



# Tee Up Manual

*In English*

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## General information

### 1. Preface

We would like to congratulate you to your new Range Servant machine. You have made a good choice! You have not only selected an excellent teeing machine with modern technology demanding a minimum of maintenance; you have also chosen high quality. Quality that is assured by us thanks to modern production technology, careful choice of material and a sense of responsibility in all our employees.

This instruction manual contains all the information you will need to completely understand its care and use. Read through and understand the User's Manual before you take the machine into service. 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. Each person operating the machine must read these instructions.

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

The machine has a 1-year guarantee. Study the guarantee certificate carefully and keep it in a safe place. If you have any questions, or if problems should arise, please contact your Range Servant representative.

#### ONE YEAR GUARANTEE

Range Servant AB hereby offers a guarantee of one year from the date of shipment from the factory on material and function of the RANGE SERVANT product specified below. 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 appointed 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 The 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 authorized 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 IIA.

The Manufacturer:

(PLACE LOGO)  
Range Servant AB  
Skallebackavägen 11  
SE- 302 41 HALMSTAD  
Sweden

The Representative:

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

Company

.....

Address

.....

Telephone

.....

Machine

.....

Type

.....

Serial no., manufacturing no. etc

.....

Declare that:

A) is in conformity with Council Directive 89/392/EEC of 14 June 1989 concerning approximation of the laws of the Member States relating to machines in particular as referred to in Annexe I to this Directive concerning essential health and safety requirements in connection with the design and manufacture of machines, as amended by Council Directive 91/368/EEC of 20 June 1991 on the amendment of Directive 89/392/EEC concerning approximation of the laws of the Member States relating to machines;

B) *(if applicable)* are manufactured in accordance with the following regulations, directives etc.:

C) *(if the requirements under A have been fulfilled)* that the harmonized standards 292-1, 292-2 and 292-2A (or parts thereof) have been applied

D) *(if applicable)* are manufactured according to the following national standards and technical specifications.

Halmstad, .....

Date

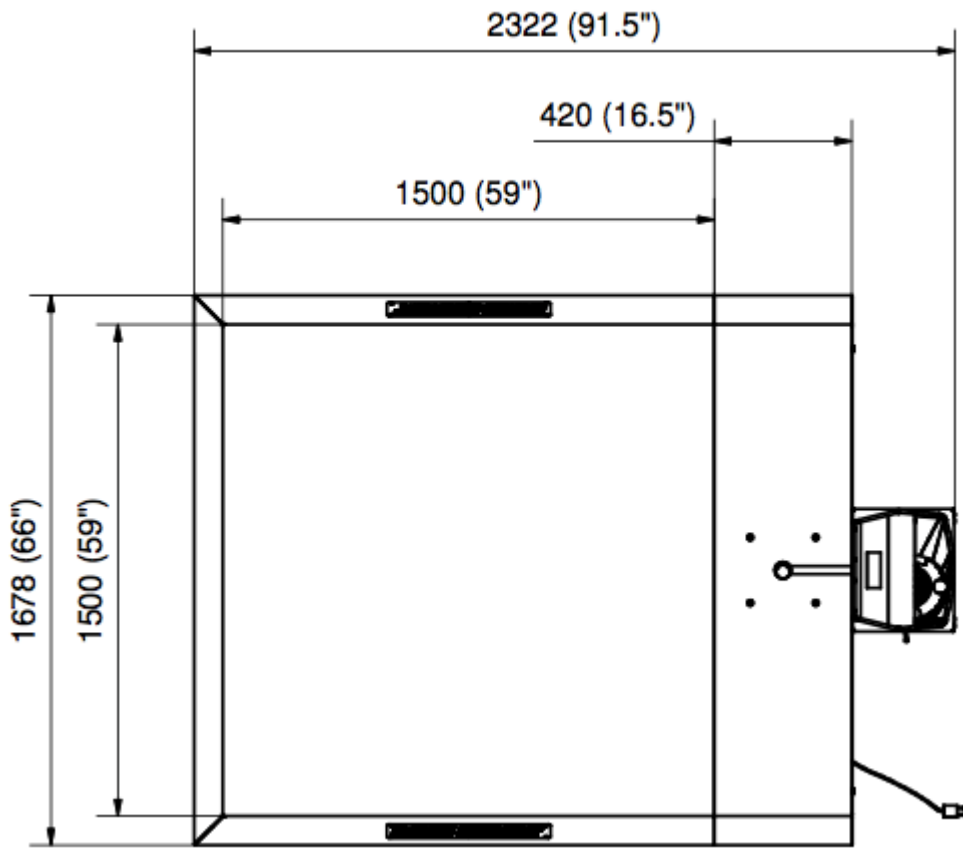
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President Signature

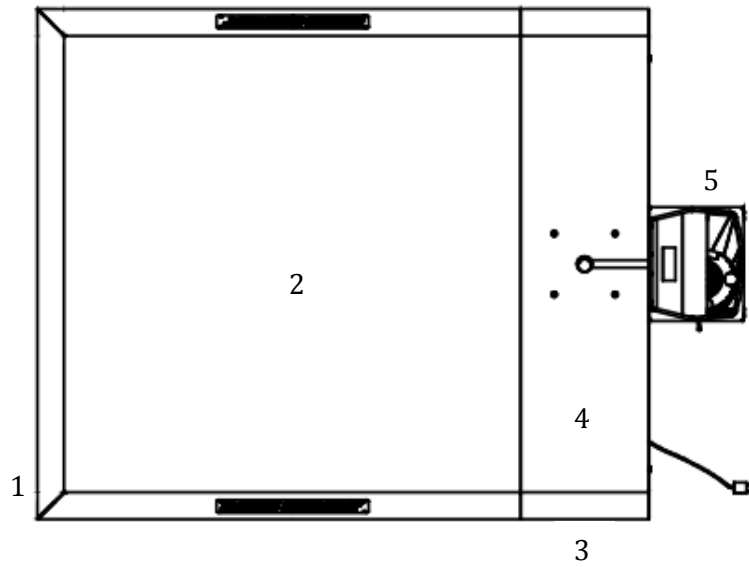
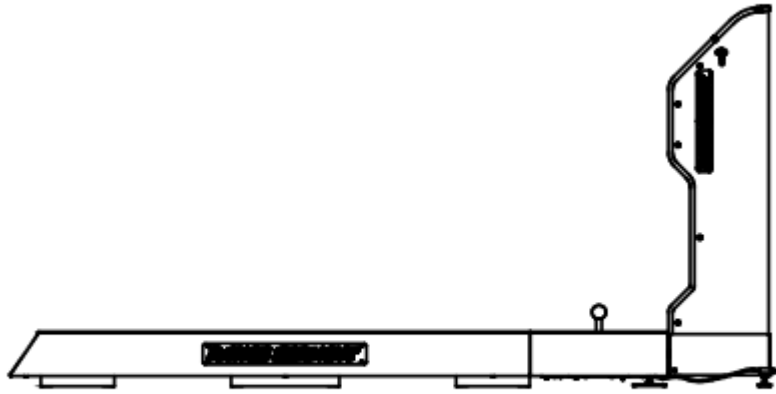
# 1 Technical Specifications

## 1.1 Stand alone Tee-Up

General	Stand-alone Tee-Up With Ball Feed
Capacity	100 balls
Max. - Min. tee height (mm)/(in) (ball center)	0-60/0-2.36
<b>Measurements:</b>	
Height (mm)/(in)	1000/39.4
Width (mm)/(in)	1678/66
Length (mm)/(in)	2322/91.5
Stance Mat (mm)/(in)	1500x1500/59x59
Frame height (mm)/(in)	167/6.5
Weight without balls (kg)/(lbs)	120kg/264,5pounds
<b>Electrical System</b>	
Supply voltage (V, 50, 60 Hz)	240/110
Operating voltage (V, DC)	24
Motor capacity, ball mixer (W)	9
Motor capacity, tee-up unit (W)	20
<b>Recommended Operational Conditions</b>	
Temperature range °C/°F	+4 to +50°C/+35 to +122°F
Atmospheric humidity	10%-90%



## 2 Design and Functions



Item	Description
1	Stance platform
2	Stance mat
3	Hitting platform with Tee Up mechanism and control equipment
4	Hitting/Tee mat
5	Feed unit

### **3 Unpacking and Assembly**

Dear customer, to unpack and assembly/installation the Tee Up properly and trouble free, please contact authorized Range Servant personnel.

#### **Contact information for customers outside of North & South America:**

##### **Range Servant AB**

Skallebackavägen 11  
302 41 Halmstad  
Sweden

Telephone: +46 35 10 92 40

Fax: +46 35 10 82 20

E-Mail: [sales@rangeservant.com](mailto:sales@rangeservant.com)

[www.rangeservant.net](http://www.rangeservant.net)

#### **Contact information for customers in North & South America:**

##### **Range Servant America Inc**

Norcross, GA  
USA

Telephone: G800.878.8050 ext. 223 - toll free

Cell phone: 8404.307.9192

Fax: 4770.448.8060 - fax

E-Mail: [peter.feilitzen@rangeservant.com](mailto:peter.feilitzen@rangeservant.com)

[www.rangeservant.us](http://www.rangeservant.us)



## 4 Operation

### 4.1 Operation of Tee-Up with Feed Unit

Collect a bucket of balls from the ball dispenser or storage bin.

Pour the balls into the feed unit which holds a maximum of 100 balls. If no ball comes out, place a ball on the tee to start.

Press the height adjustment button to adjust the tee height, up or down.

Hit the ball.

Next ball will be fed to the tee and raised to the same tee height as the previous ball (until all balls have been hit).

To see the total amount of balls hit press Up twice, the Down once and Up once more.

To reset the ball count for the day do the combination from above and press once down and once up to confirm.



## 5 Service and Maintenance

### 5.1 Requirements

Due to the design and operation of the unit, the person carrying out service and maintenance must meet the following requirements: He is required to successfully complete a training session showing proof of understanding the contents of this manual. If the person is absent for more than three months training shall be repeated.

### 5.2 Service

Accessories and original spare parts along with qualified support will be provided by Range Servant. Correct maintenance and service prolongs the life of the unit and secures reliable operation. Any faults, if any, will be detected at an early stage and are therefore easier to repair. If the unit is regularly overhauled there will be less problems and unwanted breakdowns. The following instructions refer to the most common problems and their causes.

### 5.3 Periodic Maintenance

#### 5.3.1 Maintenance Intervals and Instructions

Maintenance Intervals:

1. Daily
2. After 15,000 balls or weekly
3. Once a season

Maintenance Intervals and Instructions	1	2	3
<b>1. Tee-Up platform</b>			
1.1 Replace the tee (or as needed).		x	
1.2 Check that the track leading to the tee.	x		
1.3 Remove any balls caught under the platform.		x	
1.4 Replace the mat (hitting/range mat)			x
<b>2 Feed Unit</b>			
2.1 Check mixer wheel and contact Range Servant if replacement is necessary.			x
2.2 Remove any balls caught under the feed unit.		x	
2.3 Check the feeder outlet tube for dirt and other obstacles.	x		

## 5.4 Troubleshooting and Repairs

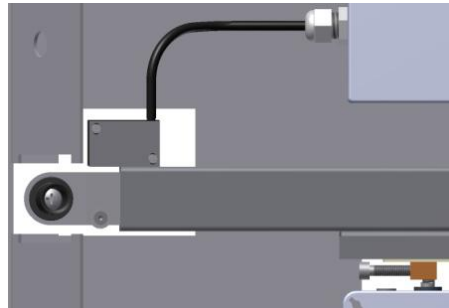
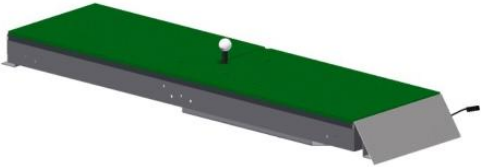
### 5.4.1 General

Even though the unit is reliable failures do occur for various reasons. Start troubleshooting by deciding whether a fault is mechanical or electrical.

### 5.4.2 Troubleshooting and Repairs

Type of fault	Symptoms	Checks/Repairs
<b>Mechanical failure</b>	Mechanical failures can in most cases be detected by observing changes in moving parts caused by e.g. wear and tear or damage.	
	The feed unit works but no balls are delivered.	Check that no balls are stuck in the tube system inside the feed unit. Remove worn, damaged and dirty balls. Check for leaf and other dirt in the feeder outlet tube.
		Check that the supply voltage does not vary.
		A ball has been caught under the ramp blocking the tee movement. Remove the ball.
	A ball has been caught under the ramp blocking the tee movement. Remove the ball.	
	The tee stops in the lower detent position.	Check that the adjusting spring on the tee arm is not too tightly tensioned.
	The ball doesn't remain on the tee or the tee comes loose.	Check that the tee is undamaged. If necessary replace the tee.
	The tee height cannot be adjusted.	Read 5.4.4 and further for information on the rubber tee.
The ball stops on the mat before the tee.	The angle on the feed pipe needs to be adjusted or needs to be cleaned. Check also if the mat is damaged.	
<b>Electrical failure</b>	Electrical failures are usually identified by checking the voltage at different measuring points. This allows you to locate the fault to a certain function or component, connection or cable.	
	The feed unit does not start.	Check that the teeing machine is on level ground.
		Check that the supply voltage does not vary.
		Check that the machine is connected to the mains and that all fuses are intact.
Check that that all the cables and contacts are intact and properly tightened.		

### 5.4.3 Replacing of the rubber tee

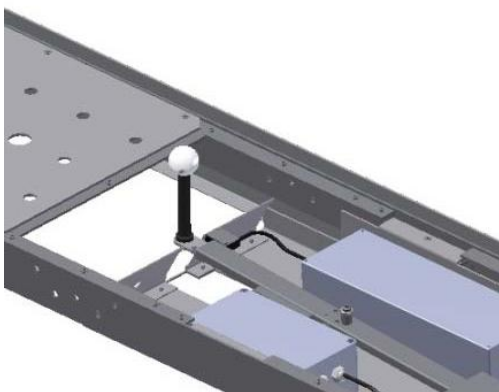


Sink the tee to the lowest level. There must be a ball on the tee to do it.

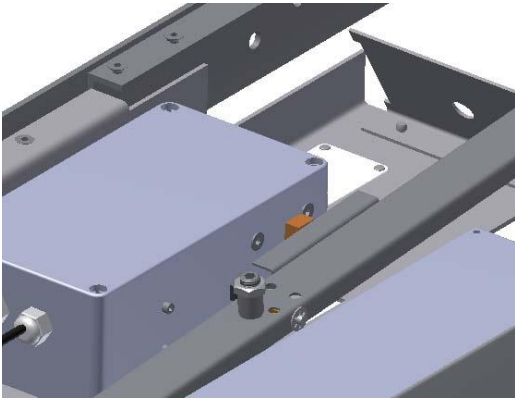
- Take away the ball
- Insert a cross-headed screwdriver inside the tee and screw off the tee.
- Now the tee is loose and can be removed.
- Replace the old, damaged tee with the new one.
- Reverse the procedure to fasten the new tee.
- Pull the tee (by hand) to make sure it is mounted correctly.
- Place a ball on the tee.
- Raise the tee from the lowest position. Now the tee-up is ready to use.

### 5.4.4 Replacing or adjusting of the adjustment spring for the tee balance

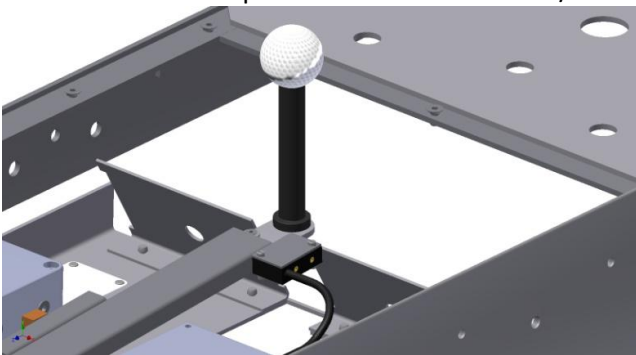
- Disconnect the power supply.
- Remove the tee mats and the sheet (sheet below grass).



- Loose the lock-nut using box wrench 19mm and allen key 6mm.
- The bolt can now be adjusted so that the tee goes down when the ball is on and goes up when there is no ball.



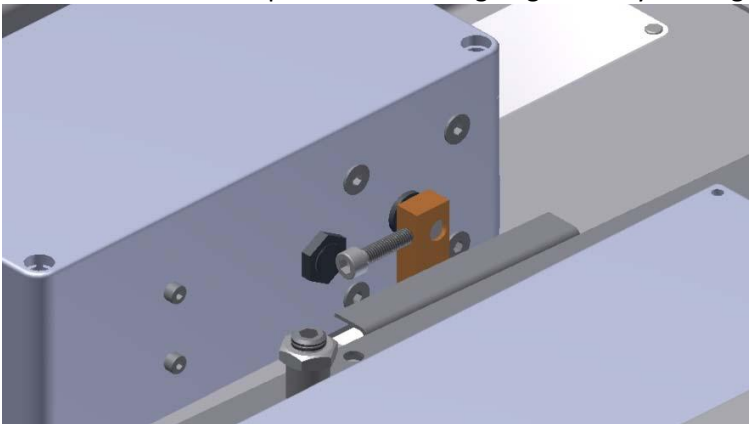
- Adjust the spring until you have a balance on the arm/tee with ball and without. Check that it is good balance even if you put on the ball slowly.
- Reverse the procedure to lock the bolt / nut.



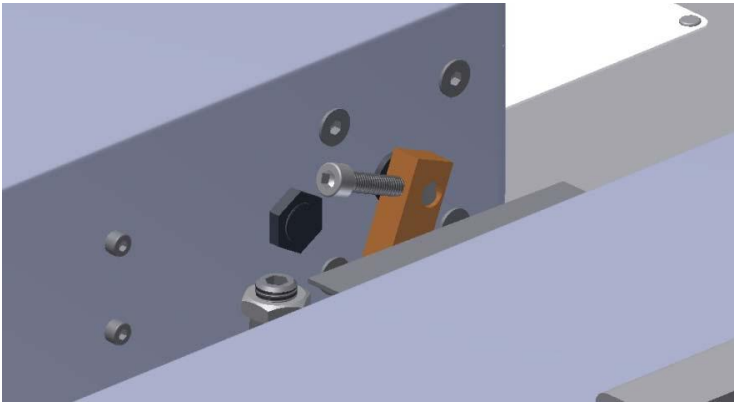
- Connect the power supply and check the function.
- Mount the sheet and mats.

#### 5.4.5 Replacing or adjusting of the inductive sensor

- Disconnect the power supply.
- Remove the tee mat and the sheet (sheet below grass), unscrew the bolts.
- The sensor stops the arm when going down by sensing the screw cap mounted on the motor axis.

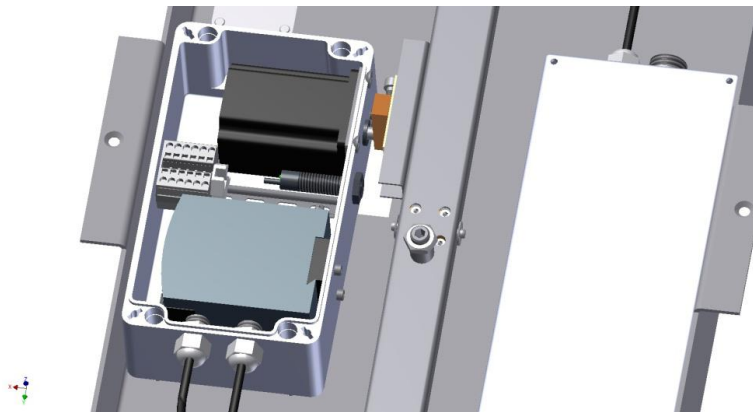


- If the sensor is damaged or the distance between the sensor and the screw cap increases 2mm, it would not work and the arm cannot find the home (down) position.



Resolve the problem as following:

- Remove the cover of the control box. Loose the nuts holding the sensor, adjust the distance between the sensor head and screw to approx. 0.5-1mm.

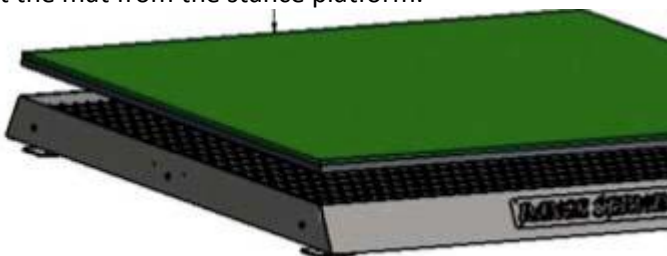


- Connect the power supply and check the function.
- If necessary, replace the sensor (Part No TCA0010).
- Mount the cover, sheets, mats.

#### 5.4.6 Replacing the tee mat

To replace the Range mat lift the mat from the stance platform and replace it with the new one.

Lift the mat from the stance platform.

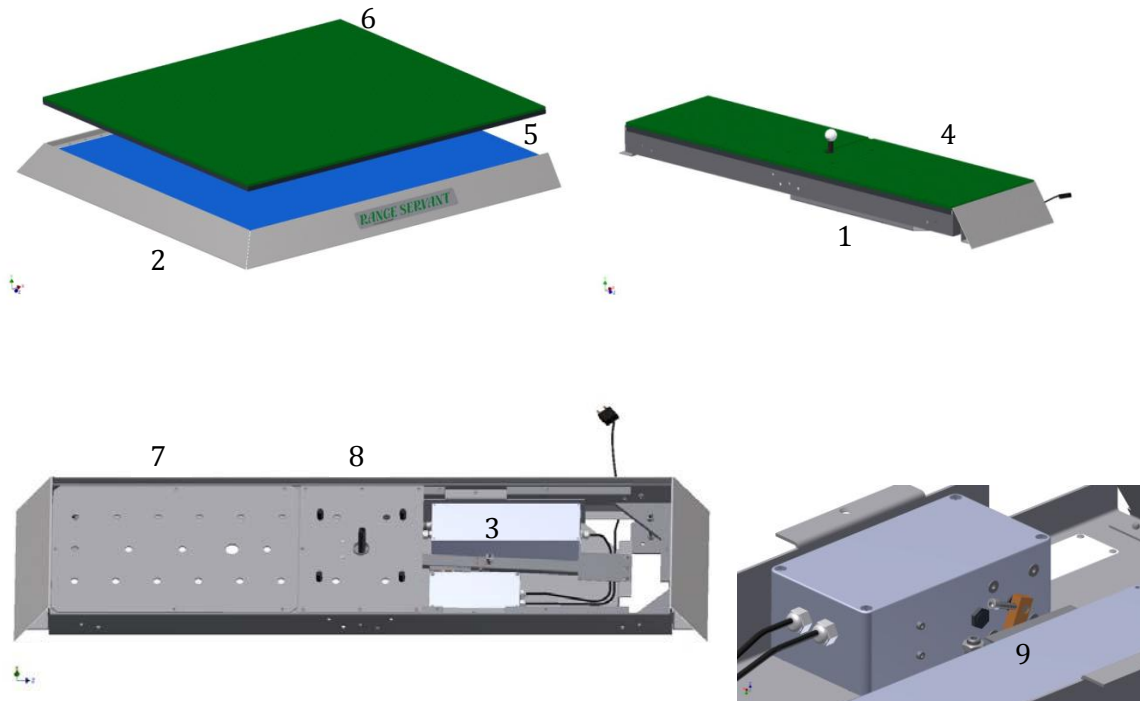


When replacing the Hitting mat it is the same as above, except that the mat needs be adjusted so it falls into place. The Hitting mat should not be easily movable.

## 6 Spare Parts

This section provides detailed drawings of the tee-up and the location of the different parts. The tables accompanying the drawings contain information showing spare parts numbers and descriptions and quantity.

### 6.1 Tee-Up Platform



Item	Part No.	Description	Qty
1	TJM0216	Hitting platform	1
2	TJM0214/17/18	Spoiler kit for platform	3
3	TCM0040	Tee-Up Mechanism assembly	1
4	TEA0016	Hitting Mat	1
5	TJM0223	Plastic Pallet	1
6	TEA 0004	Range Mat	1
7	TEM0112	Sheet below grass	2
8	TEM0097	Sheet below grass, middle	1
9	TCA0008	Inductive sensor	1



## 6.2 Feed unit



Item	Part No.	Description	Qty
1	TJM0271	Hopper	1
2	TJM0249	Feeder mechanism assay	1
3	TJA0010	Height Adjustment Button	3

## 8 Sales Offices and Agents

Below is a list of current sales offices and agents dealing with Range Servant products.  
The list is continually updated on our website <http://www.rangeservant.com>.

### 8.1 Head Office

#### Sweden

#### Range Servant AB

Skallebackavägen 11

302 41 Halmstad

Telephone: +46 35 10 92 40

Fax: +46 35 10 82 20

E-Mail: [sales@rangeservant.com](mailto:sales@rangeservant.com)

[www.rangeservant.net](http://www.rangeservant.net)

### 8.2 Range Servant America

#### Range Servant America Inc

Norcross, GA

Telephone: G800.878.8050 ext. 223 - toll free

Cell phone: 8404.307.9192 - cell

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[www.rangeservant.us](http://www.rangeservant.us)

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