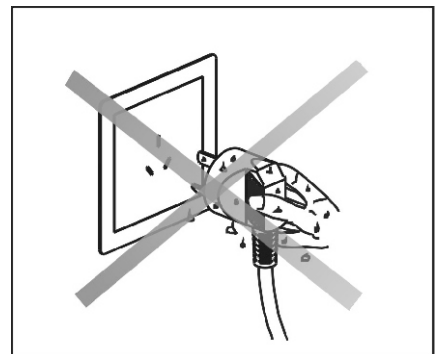


Statement

1. Please read this manual carefully before you start operation of the machine.
2. If you encounter problems, contact your supplier or our Product Support Department.
3. The company is not liable to any legal responsibility for any failure or damage due to improper use or handling of the machine.
4. The warranty does not cover any failure or damage due to improper operation, disassembling ,or remodeling of the machine.
5. The manual cannot be copied and downloaded without our permission.
6. We reserve the rights to make any change of or modify the machine as well as the attachments without further notice.

Warnings

- ★ Make sure the local voltage is:
AC100V~240V,50/60Hz .
- ★ Do not plug in with wet hands as device may short circuit.
- ★ The power plug should be properly grounded to ensure the safety in operation.
- ★ Please disconnect the power supply when machine is not in use or during unfavorable weather conditions.
- ★ If abnormal conditions occur, please disconnect power supply and unplug the power socket of the machine. Contact your supplier or our product support department to rectify the problem before the machine restarts.



Reminder: Please read the manual carefully prior to any operation to ensure the machine is operated safely, accurately and efficiently.

TW-2700-V1 Basic features and functions of the robot

- ★ Double Spin Technology ensures different degrees of speed, curve and spin are served. The technology can also set the straight (no spin) serve that the other serving machine with single spin wheel can't do.
- ★ Serves can be set landing on 1-5 points from left to right on the entire width of the court. Press Left or Right keys on the remote control to select the landing point(s) desired.
- ★ Program mode allows players to set the combination of serves based on the desired level of difficulty.
- ★ There are 3 serving modes to choose:
 - 1) **Regular mode** Various kinds of serve land continuously at one point to be chosen from 1-5 points.
 - 2) **Random mode** Balls land randomly on 5 possible points on the entire width of the court.
 - 3) **Program mode** Allows players to set the combination of serves based on the desired level of difficulty.
- ★ Equip with remote control, making operation of the robot much easier.
- ★ Equip with memory function that can restore to the most recent setting for repeat training or use.
- ★ Ball collection net helps to collect the returned ball into the machine, saving time and increasing efficiency.

Factory Reset and Recommended Parameters

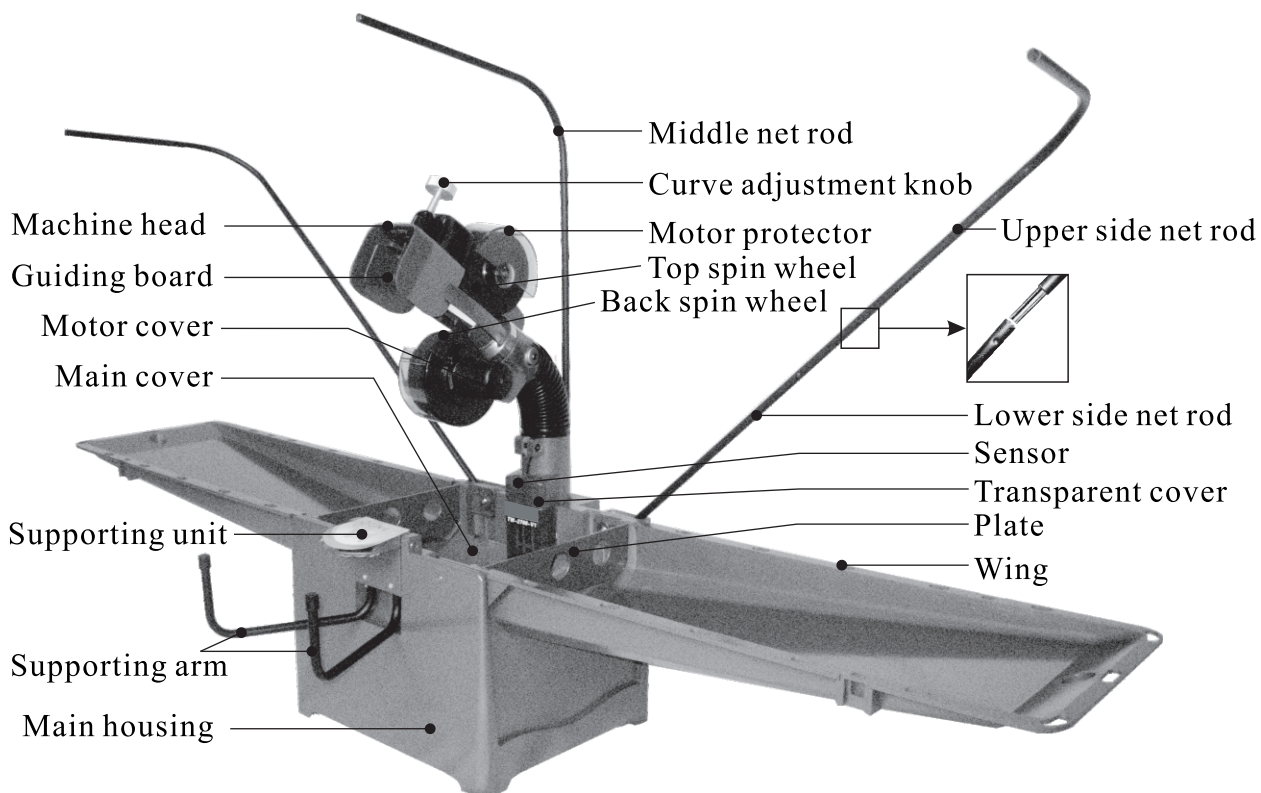
Type of spin	Level of spin	Frequency of serve	Remarks	
Factory reset	4 (top spin)	40		
Recommended parameters	Straight (no spin)	3 (top spin)	40-70	
	Top spin	4-9	40-70	
	Back spin	4-7	30-50	
	Random mode	4-9 (top spin)	40-60	

Hints: Please use the Factory Reset Parameters to have the robot start at the time of initial use. Press On/Off to confirm and operate. Users can adjust and set the parameters based on their level of technique.

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I .Name of The Parts



Remote control

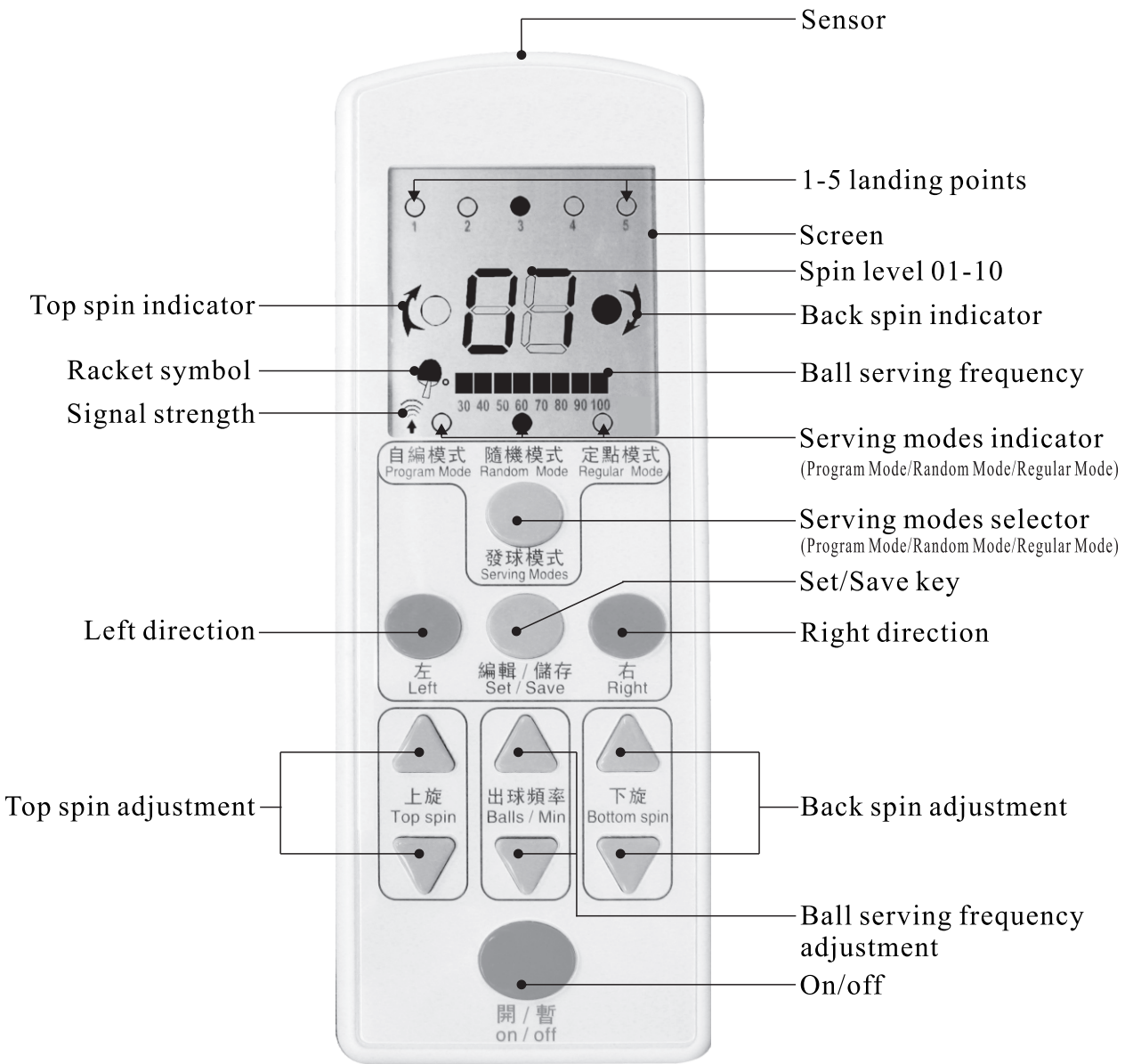


Power socket

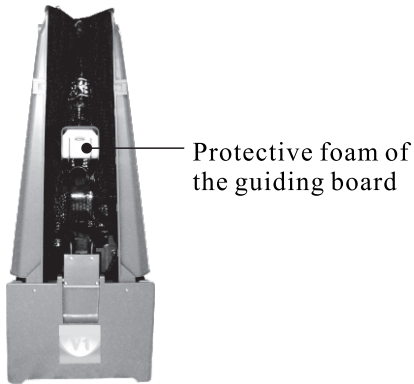


Power cord

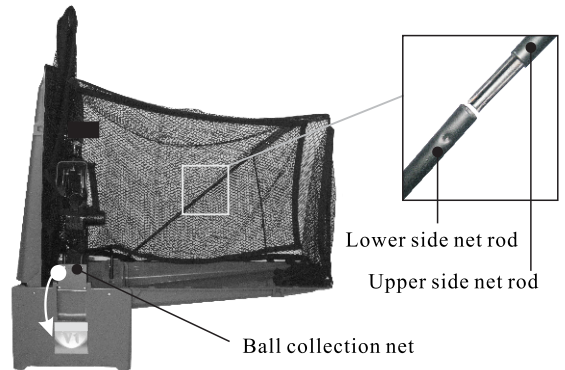
II . Functions of The Remote Control



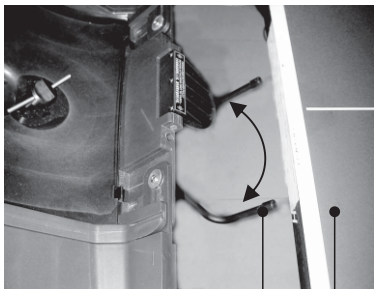
III. Installation



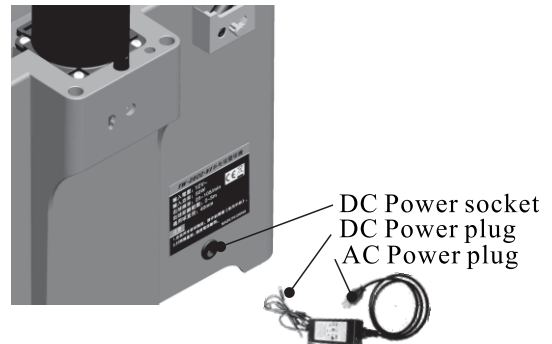
1. Open the carton, remove the cushioning foam and place the robot gently on the ground. Take away the transparent plastic bag and protective foam of the guiding board.



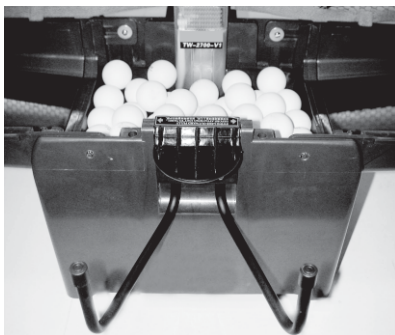
2. Separate both wings and insert the upper side net rod into the lower side net rod.



3. Hold the supporting arms and pull down the supporting unit. Spread the arms fully then insert the robot into the middle line of the table. Fasten the ropes of the ball collection net to the middle net of the table.



4. Insert DC power plug into DC power socket.



5. Put balls on the cover of the main housing. Connect the power supply. Press On/off on the remote control and the robot is in operation.



Completed installation is shown in the picture above

Hints

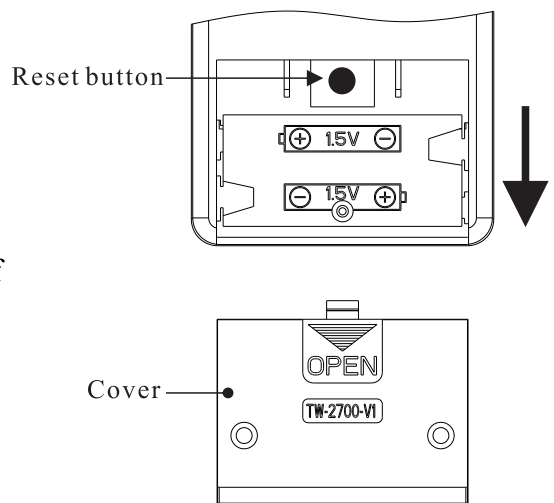
A rechargeable battery (DC 12V) is an optional item. It facilitates the use of the robot when there is no power supply.

IV. Operation of The Remote Control

- Signal can cover 6 meters away from the robot.
- Please handle the remote control with care. Do not throw or drop the remote control on the ground. Keep the remote control from getting wet.
- Please replace 2 size-7(AAA) batteries if the signal of the remote is getting weak or the screen is dim.
- Replace the aged batteries with new batteries of the same standard.
- Place the new batteries at the right position of +,-.
- When the remote control is not in use for a longer period of time, please remove the batteries. Aged batteries might cause damage to the remote control.

Replacement of Batteries:

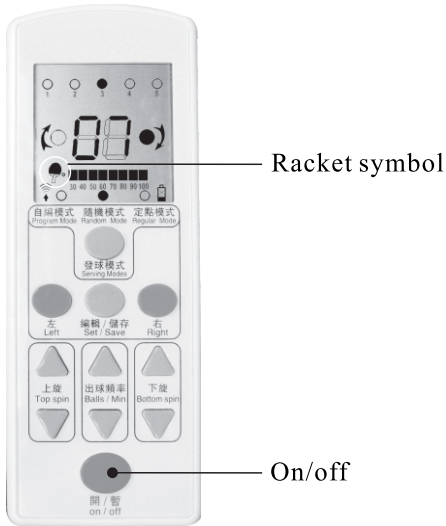
1. Push outward and open the cover of the battery compartment.
2. Place the batteries at the right position of +,- as the picture shows.
3. Close the cover.




V. Start And Stop


Reminders

1. Remove the Cushioning foam before the machine starts initially.
2. Insert the DC power plug into the DC socket of the machine.




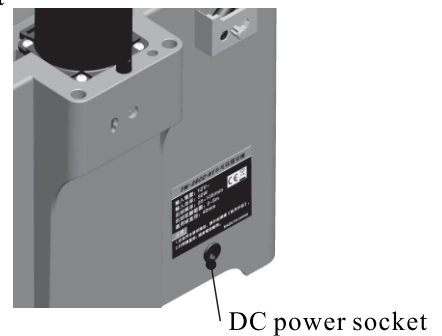
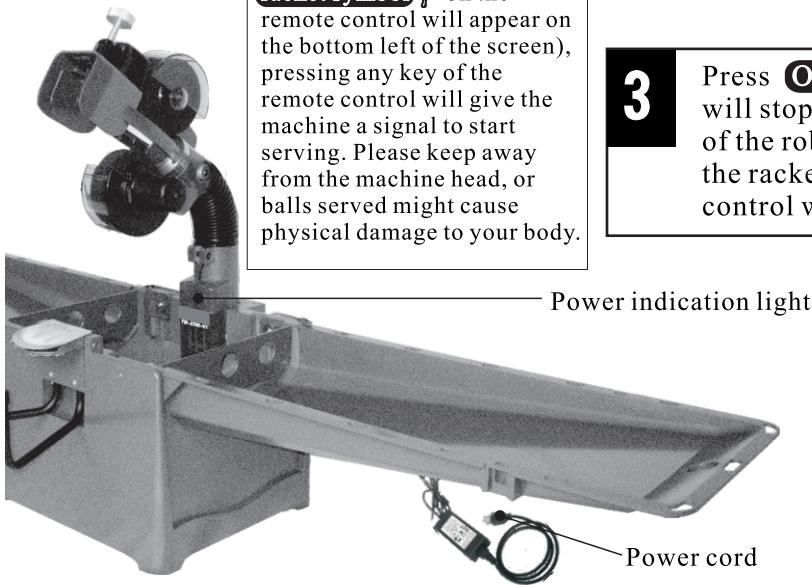
1 Connect the power supply. The red power indication light on the robot will turn on.

2 Use the remote control to adjust the spin level and serve frequency to the factory recommended parameters, as shown below. With the sensor pointing at the robot, press **On/off** and the robot will start. (The robot will make a 'beep' sound and the blue power indication light will turn on. The racket symbol,  on the remote control will also appear on the bottom left of the screen.) Ball are served in accordance to the parameters set.

WARNING: When the power supply is connected and the machine is in operation (the racket symbol  on the remote control will appear on the bottom left of the screen), pressing any key of the remote control will give the machine a signal to start serving. Please keep away from the machine head, or balls served might cause physical damage to your body.

Recommended	Type of Spin	Level of Spin	Frequency of Serve
	Top spin	4	40

3 Press **On/off** again and the robot will stop. The power indication light of the robot will turn back to red and the racket symbol,  on the remote control will disappear.

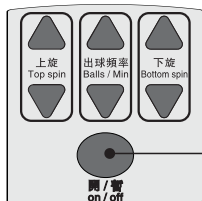


WARNING

Please keep away from the machine head when **On/off** is pressed. Balls served will cause physical damage to your body if you are so close to the machine head.

VI. Procedures And Operations for Remote Control

(1) On/off



On/off

Press **On/off** and the robot is in operation. The symbol, is displayed at the bottom left of the screen and the power indication light on the robot will turn blue. Press **On/off** again and the robot will power down. The symbol, disappears and the power indication light on the robot will turn red.

(2) Frequency of serves



Frequency level

Frequency adjustment ▲ ▼

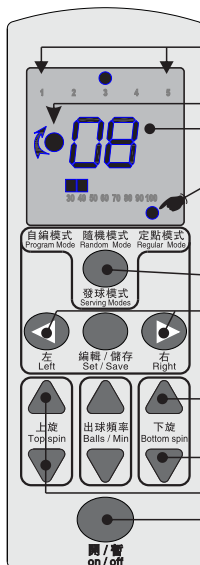
Press ▲ or ▼ of Ball/Min once,

Condition	Key is pressed	Level indicated	Frequency Result
Low Frequency	Press ▲ once		10 more serves/min
	Press ▲ twice		Additional 10 more/min
High Frequency	Press ▼ once		10 fewer serves/min
	Press ▼ twice		Another 10 fewer/min

Hints

1. Range of frequency is 30-100 serves/min.
2. Frequency can be adjusted whenever the machine is in operation.

(3) Procedures for regular serving mode



1-5 landing points

Top spin

Level of spin

Black circle for regular mode

When the 'Serving Mode' key is pressed, a mode is shifted to the other in the order as follows:



- 1 Press **Serving Modes** until the black circle moves to the position for regular mode.
- 2 Press **left** ◀ or **right** ▶ to select the landing point desired. A black circle will appear on the screen in one of five positions, from left to right, indicating the landing point chosen.
- 3 Press **Top spin** ▲ ▼ or **Back spin** ▼ ▲ To adjust the level of the spin. The Level of spin is displayed on the screen; the higher the number, the stronger the spin.
- 4 Press **On/off** to run regular mode. Balls will continuously land on the point you have selected above.

Note: There is a 'beep' sound from the robot indicating the robot has received the signal from the remote control.

(4) Procedures for random serving mode

Black circle for random mode
When the 'Serving Mode' key is pressed, a mode is shifted to the other in the order as follows:
— program mode ← Random mode ← Regular mode ←

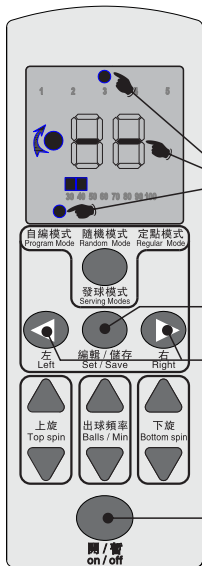
- 1 Press **Serving Modes** until the black circle moves to the position for random mode.
- 2 Press **On/off** to run random mode. Balls are served randomly at one of five points on the entire court.

Hints Change of serving modes or adjustment of serving parameters can be made whenever the machine is in operation.

(5) Procedures for self program serving mode

Black circle for serving mode
When the 'Serving Mode' key is pressed, a mode is shifted to the other in the order as follows:
— program mode ← Random mode ← Regular mode ←

- 1 Press **Serving Modes** until the black circle moves to the position for self program mode.
- 2 Press **On/off** to run self program mode. Serves will land on the points as last programmed.

(6) Procedures for programming a combination of serves

These 2 black circles and - - blink when Set/save is pressed

- ① Press **Set/save** . The black circles for Program mode, the landing points, and - - will all blink. (If Set/Save is pressed during serving operation, the robot will stop and enter into the Program mode.)
- ② Press **Left** ◀ or **right** ▶ and the black circle on the top of the screen will move from left(1) to right(5) or right to left for you to set a landing point in your program. Press **Set/Save** to activate the setting of the landing point. 01 Will be displayed and blink at the center of the screen. Repeat the steps as above to set the 2nd, 3rd, 4th... landing points. 02, 03, 04 ... will be displayed and blink respectively. Up to 30 landing points can be set in a program. There is no restriction for repeating a landing point already set.
- ③ Press **On/Off** to activate the operation of the mode. The black circle is displayed at the position for the Program Mode. (The current setting will override the previous one.)

Hints

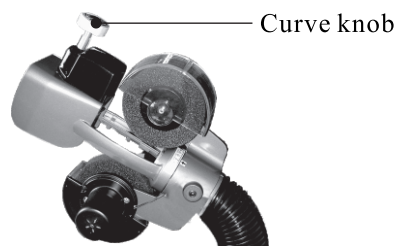
1. During the process of program setting, if there have been no instructions given for 2 minutes, the Program Mode will automatically be withdrawn.
2. In the process of program setting, types and level of spin, frequency of serve, and the serving curve cannot be adjusted.
3. Adjustment of serving parameters can be made whenever the machine is in operation.

VII. Auto correction for irregular serve landings

When the guiding board of the machine head gets external interference such as strong contact by returned balls or moving by hands, the serves might land irregularly not as previously programmed. Power off the robot and restart after 10 seconds. The robot will automatically correct the problem and resume to its previous setting.

VIII. Adjustment of Serving Curve

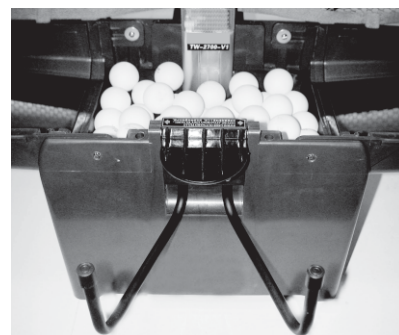
Use the 'Curve knob' at the top of the machine head to adjust the curve of serves. Turn the knob clockwise to lower the curve. Turn the knob anti-clockwise to get a higher curve. When changing serving spin level causes serving balls to fall out of bounds or into the net, adjustment of the curve is required. Also see the 'Adjustment of serving balls falling out of bounds or into the net' in P.11.



IX. Capacity of Ball Collection Dish

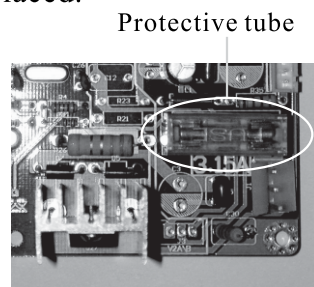
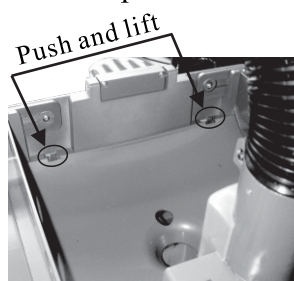
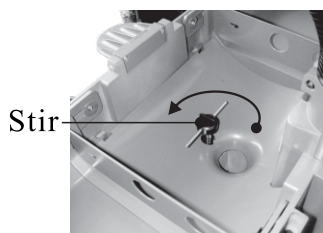
Capacity: 120 PCS of 40MM-ball.

Note: Nothing other than table tennis balls should be placed in the dish. Otherwise, it may cause machine failure or damage to the parts.



X. Replacement of Protective Tube

Disconnect the power supply before the protective tube is replaced.



- 1 Take out all the balls in the dish. Pull and remove the stir by turning anti-clockwise.
- 2 While using fingers to push and release the lock, pull and lift the main cover.
- 3 Open the cover ,Pull out the tube cover and replace the bad protective tube with a qualified one of the same standard. Reinstall the tube cover, main cover and stir.

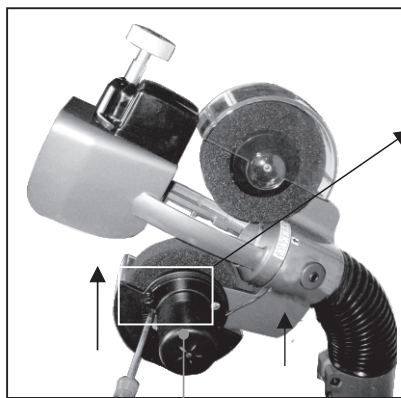
XI. Maintenance

1. The robot and the remote control should be prevented from strong vibration and from getting wet. Failure to do so will cause short circuit or electricity leakage resulting in damage to the electrical and electronic components.
2. After a period of use, there will be wear and tear on the spin wheels, causing slower serving speeds than usual. Adjust the distance between the two wheels to resume the effectiveness of the serves. Please see P.10 for detail.
3. After use for 1 to 2 months, dust and dirt might gather in the ball running track. Clean the ball running track by a wet cloth and spray some car cleansing wax(spray type) from the ball entrance and exit in the ball running track.
4. When the robot is not in use for a longer period of time, please disconnect the power supply and cover the robot with cloth or a plastic bag.

XII. Adjustment And Replacement of Spin Wheel

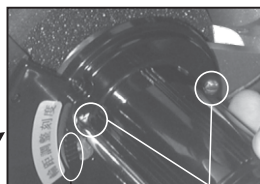
(1) Adjustment of Spin Wheel

After a period of use, There will be wear and tear on the spin wheels, causing slower serving speeds than usual. Adjust the distance between the two wheels to resume the effectiveness of the serves.



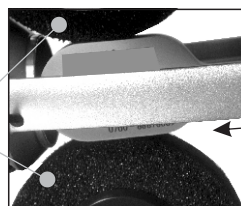
Back spin wheel assembly

Picture 1



Scale mark for distance between wheels
Motor Screws

Top and back spin wheel



About 37mm
Gauge for standard distant between wheels

Picture 2

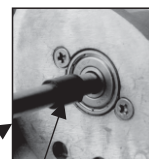
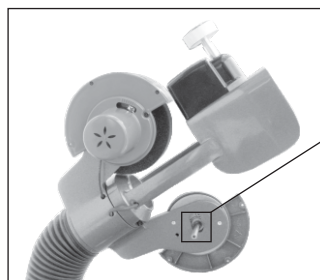
Disconnect the power supply. Use the screwdriver to unscrew a little the 2 motor screws as the picture 1 shows. Lift the Back spin wheel assembly up about 2-3 mm. (one level of the scale mark) or lift to an extend that the gauge fits in perfectly as the picture 2 shows. Tighten the screws and the machine is ready for operation.

Note: Within a range of wear and tear, serves still work in their standard through the above adjustment. It is recommended that the wheel should be replaced when the diameter of the wheel reduces to 70mm due to wear and tear.

(2) Replacement of Spin Wheels

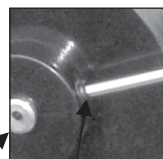
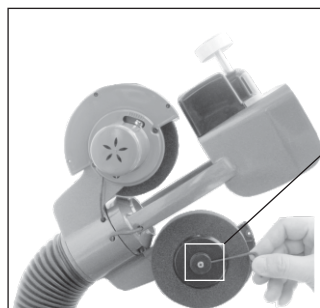
1. Disconnect the power supply. Remove the wheel cover of the back spin wheel by using the screwdriver to unscrew the 3 screws of the cover.
2. Use the hexagon spanner to remove the back spin wheel. While removing the wheel, make sure the small blocking sleeve that separates the wheel and the motor is still on the axis of the motor. (See picture 1) Install the new wheel onto the axis of the motor. Use the hexagon spanner to tighten the screw of the wheel. (See picture 2) Unscrew a little the 2 motor screws of the motor to adjust the distant between the 2 wheels to about 37mm in which the Gauge for standard distant between wheels can perfectly fit. Tighten the motor.
3. Reinstall the wheel cover of the back spin wheel and the replacement is completed.

Repeat the above 3 procedures if the top spin wheel needs to be replaced.



Blocking sleeve

Picture 1



Hexagon spanner

Picture 2

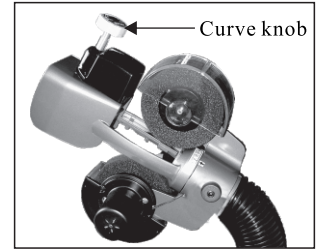
Note: (1)When the landing points and speed of serves do not meet the standard, adjust the distant between wheels to get the best result.

(2)Please replace the spin wheel under the supervision of your local supplier.

XIII. Adjustment of Serving Balls Falling out of Bounds Or into The Net

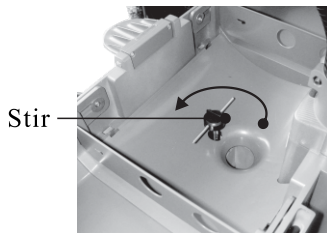
Before any adjustment is made, set the spin level of the top and back spins to the factory reset or recommended parameters.

1. When balls are served into the net, adjust the serving curve by turning the curve knob (see picture) anti clockwise.
2. When balls are served out of bounds, turn the curve knob clockwise.



XIV . Handling of balls getting stuck

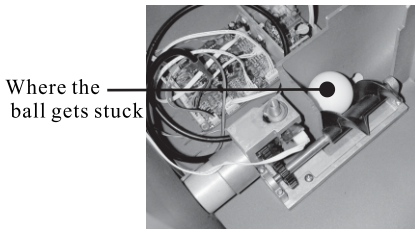
A ball getting stuck is mainly attributable to damaged balls or other items that may be blocking the ball running track. If the problem occurs, disconnect the power supply and follow the procedures as below to correct:



- 1 Take out all the balls in the dish. Pull and remove the stir by turning anti-clockwise as the picture shows.



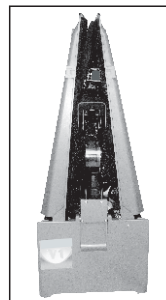
- 2 While using fingers to push and release the lock, pull and lift the main cover.



- 3 Use a screwdriver to take away the stuck ball. Reinstall the main cover, and the stir.

XV. Uninstalling

The robot is easy to uninstall. It can be stored in any place because of its small size. To uninstall, disconnect the power supply. Pull out both the upper side net rods and insert into the 2 holes at the back of the robot. Fold back the supporting unit and both wings. Put the robot in the backpack.



Robot backpack

XVI. Troubleshooting

Problem	Solution
1. The power indication light is not lit and the robot is not in operation.	<ul style="list-style-type: none"> • Check if the plug is correctly plugged in. • Replace the protective tube. Refer to item X of page 9 for detail.
2. Balls get stuck	<ul style="list-style-type: none"> • The robot will make 'beep' sounds continuously. Refer to item XIV of page 11 to solve.
3. Data on the display of the remote control are messed up	<ul style="list-style-type: none"> • Open the cover of the battery compartment. Use a ball pen to press the reset button once. The remote control will resume to its original setting.
If problem still occurs, please contact our maintenance center. Tel:0760-88878689 Mr.He/Mr.Peng	

REMINDER: When the Remote Control is out of order or lost, the machine can still be started by pushing the emergency button at the bottom of the machine.

XVII. Table of features and parameters

Description		Features/Parameter	
FUNCTIONS	Voltage (V)	100~240	
	Rated power (W)	50	
	Rated frequency (Hz)	50/60	
	Serving spin	Top spin, back spin and no spin	
	Serving frequency (balls/min)	30~100	
	Serving speed (m/s)	4~40	
	Landing point	1-5 landing points on the entire width of the court	
	Combination of serves	Combination of serves can be programmed based on your desired level of difficulty.	
	Memory	Can restore to the most recent setting for repeat training or use.	
	Three Serving Modes	Regular mode	Various kinds of serve land continuously at one point to be chosen from 1-5 Points.
		Random mode	Balls land randomly by computer control on 5 possible points on the entire width of the court.
		Program mode	Allow players to set the combination of serves. Up to 32 landing points can be set in a program.
	Remote control	Make operation of the robot much easier.	
	Optional rechargeable battery	A rechargeable battery (DC 12V) can be used when there is no power supply.	
	Automatic ball recovery	The main cover automatically feeds returned balls back into the machine, saving time and increasing efficiency.	
Package	Gross weight (kg)	12	
	Net weight (kg)	8	
	Dimensions (cm)	93X43X43	

Note: If the parameters of this table vary from that on the plate of the machine, the parameters on the plate prevail.