

# RANGE SERVANT®

http://www.rangeservant.com



# **USER'S MANUAL**

PRE SOAKER 3600

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## 1 General

#### 1.1 Preface

We congratulate you to your new Range Servant machine. You have made a good choice! Not only have you chosen an excellent state-of-the-art PreSoaker with little demands on maintenance but you have also chosen quality. Quality is ensured with the help of modern production techniques, carefully chosen materials and the responsible workmanship of our staff.

This User's Manual contains all the information necessary to fully understand the maintenance and operation of the machine.

Study the User's Guide carefully before using the machine. If these instructions are not followed, persons using the machine might be injured or the equipment itself be damaged. In many cases, following the instructions is a necessary condition for Range Servants' warranty to be applicable. Every person operating the machine must read these instructions.

No part of this publication may be reproduced without the written authorisation of Range Servant.

The machine has a one-year warranty. Study the warranty conditions carefully and keep them in a safe place. If you have any questions, or if problems should arise, please contact your Range Servant representative.

#### **ONE YEAR WARRANTY**

Range Servant AB hereby offers a warranty of one year from the date of shipment from the factory on material and function of the RANGE SERVANT product specified in this Manual. This engagement applies to repaired or replaced components for a period of three months. This undertaking only applies to the original purchaser. Furthermore, it is limited to the components that the manufacturer finds to be faulty when inspected.. Repairs or replacement of components shall be carried out by a representative authorised by the manufacturer. The manufacturer further guarantees that the equipment supplied corresponds to the product description issued. THE UNDERTAKINGS SPECIFIED IN THIS AGREEMENT CONSTITUTE THE MANUFACTURER'S SOLE OBLIGATION TOWARDS THE PURCHASER. THE MANUFACTURER DECLINES ALL RESPONSIBILITY FOR ANY FORM OF PROMISE OUTSIDE THE FRAMEWORK OF THIS GUARANTEE CERTIFICATE. manufacturer also declines all responsibility for promises that might have been made by a third party in conjunction with the sale. The guarantee contract does not apply to equipment that has been repaired or has had components replaced by persons/companies not authorised by the manufacturer. The manufacturer's guarantee is void if equipment has been incorrectly used, damaged by lack of maintenance / accident or has not been handled in accordance with the written user's manual supplied on delivery. Finally, the manufacturer is exempted from financial responsibility for any kind of injury which might arise in conjunction with the sale and repair of equipment, and from injury suffered by third parties in conjunction with use of the product.

## 1.2 EC Declaration of Conformity

In accordance with the Machine Directive 89/392/EEC, annex 2A.

The Manufacturer: RANGE SERVANT

Range Servant AB Skallebackavägen 11 SE- 302 41 HALMSTAD Sweden

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(To be filled out by a representative established within the EU)

	Company				
	Address				
	Telephone				
Declare that:	Pre Soaker				
	Туре				
	Serial no., manufacturing no. etc.				
approximation of the la referred to in Annexe requirements in connect by Council Directive 9	with Council Directive 89/392/EEC of 14 June 1989 concerning aws of the Member States relating to machines in particular as a I to this Directive concerning essential health and safety ction with the design and manufacture of machines, as amended 11/368/EEC of 20 June 1991 on the amendment of Directive g approximation of the laws of the Member States relating to				
B) (if applicable) are manufactured in ac	cordance with the following regulations, directives etc.:;				
	(if the requirements under A have been fulfilled) that the harmonised standards 292-1, 292-2 and 292-2A (or parts thereof) have been applied				
	(if applicable) are manufactured according to the following national standards and chnical specifications:				
Halmstad,					
Jordan Knez					
President	ignature				

## 1.3 Description

#### 1.3.1 Pre Soaker

The Pre Soaker can be used either as a stand-alone machine or be integrated into a complete, automated system - the Range Servant Ball Management System.

Range Servant's user-friendly Pre Soaker is designed to operate on the toughest of ranges. By adding the Pre Soaker to the efficient Boll Washer you will have a ball washer that is capable of removing even the most stubborn dirt from the golf balls. It is ideal for soggy golf ranges situated in depressions. As a cleaning agent you can use any detergent you like.

#### 1.3.2 Ball Management System

Range Servant can deliver a complete, flexible Ball Management System adaptable to any kind of driving range requirements. There is a Ball Dispenser that can be combined with the work-efficient, environment friendly Ball Washer. The Ball Washer in turn can be connected to the Elevator, the Conveyor Belt or the Blower transporting the clean, undamaged balls from Washer to one, or several, Ball Dispensers. The system also includes a Ball Picker machine picking up used balls from all over the driving range. Thus the circle is closed and manual work reduced to a minimum.

By applying our extensive know-how to the specific problems of every driving range we are able to offer tailor-made solutions.

#### 1.4 Identification

When contacting Range Servant, please identify your machine with the help of the information contained in the identification plate. The identification plate is well visible and firmly attached and contains the following information:

- · Name and address of the manufacturer
- CE-marking
- Designation of series or type of machine
- Serial no., if any
- · Year of manufacture

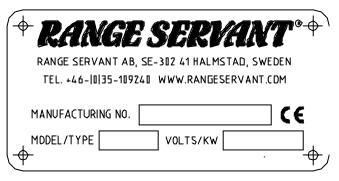
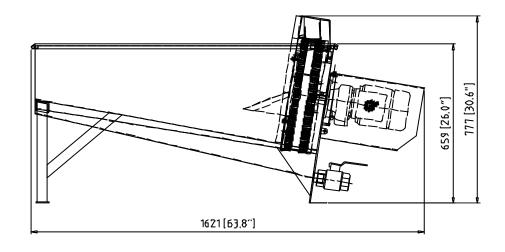


Fig. 1: Product identification plate

## 1.5 Technical Data

General	Pre-Soak
Hopper capacity [balls] Cleaning capacity [balls/min] Water volume [liter] /([gal)	3.000 450 240 (63.4)
Dimensions:	
Height [mm] /([in]) Length [mm] /([in]) Width [mm] /([in])	777 (30.6) 1621 (63.8) 947 (37.3)
Electric system:	
Mains supply [V, 50 Hz] [V, 60 Hz] Motor (kW)	230 110 0.37
Operating Conditions:	
Operating Temperature [°C] /([°F])	+2 - +50 (+35- +122)



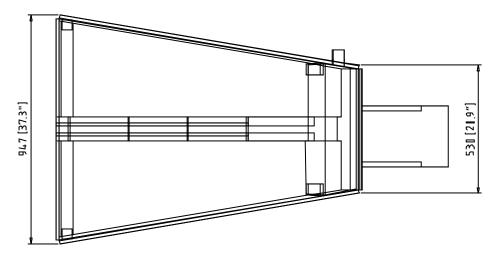


Figure 2: Pre Soaker 3600.

The level of airborne noise has been measured for an identical machine under normal operating conditions.

The values indicate the sound pressure level measured 1 m [39.4"] from the sides of the machine and 1,6 m [63"] from the floor or access platform.

Sound pressure at the machine (dB, Peak) Χ Sound pressure at the machine (dB, A) X
The manufacturer reserves the right to alter any details of the products without prior notice.

## 2 Safety

#### 2.1 General

Safety measures are a combination of measures taken by the manufacturer when designing and building the machine and measures that have to be taken by the user.

The machine has been designed to function for its intended purpose. It has been designed and manufactured in such a way that configuration and maintenance can take place with the least possible risks to the operator, provided such work is carried out according to the instructions laid down in the User's Manual.

The objective of the safety measures is to eliminate all accident hazards during the operational life of the machine which also includes the assembly and dismantling of the machine, including any hazards arising as a consequence of such abnormal circumstances as can be anticipated.

Accessories and spare parts that have not been approved by Range Servant can lead to personal injuries and/or equipment damage and affect the operational reliability of the machine. For the sake of safety you should therefore exclusively use accessories and original Range Servant spare parts recommended by Range Servant.

Such accessories and spare parts are specially intended for the machine and are approved by us with regard to safety.

All Range Servant retailers keep accessories and spare parts at your disposal along with competent advice. They also have the technical qualifications necessary for installing your machine and are informed about what technical changes are authorised.

Damage caused by the use of accessories and spare parts not having been approved by Range Servant and damage due to unauthorised technical modifications are not covered by the warranty obligation.

## 2.2 Conformity with mandatory requirements

The Range Servant ball management machines fulfil the personal safety requirements of the EU Machine Directive 89/392/EEC as amended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC, with a special reference to Annex I of the Directive concerning essential health and safety requirements in connection with the design and manufacture of machines, as amended by Directive 91/368/EEC. Furthermore the harmonised standards 292-1, 292-2 and 292-2A (or parts thereof) have been applied.

The electrical equipment fulfil the safety provisions laid down in the EU low voltage directive 73/23/EEC, as amended by directive 93/68/EEC.

## 2.3 Remaining hazards

There are warning signs serving as a reminder and warning to the user of any remaining risks, i.e. risks that we have not been able to eliminate, or sufficiently minimise, in our design and against which technical safety measures do not provide complete, or sufficient, protection. The warning signs shall be written in the local language and, on request, in the language understood by the respective operator. The signs are yellow with black characters. They are big enough to be readable from a distance of three meters.



Fig. 3: Warning signs on front hatch

- Always disconnect the power supply to the machine before carrying out maintenance or service work so that it cannot start. The mains switch is located in the control box in the lower corner of the printed circuit board.
- Mechanical or electrical alterations may only be undertaken in consultation with Range Servant.
- If the machine is used at temperatures below 2°C, there is a risk of the water valve and water hoses freezing. To prevent this from happening, disconnect the water supply and check that the machine is empty of water when temperatures approach the freezing point..
- Never put your hands inside the Pre Soaker when it is working.
- The machine shall be connected to a drain.

#### 2.4 Authorised use

The machine may only be used as a washing machine for golf balls.

The machine may only be taken into service if installed according to the instructions contained in this Manual.

#### 2.5 Prohibited use

Using accessories or spare parts not recommended by Range Servant might cause personal injury and/or equipment damage and affect the operational reliability of your ball dispenser. For safety reasons, use only those components recommended by us. They are intended for your machine, they have been chosen for safety reasons and they are approved by the manufacturer.

Damage caused by the use of accessories and spare parts not having been approved by Range Servant or damage due to unauthorised technical changes are not covered by the warranty obligation.

## 2.6 Emergencies

#### 2.6.1 Fire

Water shall be used as an extinguisher in the event of fire, except if the fire is located in the electric equipment, where a carbon dioxide extinguisher must be used.

## 2.7 Operational reliability

For trouble-free operation and long service life the instructions below should be followed:

- Place the machine on a firm and level surface.
- Place the machine under cover.

## 3 How to use the Pre-Soaker

## 3.1 Necessary Qualifications

Due to the complex design and operation of the machine the person carrying out service and maintenance work must have the necessary qualifications. He is required to have attended a training course, in form of a comprehensive study of the User's Manual.

If the person has to be absent from work for more than three months, training has to be repeated.

## 3.2 Operation of the Pre Soaker

#### 3.2.1 Start and stop

Start the machine by turning the Start/ Stop knob.

#### 3.2.2 Charging of balls

After starting the machine, fill the golf balls into the hopper. After they have been soaked they are fed into the washer for cleaning.

## 4 Design and Function

#### 4.1 General

The machine was designed for the soaking and cleaning of golf balls. The Pre Soaker is composed of two opposite discs with a space between them. On the facing sides they are equipped with brushes. The distance between the brushes is smaller than the diameter of the balls. The cleaning effect is obtained due to the fact that one disc rotates and the other is fixed. The balls are fed into the space between the brushes through an opening in the lower part of the fixed disc. The discs are arranged in container the bottom of which slopes down towards the brushes.

The rotating brush is attached to a shaft and the shaft to the motor that rotates the disc.

The shaft is equipped with a device capable of moving the balls away from the centre making them follow a spiral shaped course from the entrance to the opening through which they are ejected.

A tap for emptying the water and an overcharge protection device are installed for the water used before, during and/ or after the treatment of the balls.

Range Servants Pre Soaker has been designed to provide driving range owners with a long-lasting, reliable, practical and economical golf ball management system.

#### 4.1.1 Main Components

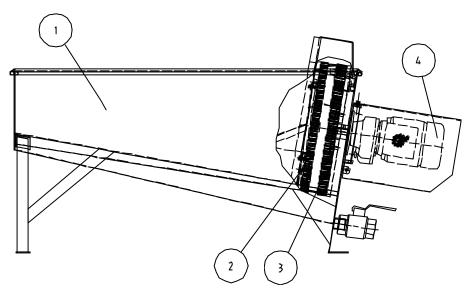


Figure 4: Side view.

Pos.	Designation
1	Hopper
2	Brush plate
3	Rotating brush plate
4	Motor

## 5 Maintenance

#### 5.1 General

Range Servant will provide accessories and original spare parts together with competent advice.

Maintenance carried out correctly minimizes defects and ensures maximum service life and reliable operation. Any malfunctions are detected at an early stage and are therefore easily corrected.

Regular maintenance minimises defects and equipment breakdown. The following maintenance instructions only refer to the most common problems and their causes.

### 5.2 Periodical maintenance

#### 5.2.1 When the result is not satisfactory

The machine should be cleaned regularly. This is easily done by following the instructions:

- I. Open the water valve and empty the hopper of water.
- II. Rinse out the inside with clean water.
- III. Close the valve and fill the hopper with clean fresh water.

## 5.3 Fault analysis and repair

The machine is very reliable, but problems may nevertheless arise for various reasons.

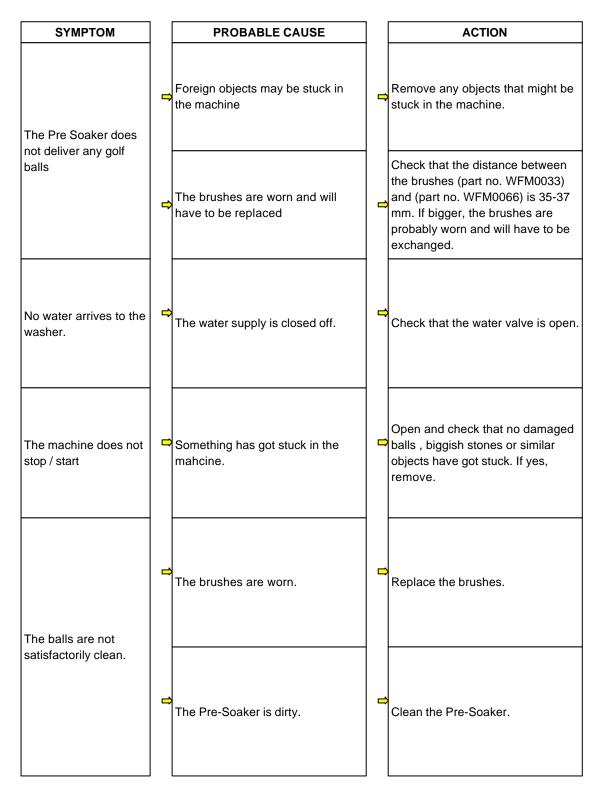


Figure 5: Fault analysis chart

## 6 Installation

## 6.1 Removing transit packing and installation

- I. Remove the packing.
- II. Position the Pre Soaker on a level surface.
- III. Connect one end of the hose to the water valve and put the other into a drain. See figure 7: Connecting the water hose.

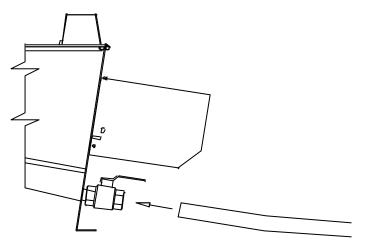


Figure 7: Connecting the water hose.

IV. Check that the water valve is closed. See figure 8: Ball valve

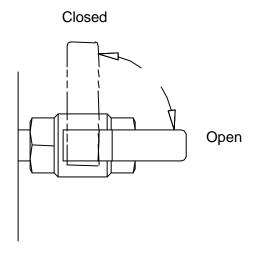


Figure 8 Ball valve

V. Pour water into the tray, see figure 9: Filling of water.

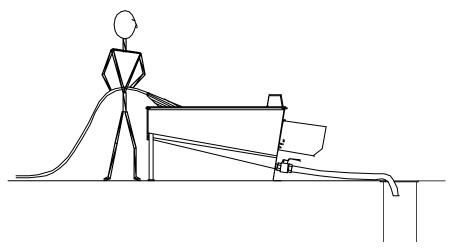


Figure 9: Filling of water

- VI. Add a cleaning agent to the water.
- VII. Connect the machine to an earthed outlet.
- VIII. Start the machine before filling the hopper with balls. Do not stop the machine until it is completely empty of balls.

# 7 Spare Parts

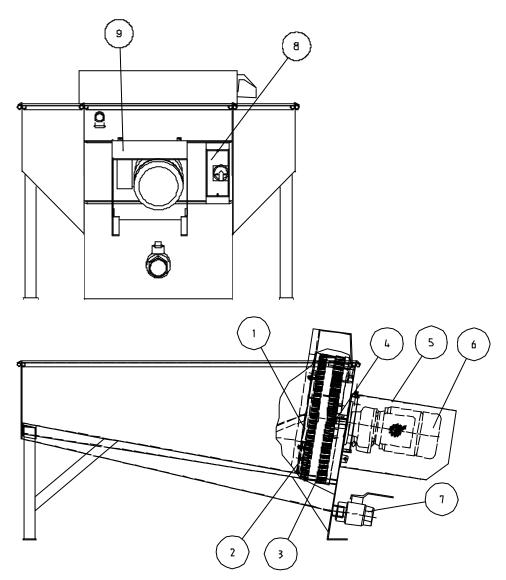


Figure 10: Spare parts for Pre Soaker 3600

## 7.1.1 Pre Soaker 3600

Pos.	Part. No.	Designation	Qty
1	WFM0041	Shaft for roller brush	1
2	WFM0033	Brush plate	1
3	WFM0066	Rotating brush plate	1
4	WFM0031	Flange	1
5	WFM0030	Motor protection	1
6	20 0800	Motor, Nord sk01vf-80s 4 ear	1
7	Ahlsell 9152407	Ball valve	1
8	93 0172	Motor protection cut-off	1
9	93 0176	Mechanical motor protection	1

# 8 Agents and dealers

This list contains addresses and telephone numbers of all our agents and dealers. In case of changes, please consult our home page, which is continually updated http://www.rangeservant.com

## 8.1 Head Office

#### Sweden

**Range Servant AB** 

Skallebackavägen 11 SE 302 41 HALMSTAD

Telefon: +46 35 10 92 40 Fax: +46 35 10 82 20 E-Mail: sales@rangeservant.com

## 8.2 Your Retailer