2019/2

SUSHI MACHINE (TSM-09)

Instruction Manual



To use this machine safely and correctly,

please make sure to read this instruction

manual carefully before use.

Model/type	Sushi Ball Robot / TSM-09
dimension	W300×D480×H450(mm)
Power supply	AC100V~240V
consumption	60W
weight	18kg



OFor the sake of safety, read the following carefully and make sure to follow the instructions:

•This explains the degree of risk in the case of improper handling, classified into \triangle WARNING and \triangle CAUTION.

The symbols have the following meanings:



Prohibite Do not touch Grounding



Follow the instructionss



No disassembly Unplug

Warning: Improper handling may result in death or severe injury.

Do not pull the cord when unplugging the power supply plug.	When you do not use the machine for a long time, make sure to unplug the
●It may break, causing a fire. Prohibited	power supply plug.It may result in an electric shock, an electric leakage or a fireIt may result in an electric leakage
Do not damage the power supply cord.	Remove all the removable parts from the main
Twisting, putting something on it,	body and clean them.
or inserting something in it may break it, causing an electric shock or a fire. Do not damage	It may cause an injury or an accident. Removal
Do not use a damaged cord or	Do not splash water on the main body
an outlet with a loose plug insert.	other than removable parts.
 It may cause an electric shock, short circuit or fire. Avoid installing in any moist or water-logged locations. It may cause an electric shock, short 	 It may cause an electric shock, a short circuit or fire. Do not insert your hand or fingers into the hopper while operating. Your hand or fingers may become
circuit or fire.	caught causing an injury or an accident.
Grounding Otherwise, it may cause an electric shock or an accident.	 Do not insert your hand into each roller portion during operation. Your hand or fingers may become caught, causing
Grounding	an injury or an accident.
Do not disassemble or alter the machine.	Do not insert your hand or fingers
●It may cause an electric shock,	into any rotating portion during operation.
fire or an injury.	 ● Your hand or fingers may become caught,causing an injury or an accident. ● Your hand or fingers may Prohibited

Insert the power supply plug firmly into the base after removing dust.	Remove or mount the parts after turning OFF the power supply.
It may cause fire or a fire.	●Your hand or fingers may become caught,causing an injury or an Turn OFF the power supply accident.
As soon as you notice any gas leakage, open	Prevent babies and children from touching it.
your windows without touching the main	It may cause an injury or an accident.
body or the power supply plug. ●A spark from electric contact may	\odot
cause an explosion or fire.	Do not touch
Under any abnormal conditions such as a burnt	Do not put anything other than rice or Rice into
smell, immediately unplug the power supply	the hopper.
plug and suspend operation.	●It may cause an injury or an accident.
Continuous operation under	\otimes
abnormal conditions may cause Unplug	Prohibited
an electric shock or a fire.	



Caution: Improper handling may result in death or severe injury.

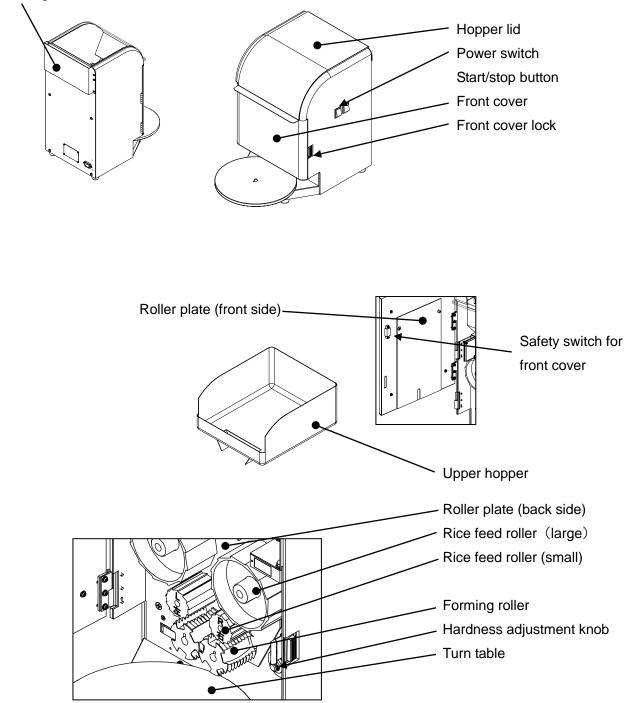
Use it under the supervision of a person who	Hold firmly when transferring or transporting it.
understands machinery management.	The machine may drop causing
Using without proper	an Injury or an accident.
understanding may cause an injury	Δ
or an accident.	Hold firmly
Understand	riold infility
Do not touch the built-in heater.	
●It may result in a burn.	
\otimes	
Prohibited	

Caution: Improper handling may result in failure of the machine or damage to buildings and household effects.

Do not wash the Teflon coated machine parts	Do not damage parts.
with a hard brush or hard sponge.	●It may prevent the normal
It may cause peeling of the Teflon coating.	Assembly of parts and cause problems.
Wipe off any oil or fat sprayed	Install the machine at a solid and flat location
on the machine main body other	A fall of the machine may
than the removable parts.	damage the machine itself or the
It may result in deterioration or the breakage of parts.Wipe off	building or cause an injury or an accident.
Do not wash the removed resin or plastic parts	Firmly hold when transferring or transporting
in a dishwasher or in hot water.	the machine.
It may deform or damage the parts.	●A fall of the machine may
Prohibited	damage the machine itself or the Firmly hold

Parts Name

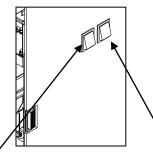
Lid storage case

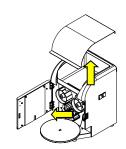


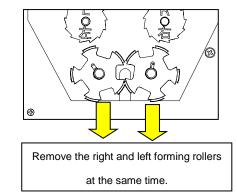
Disassembly (Forming roller, Rice feed roller)



Make sure to turn OFF the power supply switch before removing or mounting any parts. Failure to do so may result in a serious injury from your hand becoming caught in the rotating section (roller).







Power supply switch

Mode switch

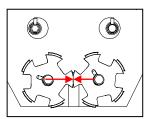
- ①Turn OFF the power supply switch after stopping the machine using the Mode switch.
- * It automatically stops at a location where the rollers can be removed. It may take up to a maximum of about two seconds until it automatically stops.

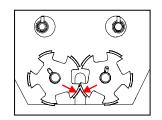
②Remove the hopper lid, open the front cover by pushing the front cover lock indicated by the arrow and remove the right and left forming rollers at the same time.

Important

When you remove the forming rollers, stopping after turning OFF the power supply switch first, or pushing the stop switch and opening the front cover before the machine automatically stops may result in you not being able to remove the forming rollers as shown in the photograph on the left, so be sure to repeat the following operations:

- ① Close the front cover again.
- 2 Turn ON the Power switch.
- ③ Turn ON the Mode switch.
- ④ Turn OFF the Mode switch..
- If you wait until the machine stops automatically, the rollers will stop automatically where you can remove them.
- 6 Turn OFF the power supply switch.





×Non-removable condition

O Removable condition

When removing the forming rollers, if the ends of the rollers stop in an overlapped position as shown above (as indicated by the arrows), it will be too hard to remove them. *Removing them forcibly may result in the breakage of the parts.

③Remove each roller toward you.

Remove the turn table upward.

Do not wash the removed parts with a metallic brush or hard sponge. Doing so will result in damage to the Teflon coating.

Do not wash any removed parts in a dishwasher. Doing so will result in deformation or breakage of

* Even if the power supply is turned ON when the front cover is open, the machine will not start up.



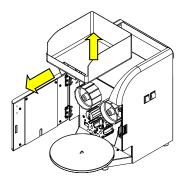
Disassembly (hopper)



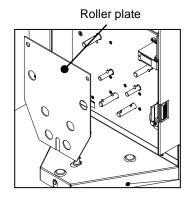
Make sure to turn OFF the power supply before removal and mounting of parts. Failure to do so may result in an injury or accident.

OHow to remove

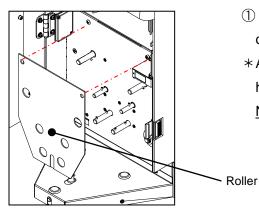
OHow to mount



①Lift the hopper once and remove it toward you.

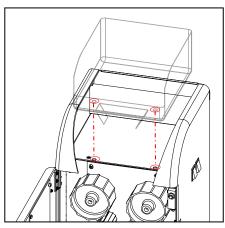


2Next, remove the Roller plates (back and front).



- ① First, set the Roller plates (back and front) on the main body.
- * Align the screws on the main body side and the holes in the Teflon plate to mount it. Note that there are front and back sides.

Roller plate



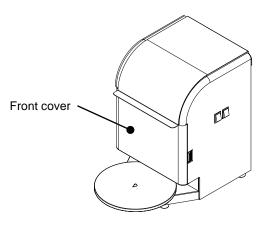
②Set the hopper from above by aligning the pin on the bottom of the hopper with the pin hole on the main body side.

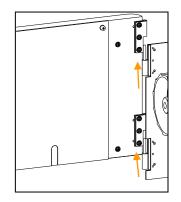
Disassembly (front cover)



Make sure to turn OFF the power supply before removal and mounting of parts. Failure to do so may result in an injury or accident.

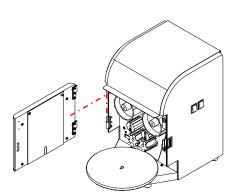
OHow to remove





①Opening and lifting the front cover upward allows it to be removed from the main body.

OHow to mount



①Insert from above by aligning the insertion portions of the front cover with the portions marked by the arrows on the main body.

O For your safety, the machine will not start up before the front cover is mounted and closed.

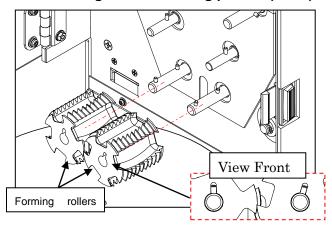


As the front cover is made of resin, be careful not to drop or strike it. Doing so may result in breakage.

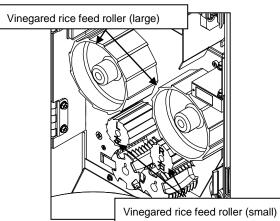
Assembly (Forming roller, Rice feeding roller, Turn table)

Danger

Make sure to turn OFF the power supply before removal or mounting of parts. Failure to do so may result in a serious injury from your hand becoming caught in the rotating portion (roller).



①Align the pin groove portions with the pin positions of the mounting axes of the main body and insert both the right and left ones securely to the back at the same time. *Note that there are right and left rollers (marked accordingly)



②Mount the Rice feed rollers (large and small).

*There are right and left ones (marked accordingly).

× Unmountable condition

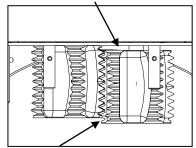
* When mounting the forming rollers, if the ends of the right and left rollers overlap as shown in the photograph at left (position indicated by arrows), it is not possible to mount these rollers. In this case, carry out the following operations:

- ① Close the front cover.
- ② Turn ON the power supply switch.

<u>Important</u>

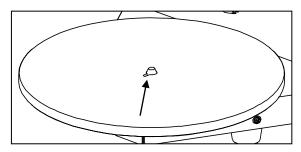
- $\ensuremath{\textcircled{}}$ 3 Turn ON the Mode switch.
- ④ Turn OFF the Mode switch.
- (5) Wait until the machine automatically stops and then they will stop automatically where you can mount the rollers.
- ⑥ Turn OFF the power supply switch.

It is not fully inserted to the back.



The right and left ones are out of alignment

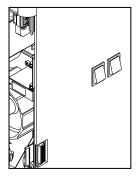
After setting the forming rollers to the main body, confirm that the right and left ones are not out of alignment.



③Align the main body turntable axis with the turntable hole and set it from above.

5

Operation Switch

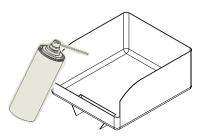


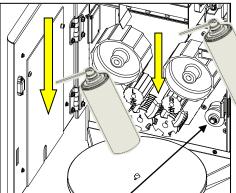
DOWER (power supply switch)

Turning the switch to the "ON" side turns ON the main body power supply.

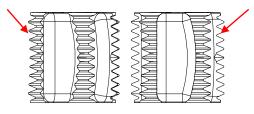
Turn ON the starts up the machine. Turn OFF the stop the machine.

Applying oil before/during use





Hardness Adjustment knob





Danger

- Before use, remove the Roller plates (front and back) from the main body and apply oil to the passage of Rice (portion indicated by arrows) by spraying.
- When Rice comes out in a loose condition, it is likely that Rice has stuck to the surface of the Teflon plates. <u>Wipe</u> off the Rice stuck to the surface and apply oil by spraying.
- * Be careful not to spray oil on the harness adjustment knob portion. Doing so may result in an accident.

ightly spray oil inside the hopper.

③Before use, remove the Rice ball forming rollers from the main body once and firmly and directly spray oil on to <u>the</u> <u>peak and valley portions</u> of the rollers.

When the Rice balls frequently fall and drop on to the turntable, repeat the above-mentioned operations. In such a case, if the Rice has stuck to the rollers in a sticky paste condition, <u>wash the rollers in water once</u> and spray oil firmly and directly on to the rollers.

In case of a newly delivered machine, it will not have oil applied to the above-mentioned Teflon plates (front and back) or each roller. After washing the various parts and mounting them to the main body, make sure to spray oil and rub it on to such parts using embossed gloves, etc.
Adding Rice without carrying out this operation may result in the Rice sticking to the Teflon portions.
* When spraying oil on to the forming rollers, make sure to turn OFF the power supply because

it is dangerous. Failure to do so may result in an injury or accident.

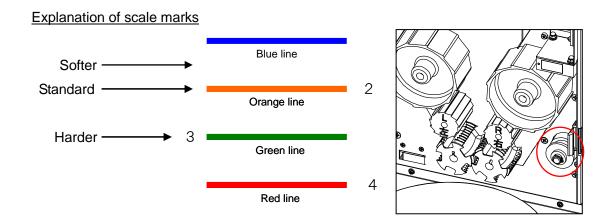
Be especially sure to firmly and directly spray oil on to the forming rollers to become well accustomed to the rollers.

Hardness Adjustment (gram adjustment)

OThe adjusting knob is located at the right lower side inside the main body front cover.

* Note

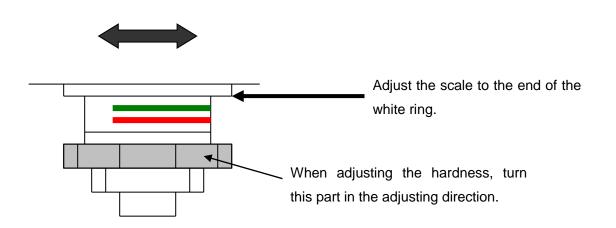
When the hardness is less than 1.5, the vinegared rice feed roller (large) will not rotate and the vinegared rice will not be fed and the rice balls will fall apart and will not be formed properly.



OWhen you want the standard hardness, adjust the scale to Scale 2 (orange line) (factory setting).
OWhen you want it a little bit softer, adjust it between Scale 1 (Blue line) and Scale 2 (Orange line).
OWhen you want it harder, adjust it to Scale 3 (Green line).

•As the number of the scale becomes smaller, it becomes softer.

- •Making it harder than the standard hardness makes it about one gram heavier.
- •Making it softer than the standard hardness makes it about one gram lighter.
- If you adjust the scale too far in the softer direction (less than 1), the Rice balls may not be formed.





Be careful not to spray any oil on to the hardness adjustment knob portion. Doing so may result in trouble.

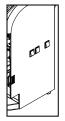
Procedure summary

- ① Spray or apply spray oil on to the various parts.
- 2 Confirm that each roller is set correctly.
- 3 Put the Rice into the hopper.
- ④ Feed the Rice set in the hopper into the "Rice feeding slot" while breaking it into flakes.
- You can put the Rice in an amount corresponding to about 25 sushi balls (*in case of 20 gram/ball).



Rice feeding slot

(5) Turn ON the power switch and turn ON the Mode switch.



(6) The sushi balls will come out on the turntable



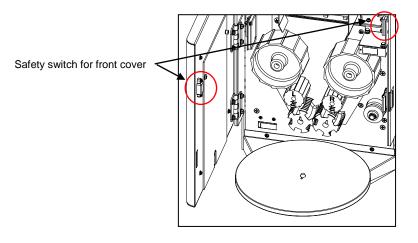
- OWhen making them in succession, use the machine by adjusting the level of Rice to always remain at the upper part of the feeding slot as shown in Photograph ④. When you can see more than half of the Rice feed roller (large), the sushi balls will come out in a crumbled condition.
- Olf you do not supply the rice into the feeding slot when it decreases, about 10 out of 25 pieces will come out in a crumbled condition.
- OThe "Rice feed roller (large)" mounted below the feeding slot stops for safety and feeding stability when it is under an overload in excess of a prescribed value, but this is not a problem.
- * As pushing the Rice in the feeding slot from above stops the "rice feed roller (large)" due to the above-mentioned function and results in crumbled sushi balls, be careful not to push down the rice from above in the feeding slot.

Description of the safety switch / Turn table sensor



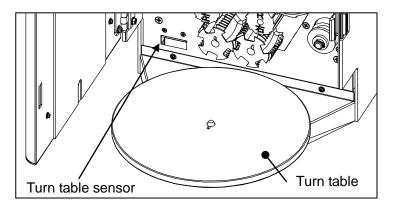
Never spray water on to the safety switch.

Doing so may result in an accident, injury or problems due to electric shock.



 \bigcirc Safety switch for front cover

For the sake of safety, opening the front cover turns OFF the power supply switch and the machine comes to a full stop.



OTurntable sensor

The sensor is used to stop the operation automatically when a predetermined number of sushi balls are on the turn table.

Never pour water or spray oil over the sensor.



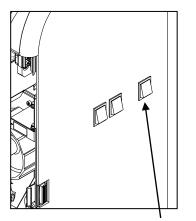
If oil, rice, and other materials are attached to the sensor light emitter (red lens), the machine may not work properly, causing the turntable to stop; wipe the red lens clean using a slightly moistened cloth or the like.

Keep-warm Heater * Optional Setting H Type Only



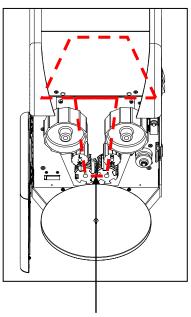
Be careful not to touch the built-in heater portion directly with your hands as it becomes very hot. Doing so may result in a burn.

Keep-warm switch (in case of Type 220 to 240V specification)



Keep-warm switch

- Turning ON the keep-warm switch turns ON the built-in keep-warm heater in the portion marked with the dotted line.
- * It takes about five minutes until it becomes completely warm.



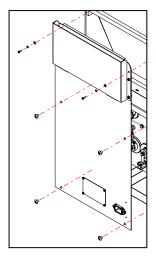
Built-in heater portion *Within the dotted line

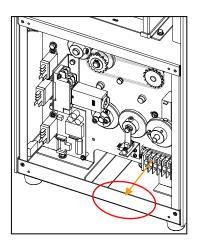
How to change Parts (fuse)



When changing fuses, be sure to unplug the power supply cord of the main body from the outlet.

Failure to do so may result in an electric shock, injury or accident.





①For the sake of safety, unplug the power supply cord from the outlet and then open the rear side of the main body by removing the screws (six screws as indicated by the arrows).





②Remove the fuse from the fuse box and replace it with a new fuse.

- * The wire inside the fuse tube is normally connected, but if it is melted in the middle, replace it with a new one.
- One fuse is contained in the spare parts case when you purchase the machine.

Fuse to be used (for 3A)

OWhen ordering fuses, consult with your distributor or TOP,INC.

What to do when you think you are having trouble with your machine.

1. When you cannot turn ON the power supply (when no lamps turn ON)

OCheck if the power supply cord of the main body is unplugged from the outlet or not.

- OCheck if the breaker of the power supply source (on the distributor side) into which the main body is inserted is blown or not.
- OCheck if the fuse inside the main body rear portion is melted or not. ***See P12**

* As it is dangerous, make sure to unplug the cord from the outlet when you replace a fuse. Failure to do so may result in an electric shock, accident or injury.

2. When the Sushi balls come out in a crumbled condition

Ocheck if the right and left Rice feed rollers (large) are mounted on the opposite sides or not. *See P5
 OApply spray oil on to the passage portions of the Roller plates (front and rear). *See P7
 Ocheck if the hardness adjustment knob is turned too far in the softer direction or not. *See P8

3. When hard Sushi balls come out

OCheck if the right and left Rice feed rollers (small) are mounted on the opposite sides or not. ***See P5**

Check if the hardness adjustment inside the front panel is adjusted too far in the harder direction or not.
 * See P8

* When the machine stops with Rice remaining in the forming roller portion, one hardened sushi ball comes out. Return it to the hopper after breaking it into flakes.

4. When the shape of a Sushi ball is different from the usual one

OCheck if the right and left Rice ball forming rollers are mounted on the opposite sides or not. ***See P5**

5. When Sushi balls often roll out and fall on to the turntable

- $\bigcirc \mathsf{Remove}$ the Rice ball forming rollers once from the main body and directly and firmly spray oil on
- to the peaks and valleys of the rollers. ***See P7**
- * In addition, when the rice is stuck to the peak/valley portions in a sticky paste condition, wash the portions clean with water and use the rollers after firmly spraying oil on the peak/valley portions.