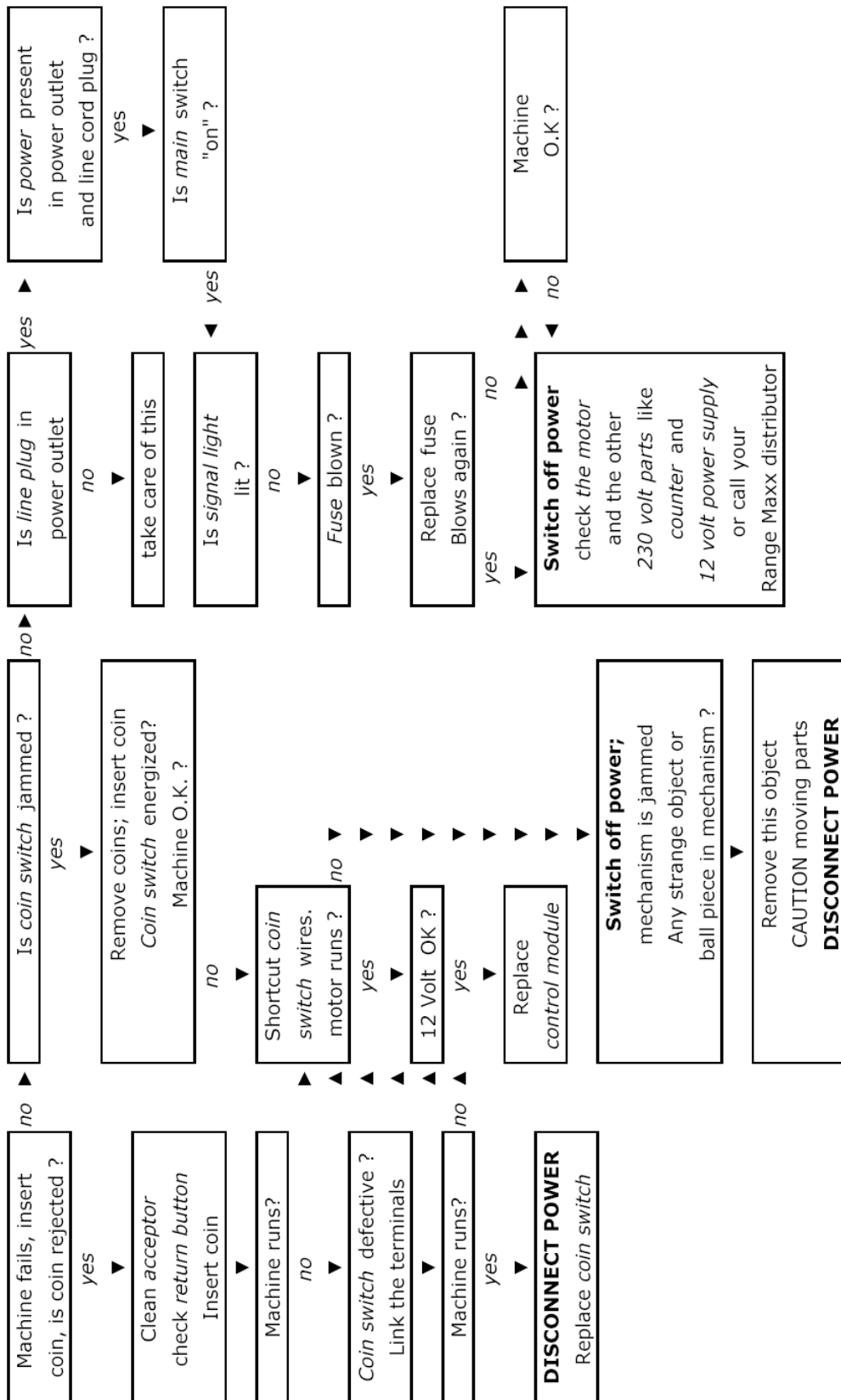


8.1 In general

8.1.1 Ball outlet

If any problems arise with dispensing balls it is often because of defilement or strange objects in the mechanism. This can easily be removed.

9. Trouble shooting



10. Coin mechanism

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

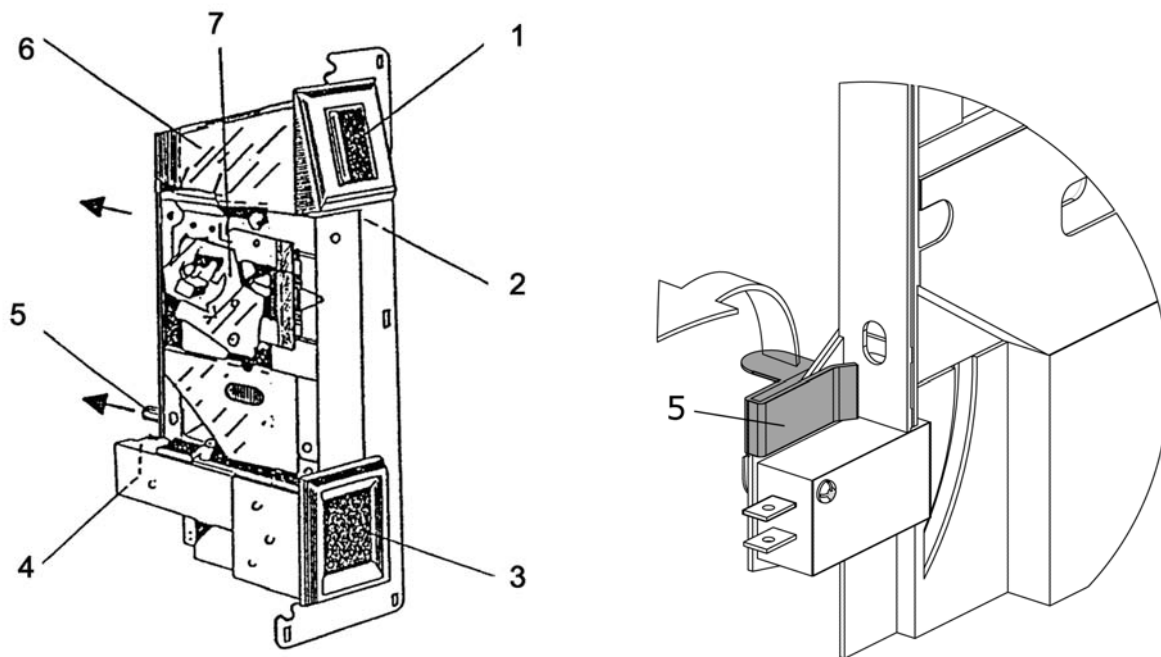


Image 11.1, coin mechanism

- | | |
|-----------------------------------|-----------------------------------|
| 1. Reject button | 5. Opening clip |
| 2. Nylon return siphon (location) | 6. Holder |
| 3. Coin return tray | 7. Hinging part of coin mechanism |
| 4. Coin switch | |

The coin mechanism must be removed seldom. Blocking coins can be removed out of the mechanism. Often it is enough to open the hinged top of the coin mechanism (7). If necessary use opening clip (5) to remove coin mechanism from holder.

11. Technical specifications

Range Maxx® golf ball dispensers Small	
Power	230 VAC 50 Hz, 5/130 Watt
Weight	170 kg
Dimensions	132 x 66 x 137 cm
Storage capacity	5.500 balls
Ball outlet	8, 10 or 12 balls per cycle, 1-5 cycles

12. Maintenance manual for Range Maxx® Dispenser Small

The reparations and maintenance in this part of the manual may exclusively 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.

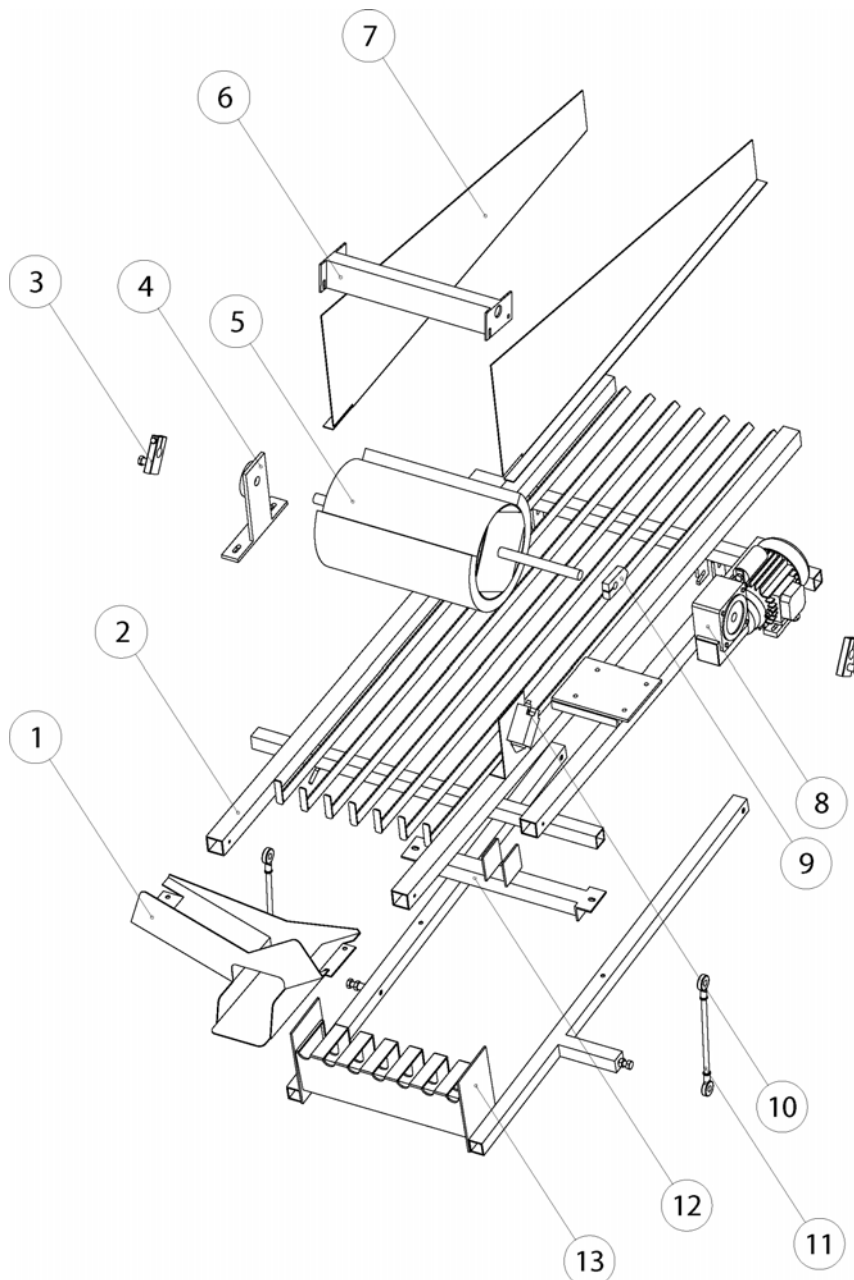


Figure R1, exploded view of dispensing mechanism

- | | |
|---------------------------------|----------------------------------|
| 1. ball outlet | 8. electric motor |
| 2. base of dispensing mechanism | 9. clamp block (switch actuator) |
| 3. axle eccentrics (2x) | 10. stop switch |
| 4. bearing support | 11. rod and bearings (2x) |
| 5. brush | 12. anti-blocking |
| 6. scrape | 13. lift mechanism |
| 7. side plate (2x) | |

12.1

12.2 Removing the dispensing mechanism

For major repairs it can be necessary to remove the dispensing mechanism. The mechanism can be removed in one piece through the bottom of the housing. To do this in a safe manner, follow the steps in this manual.

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



- First make sure there is no voltage on the machine
- Disconnect the connection wires to control module
- Turn the entire dispenser on its backside
- The mechanism is bolted to the housing right and left on the front side; unscrew the connection bolts
- Lift the mechanism to the front side of the housing, the hind cross beam can slip through the openings in the supporting profiles of the side plates.
- Now the mechanism can be removed from the housing.

For maintenance and small repairs it's not necessary to take out the whole mechanism.



To place the mechanism back in the housing, follow the same steps in reverse.

12.3 Replacing the brush

If the brush is worn out or by other courses doesn't function well, it can be replaced by following these instructions.

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



- Take out the dispensing mechanism as described in 'Removing the dispensing mechanism'
- Take of the axle eccentrics (3) on both endings of the axle
- Remove the bearing support (4) from the base of the dispensing mechanism
- Unscrew the bolts of the scraper (6) on the side as the bearing support (left side)
- Take of the left side plate (7) by unscrewing the connections screws
- The brush is now free and can be taken out of the motor's hollow axle

To install a new brush the same instructions can be used. Always grease the new parts to prevent them from rusting. Be reminded that the brush needs adjusting, for instructions see 'Adjusting the brush'.

12.4 Adjusting the brush

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



The figure below illustrates the correct position of the brush-roll when the dispensing mechanism is in its lowest position. In this position the lift mechanism is as low as it can get, the first two rows of balls are above the lift mechanism and the opening in the brush is pointed upwards.

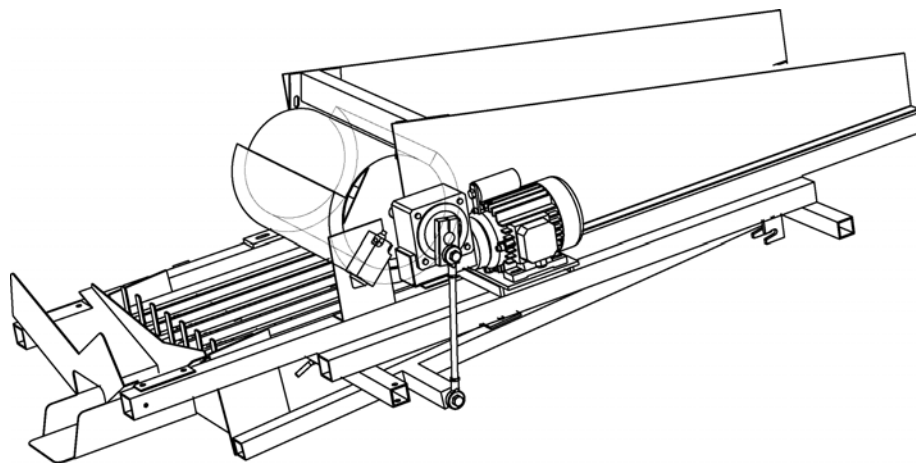


Figure R2, mechanism in lowest position

In figure R3 the dispensing mechanism is in the stop position. While the brush rotated anti-clock wards, the mechanism lifted the first two rows of balls. In this position the mechanism will dispense the balls and let new balls pass under the opening in the brush. To prevent the switch from being crushed by the actuator (9), there is a 1 mm margin between the utmost position of the switch and the actuator.

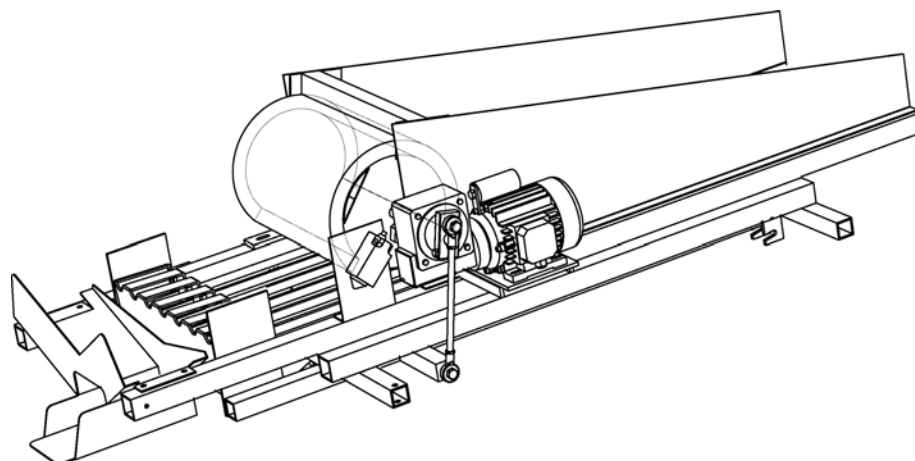


Figure R3, mechanism in stop position

When the position of the brush-stop is incorrect, the mechanism will not dispense, or not enough balls. For the right position, adjust the axle eccentrics on both ends of the brush-axle; see instructions below.

- First adjust the stop position, in this position the lift (13) is in its upper position. The actuator activates the stop switch by pushing it slightly.

Beware that the actuator does not crush the switch, leave 1 mm margin minimum.



If the adjustment of the stop position with the stop switch does not have adequate result, the whole brush needs to be rotated in the right position.

- Run the machine to the point that the lift mechanism (13) is in its highest position; loosen the bolts of the axle eccentrics (A) a few
- Rotate the brush, so that the brush-interval point down and the balls roll free under the brush (same as figure R4)
- Fasten the bolts of the axle eccentrics

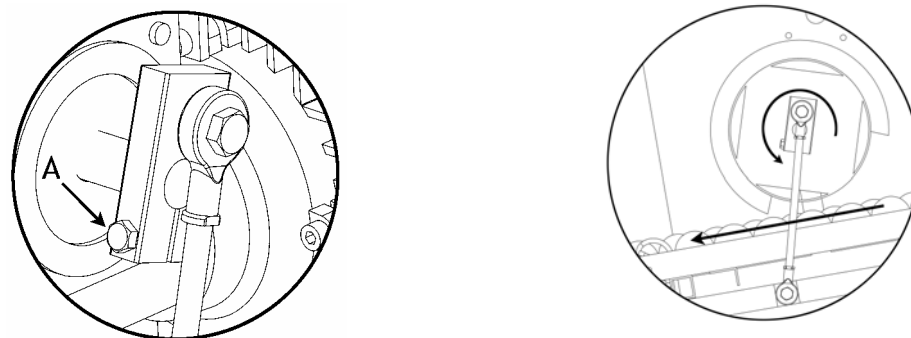


Figure R4, adjusting the brush-stop

EC declaration of conformity

Manufacturer: Range King golf course equipment
Address: Dirk Storklaan 23-24
2132 PX Hoofddorp
The Netherlands

Declares, under own responsibility, that the product:

Range Maxx® Golf Ball Dispenser

Model: SMALL.....

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

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

- directive for machinery 98/37/EG
- directive for EMC 89/336/EEC

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Hoofddorp

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