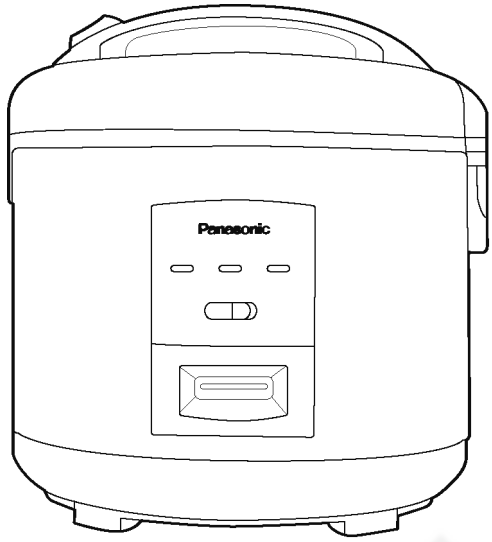
ORDER NO. PMMA150931CE

Service Manual

Electric Rice Cooker



Model No. SR-JP185WVA-US
SR-JP185SWVA-US
SR-JP185WVA-CA
SR-JP185SWVA-CA
SR-JP185SBSR-ID
SR-JP185WSR-ID
SR-JP185TSH-SG
SR-JP185WSH-SG
SR-JP185WSW-SG
SR-JP185WSW-MN
SR-JP185SSK-MY
SR-JP185TSK-MY
SR-JP185WSK-MY

Destination: USA, Canada, Indonesia, Singapore (DBD), Singapore (RBD), Mongolia, Malaysia

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Panasonic®

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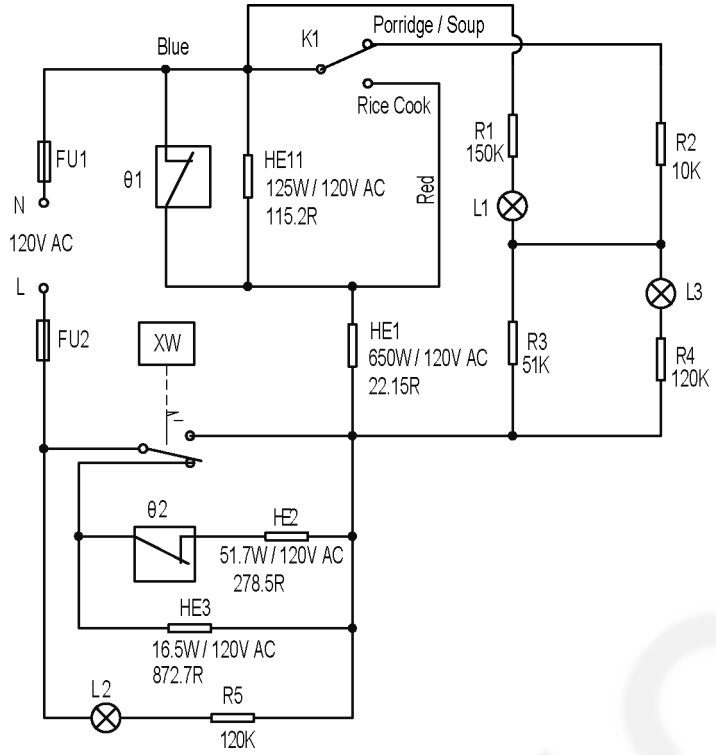
1 Specifications

Model No.		SR-JP185
Power Supply / Rated Voltage	USA / Canada	AC 120V / 60Hz
	Indonesia / Singapore (RBD) / Mongolia	AC 220V / 50Hz
	Singapore (DBD)	AC 230V / 50Hz
	Malaysia	AC 240V / 50Hz
Power Consumption	Cooking	650 W
	Cooking (Indonesia)	400 W
	Keep Warm	61.8 W
	Keep Warm (Indonesia)	58 W
	Porridge	650 W
	Porridge (Indonesia)	105 W
Cooking Capacity		0.54L ~ 1.8L (3 ~ 10 cups)
Center Thermostat Working Temperature		141°C ± 5°C
Menu Select		Quick Cook, White Rice, Steam, Porridge
Keep Warm Temperature		65°C - 78°C
Porridge Cooking Volume		0.54L ~ 1.8L (3 ~ 10 cups)
Power Cord Length		1m
Thermal Fuse Specification		250V 15A 142°C
Thermal Fuse Quantity		2
Dimension	Height	0.287m
	Weight	0.275m
	Length	0.270m
Product Weight		2.9kg
Accessory		Measuring Cup, Steam Basket, Rice Scoop, Porridge Spoon

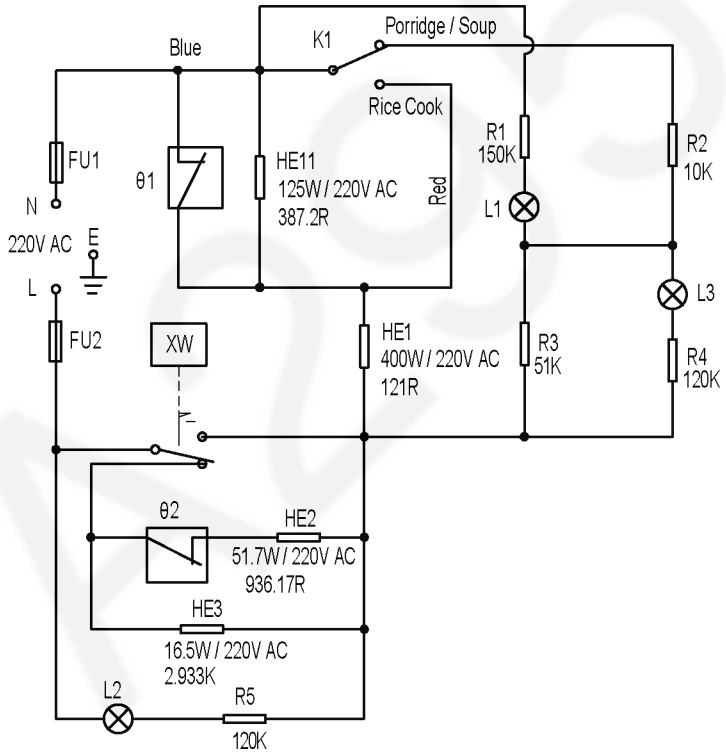
2 Schematic Diagram

2.1. For 120V, 650W model.



HE1: High-power Heating Plate
HE11: Low-power Heating Plate
HE2: Middle Keep Warm Belt
HE3: Top Keep Warm Belt
XW: Thermostat Magnetic Induction Switch
FU1, FU2: Fuses
L1: Cooking Light
L2: Keep Warm Light
L3: Porridge / Soup Light
θ1, θ2: Thermostat
R1, R2, R3, R4, R5: Limiting Resistor
K1: Porridge / Rice Switch

2.2. For 220V, 400W model.



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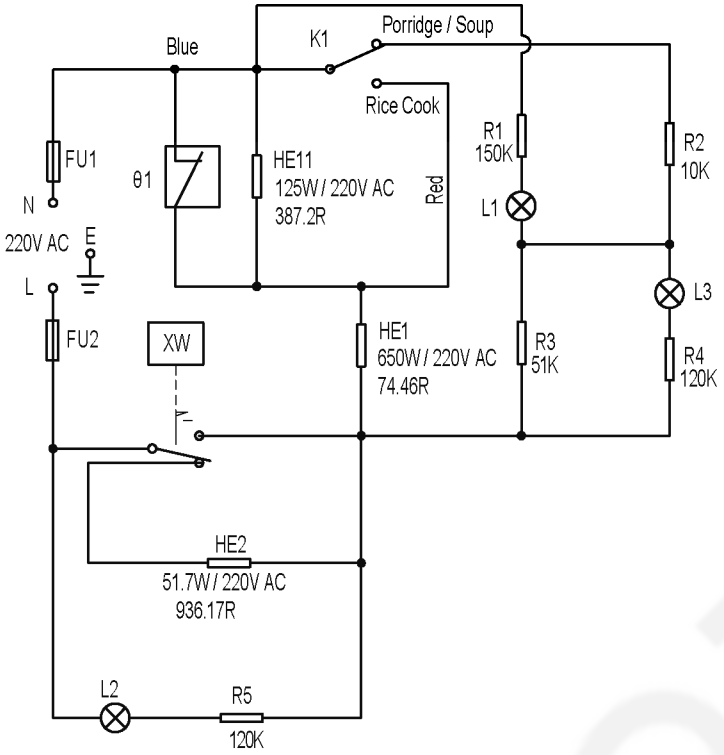
θ1, θ2: Thermostat
R1, R2, R3, R4, R5: Limiting Resistor
K1: Porridge / Rice Switch

2.3. For 220V, 650W model.



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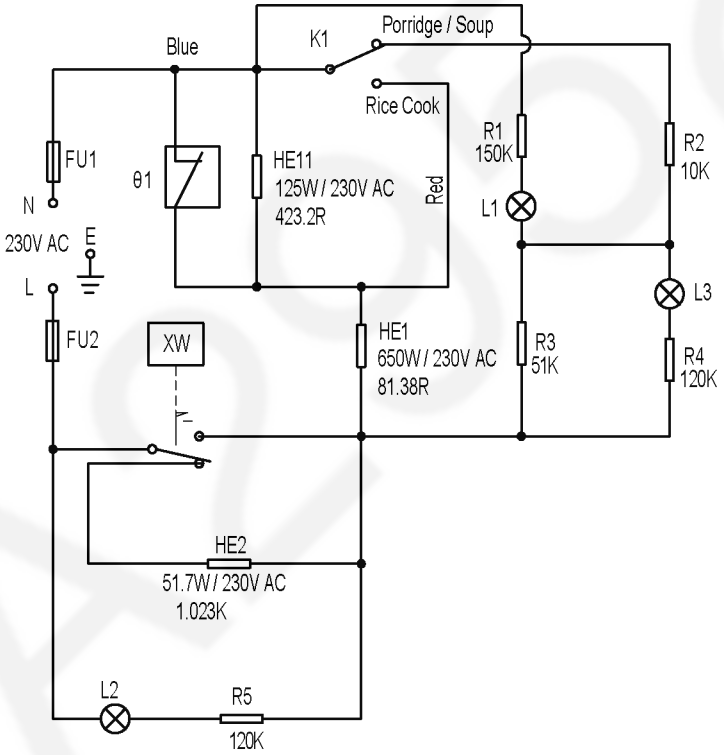
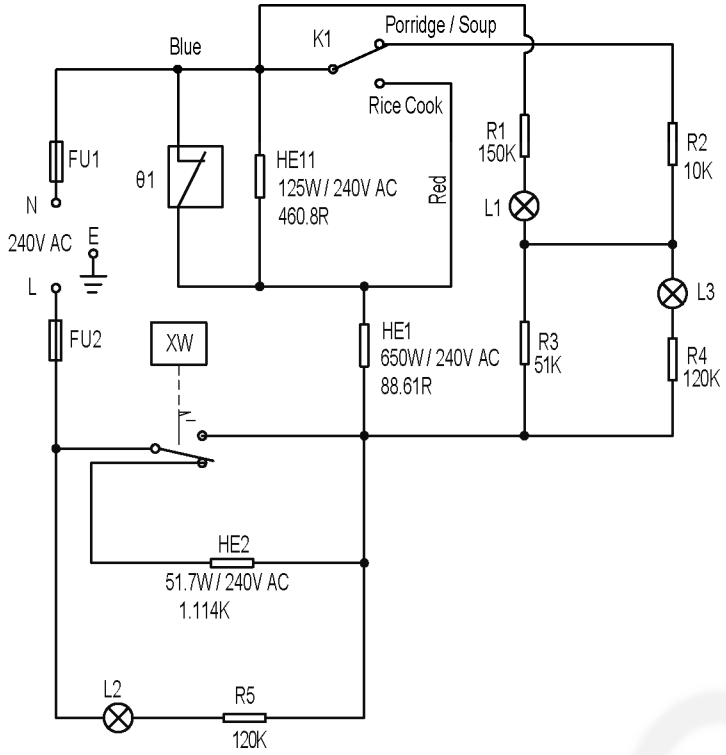
HE2: Middle Keep Warm Belt
XW: Thermostat Magnetic Induction Switch
FU1, FU2: Fuses
L1: Cooking Light
L2: Keep Warm Light
L3: Porridge / Soup Light
θ1: Thermostat
R1, R2, R3, R4, R5: Limiting Resistor
K1: Porridge / Rice Switch

2.4. For 230V, 650W model.



HE1: High-power Heating Plate
HE11: Low-power Heating Plate
HE2: Middle Keep Warm Belt
XW: Thermostat Magnetic Induction Switch
FU1, FU2: Fuses
L1: Cooking Light
L2: Keep Warm Light
L3: Porridge / Soup Light
θ1: Thermostat
R1, R2, R3, R4, R5: Limiting Resistor
K1: Porridge / Rice Switch

2.5. For 240V, 650W model.



HE1: High-power Heating Plate
HE11: Low-power Heating Plate
HE2: Middle Keep Warm Belt
XW: Thermostat Magnetic Induction Switch
FU1, FU2: Fuses
L1: Cooking Light
L2: Keep Warm Light
L3: Porridge / Soup Light
θ1: Thermostat
R1, R2, R3, R4, R5: Limiting Resistor
K1: Porridge / Rice Switch

3 Troubleshooting Guide

When receiving the rice cooker requiring repair, please ask the customer about the malfunctions (phenomena), and if necessary, you should also check the inner pot and spill-proof moisturizing cap.

Power off first before checking the related components.

Check the main unit according to the troubleshooting table below.

3.1. Troubleshooting Table

Note:

Mark O means the components that may malfunction.

Malfunction Symptom / Status of main unit		Outer lid comp.	Spill-proof moisturizing cap	Aluminium inner pot	Temperature limiter	Thermal insulation heater	Heating plate	Finished switch	Finished control baseplate	Thermal fuse	Power plug	Power cord	
Does not cook rice	COOKING LED lights up						O	O		O			
	COOKING LED does not light up							O		O	O	O	If the thermal fuse has melted, firstly find out the reasons and then exchange the defective parts.
The Keep Warm LED does not light up after cooking									O				
Cannot cook rice correctly. (Stops early or cooking is uneven, etc.)				O	O		O	O		O			This may occur due to user's wrong measurement or insufficient loosening of rice.
Rice on the bottom of the inner pan is scorched dark brown.				O	O		O	O		O			Check that there is no dirt or foreign substances stuck to the surface of the temperature limiter.
Does not keep warm	Keep Warm LED lights up					O	O						
Droplets fall onto the surface of the rice.		O	O	O									This may occur by cutting off the power or insufficient loosening of rice, or the valve for warming deforms.
The surface of the rice dries up.		O	O	O									This may occur when the lid is kept open for a long time or by insufficient loosening of rice, or the valve for warming comes off.

4 Test Method

4.1. Pre-test setting

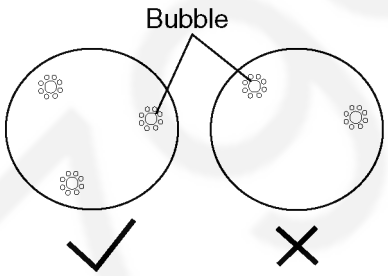
Make sure that the inner pan set in the cooker and the power cord plugged into the wall socket.

4.2. Bubble test

1. Insert the pan into the cooker's main body, and then turn it slightly clockwise and anti-clockwise to place the pan properly on top of the cast heater.
2. Pour a small quantity of water into the pan so that the bottom of the pan is immersed with water. Close the lid completely and press the switch to start cooking.
3. When the water boils, the cooker will blow off steam. When you see the steam, open the lid, and press the brim of the pan to completely touch the bottom of the pan to the cast heater. Check the water bubbling condition.

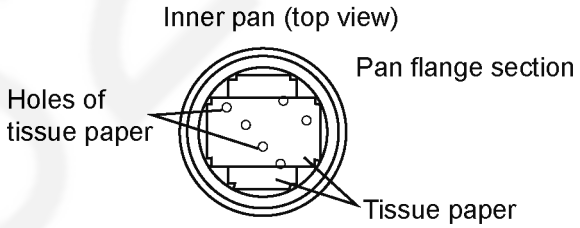
See the right figures:

- Water bubbles appear at three areas and are distributed evenly around the circle ---------- Acceptable
- Water bubbles appear are distributed unevenly and not around the circle ---------- Unacceptable
- The unacceptable result is possibly due to incomplete contact of bottom of pan and the cast heater. So, please check the heater surface for foreign material and remove them or replace the defective part (pan or cast heater).



4.3. Steaming Test

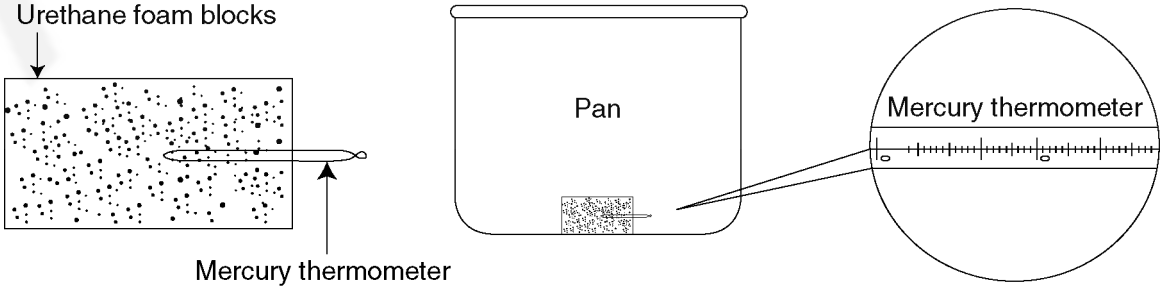
After that, place two or three sheets of tissue paper (gauze) into the pan in such a way that the sheets are spread over the bottom of the pan, then leave the cooker on without closing the lid.

1. Be sure to fully open the lid to protect the plastic parts from thermal distortion caused by steam. 2. Make holes in the tissue paper (or gauze), as shown, so that it will not float up during steaming.	

*If the unit fails the switching timing test, check for poor contact between the inner pan and the pan sensor. If necessary, remove any dirt deposit from between them, or replace the inner pan and/or the pan sensor.

4.4. Keep Warm Test

1. Place a mercury thermometer between urethane foam blocks. (Urethane foam blocks (ASN-300) and the thermometer (ASN-150H) are supplied as spare parts.)
2. Place the urethane foam blocks holding the thermometer in the center of the bottom of the pan, and allow the cooker to run in the Keep Warm process.
3. More than one hour later, open the lid and read the temperature within 10 seconds.
   - If it is within 65°C ~ 78°C, then considered as normal.
   - If the waring temperature is out of this range, check wether there is any dirt of foreign material stuck on the pan sensor or bottom of the pan, if so, please remove them.

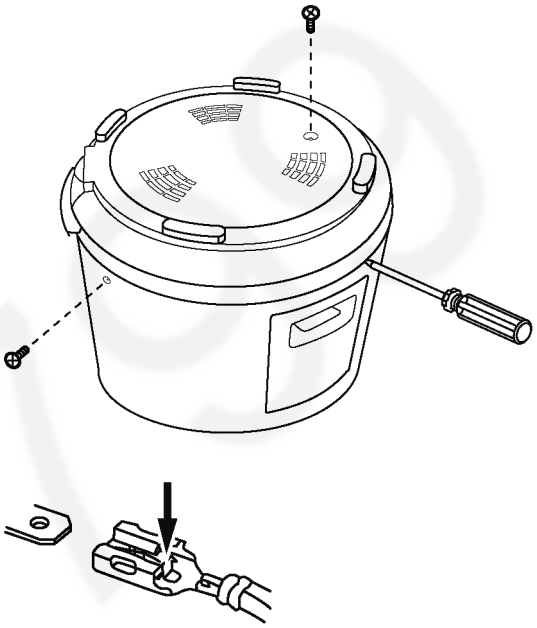


5 Disassembly and Assembly Instructions

5.1. Replacing the switch assembly.

1	Remove the base.

- Place a rubber pad or similar thing under the rice cooker to prevent damage, and open the lid of the rice cooker, and place the bottom of the rice cooker upward, as shown in the diagram right.
- Pull out the power cord.
- Remove the fixing screws of the underframe (on the side) and those at the bottom (on the underside).
- As shown in the diagram, gently pry at the slot of the underframe edge with a slotted screwdriver, to remove the base.
- Disassemble the wires of the power socket.

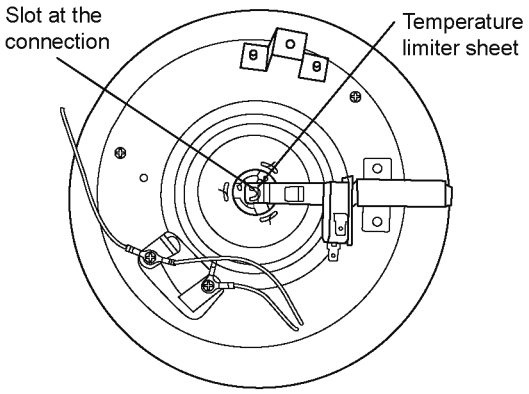


Note:

- Do not remove the base by tapping it with a screwdriver, otherwise the screwdriver contacted parts will be damaged. You must use the above method.
- Upon pulling out connectors and similar things, just directly pull them outwards. Pulling them out in different directions will impose pressure on the components connected to them, to cause damages to the components.
- Upon pulling out the fastening terminals at the chuck, please press them down in the direction of the arrow, while pulling the lock catch outward. Press them down in the direction indicated by the arrow, otherwise you will not be able to pull out the terminals.

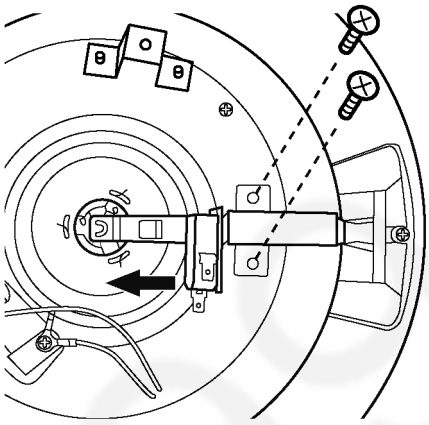
2	Disconnect the temperature limiter from the connecting rod.

- Gently bend the sheet at the end of the temperature limiter as shown in the diagram, and fold it into the slot shape at the junction of the connecting rod.
- Separate the temperature limiter from the connecting rod slot.



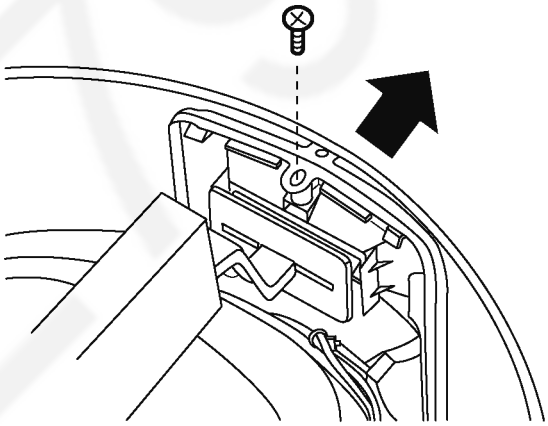
3	Remove the bracket

- Remove the wiring on the switch assembly.
- Remove the fixing screws (2 pcs) for the connecting rod bracket.
- Push the bracket towards the temperature limiter, to remove the bracket.



4	Remove the switch assembly.

- Remove the fixing screws of the control baseplate.
- Push the control baseplate upward along the body assembly, to remove the switch assembly.



5	Assembly the switch assembly.

- Conduct assembly after control switch assembly replacement as per the disassembly steps in a reversed way.

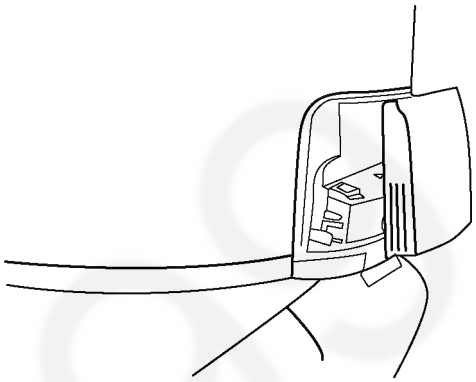
Note:

- For wiring, refer to Schematic Diagram on P. 4.

5.2. Replacing the outer lid.

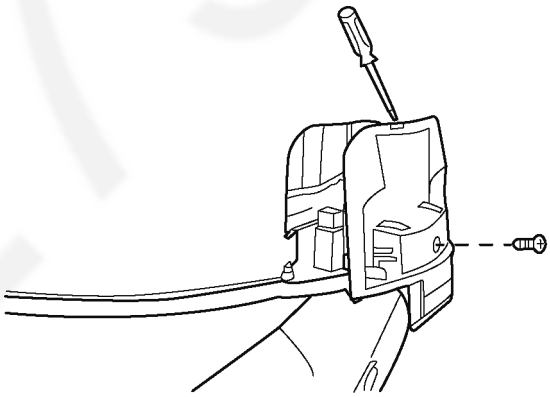
1	Remove the water collecting cup.

• Remove the water collecting cup directly.



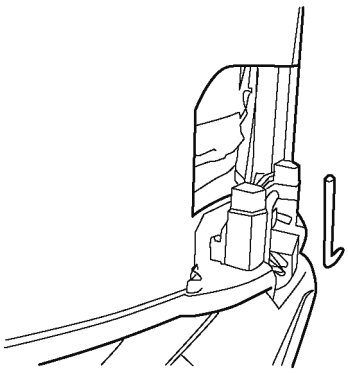
2	Remove the hinge cover.

• Remove the fixing screws for the hinge cover.
• Remove the hinge cover using a screwdriver, as shown in the diagram.



3	Remove the outer lid.

• Take out the fixed pin for fixing the outer lid. (2 pieces)
• Gently take out the outer lid.
• Push the bracket towards the temperature limiter, to remove the bracket.



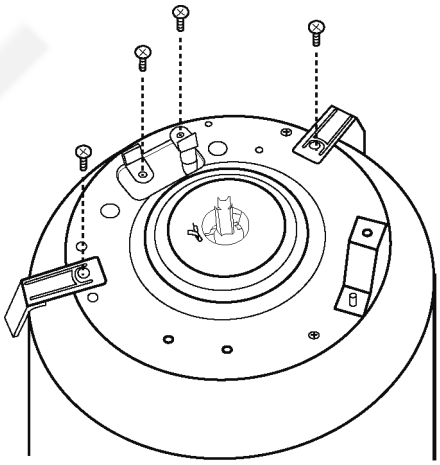
4	About assembly.

• Conduct assembly after outer lid replacement as per the disassembly steps in a reversed way.

5.3. Replacing the body assembly.

1	Remove the hinge cover.
• Disassemble the hinge cover by referring to Step (1-2) as shown in 5.2.	
2	Remove the switch assembly.
• Remove the fixing screws for the hinge cover. • Disassemble the switch assembly by referring to Step (1-4) as shown in 5.1.	
3	Remove the Body Assembly.
• Use force directly upward to take out the Body Assembly.	

5.4. Replacing the heating plate.

1	Remove the base.
• Disassemble the base by referring to Step (1) as shown in 5.1.	
2	Remove the heating plate
• Disassemble the connection to the heating plate. • Remove the fixing screws from the heating plate. • Remove the heating plate from the protective frame.	
3	About assembly
• Conduct assembly after heating plate replacement as per the disassembly steps in a reversed way. **Note:** • For wiring, refer to Schematic Diagram on P. 4. • Please wear gloves when assembling a new heating plate, so as not to damage or containate the surface of the the heating plate.	

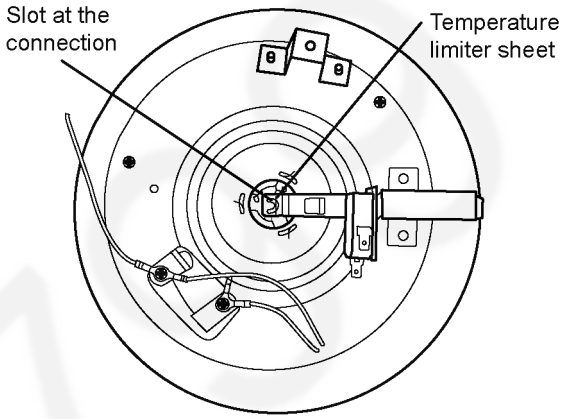
5.5. Replacing the temperature limiter.

1	Remove the base.

• Disassemble the base by referring to Step (1) as shown in 5.1.

2	Separate the temperature limiter from the switch assembly.

• Gently bend the sheet connected to the switch assembly as shown in the diagram, and fold it into the slot shape at the connection of the switch assembly.
• Separate the Temperature limiter from the connecting rod slot.

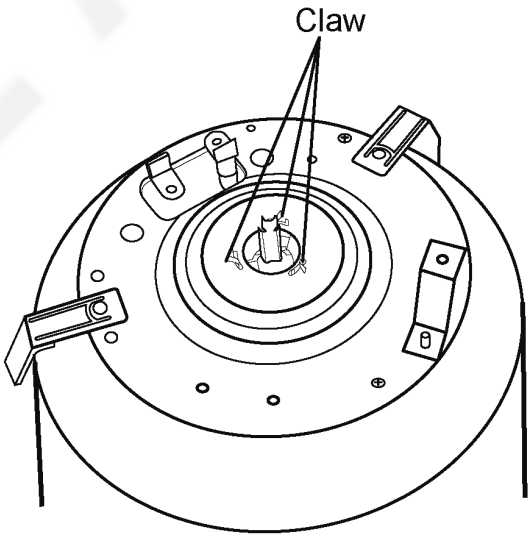


3	Remove the Temperature limiter

• Straighten the claws (3), as shown in the diagram right and take out the temperature limiter.

Note

• Do not deform the supporting spring when disassembly.



4	About assembly

• Conduct assembly after temperature limiter replacement as per the disassembly steps in a reversed way.

Note:

• Do not scratch the surface of the temperature limiter when assembly.
• Do not make the supporting spring tilting and deformed when assembly.

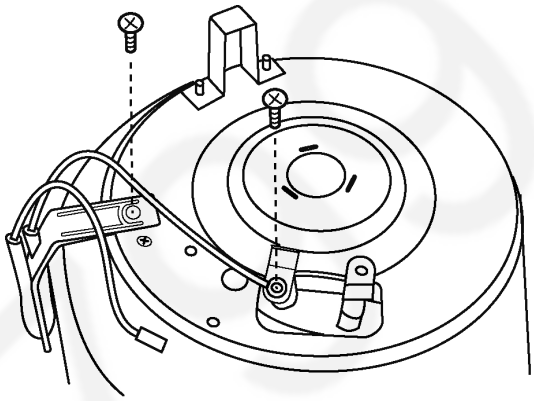
5.6. Replacing the thermal fuse.

1	Remove the base, body assembly.

• Disassemble the base by referring to Step (1) as shown in 5.1.
• Refer to the method of replacing the body assembly to remove the body assembly.

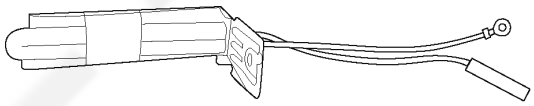
2	Disassemble the connectiong between the thermal fuse and the heating plate

• Disassemble the connection between the thermal fuse and the heating plate.



3	Remove the temperature fuse holder, and take out the thermal fuse

• Remove the fixing screws from the theral fuse holder, peel off the aluminum foil tape, and remove the holder and the thermal fuse.
• Directly take out the thermal fuse.



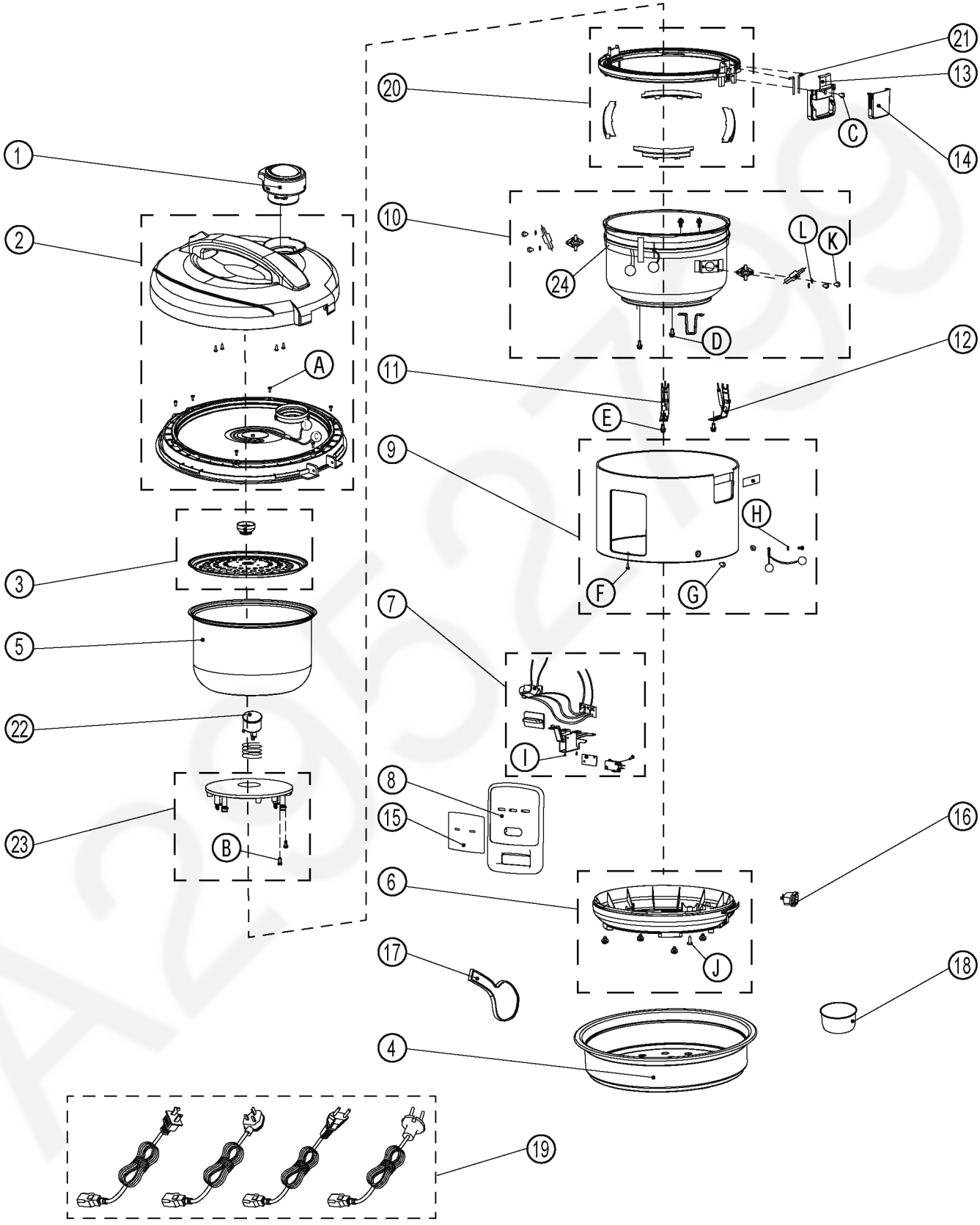
4	Reassembly

• Conduct assembly after thermal fuse replacement as per the disassembly steps in a reversed way.

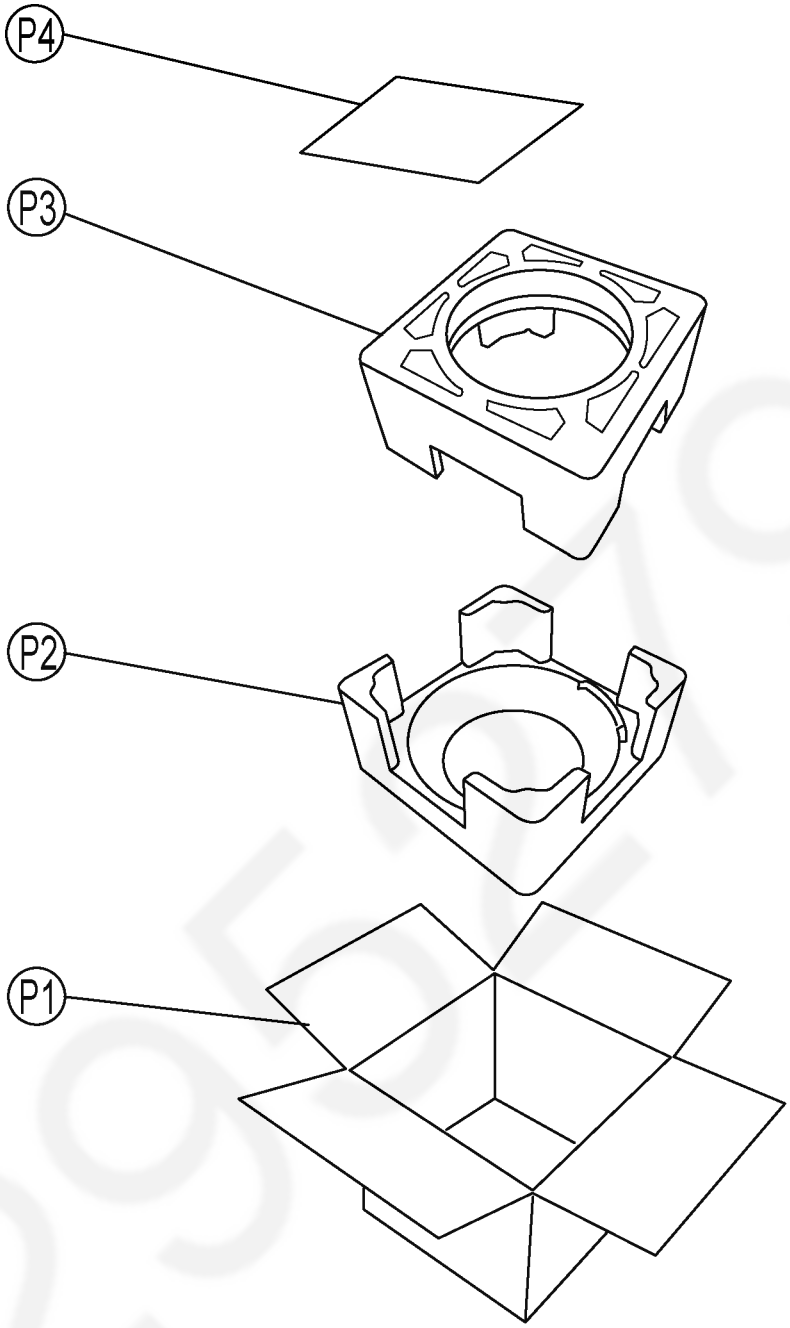
Note:
• Do not make temperature fuse deformed when assembling.
• Do not make temperature fuse tilting when assembling.
• Do not damage the lead, insulating sheet, etc. when mounting the thermal fuse on the holder.

6 Exploded View and Replacement Parts List

6.1. Exploded View



6.2. Packing View



6.3. Replacement Part List

Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

6.3.1. Part List

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	1	3100790040	STEAM VALVE ASSY	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSR/ SR-JP185WSW
	1	3100790041	STEAM VALVE ASSY	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
	1	3100790061	STEAM VALVE ASSY	1	SR-JP185SWVA/SR-JP185WVA
	2	3100160299	OUTER LID ASSY	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSW
	2	3100160303	OUTER LID ASSY	1	SR-JP185TSH/SR-JP185TSK
	2	3100160304	OUTER LID ASSY	1	SR-JP185SBSR
	2	3100160305	OUTER LID ASSY	1	SR-JP185WSR
	2	3100160313	OUTER LID ASSY	1	SR-JP185SWVA/SR-JP185WVA
	3	2300160046	INNER LID ASSY	1	
	4	3100200031	STEAM BASKET	1	
	5	2300030739	INNER PAN	1	
	6	3100050253	BOTTOM PLATE ASSY	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSR/ SR-JP185WSW
	6	3100050254	BOTTOM PLATE ASSY	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
	6	3100050289	BOTTOM PLATE ASSY	1	SR-JP185SWVA/SR-JP185WVA
⚠	7	1200070226	SWITCH LEVER ASSY	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
⚠	7	1200070227	SWITCH LEVER ASSY	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSR/ SR-JP185WSW
⚠	7	1200070237	SWITCH LEVER ASSY	1	SR-JP185SWVA/SR-JP185WVA
	8	3100271076	SWITCH PANEL ASSY	1	SR-JP185SBSR
	8	3100271077	SWITCH PANEL ASSY	1	SR-JP185WSR
	8	3100271078	SWITCH PANEL ASSY	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSW
	8	3100271079	SWITCH PANEL ASSY	1	SR-JP185TSK
	8	3100271083	SWITCH PANEL ASSY	1	SR-JP185TSH
	8	3100271093	SWITCH PANEL ASSY	1	SR-JP185SWVA/SR-JP185WVA
	9	2300131479	BODY ASSY	1	SR-JP185WSH/SR-JP185WSK/SR-JP185WSW
	9	2300131483	BODY ASSY	1	SR-JP185SSK
	9	2300131488	BODY ASSY	1	SR-JP185SBSR
	9	2300131489	BODY ASSY	1	SR-JP185WSR
	9	2300131490	BODY ASSY	1	SR-JP185TSH/SR-JP185TSK
	9	2300131500	BODY ASSY	1	SR-JP185SWVA
	9	2300131501	BODY ASSY	1	SR-JP185WVA
	10	2300150315	PROTECTING FRAME ASSY	1	SR-JP185SBSR/SR-JP185WSR
	10	2300150316	PROTECTING FRAME ASSY	1	SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
	10	2300150321	PROTECTING FRAME ASSY	1	SR-JP185TSH/SR-JP185WSH
	10	2300150323	PROTECTING FRAME ASSY	1	SR-JP185WSW
	10	2300150326	PROTECTING FRAME ASSY	1	SR-JP185SWVA/SR-JP185WVA
	11	1200170042	THERMAL FUSE A ASSY	1	
	12	1200170041	THERMAL FUSE B ASSY	1	
	13	3100170041	HINGE COVER	1	SR-JP185SSK/SR-JP185WSH/SR-JP185WSK/SR-JP185WSR/ SR-JP185WSW
	13	3100170042	HINGE COVER	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
	13	3100170047	HINGE COVER	1	SR-JP185SWVA/SR-JP185WVA
	14	3100180029	DEW COLLECTOR	1	
	15	5100160448	DECORATIVE PANEL	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
	15	5100160458	DECORATIVE PANEL	1	SR-JP185SSK/SR-JP185SWVA/SR-JP185WSH/SR-JP185WSK/ SR-JP185WSR/SR-JP185WSW/SR-JP185WVA
⚠	16	1200100005	INLET	1	SR-JP185SWVA/SR-JP185WVA
⚠	16	1200100048	INLET	1	
	17	3100330012	RICE SCOOP	1	
	18	3100320003	MEASUREMENT CUP	1	
⚠	19	1200010999	POWER CORD ASSY	1	SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
⚠	19	1200011001	POWER CORD ASSY	1	SR-JP185SWVA/SR-JP185WVA
⚠	19	1200011003	POWER CORD ASSY	1	SR-JP185WSW
⚠	19	1200011004	POWER CORD ASSY	1	SR-JP185TSH/SR-JP185WSH
⚠	19	1200011011	POWER CORD ASSY	1	SR-JP185SBSR/SR-JP185WSR
	20	3100250235	UPPER FRAME ASSY	1	
	20	3100250237	UPPER FRAME ASSY	1	SR-JP185SBSR/SR-JP185TSH/SR-JP185TSK
	21	2100040063	HINGE SHAFT	2	
	22	1200150033	THERMOSTAT	1	
⚠	23	1100000679	CAST HEATER ASSY	1	SR-JP185SBSR/SR-JP185WSR
⚠	23	1100000680	CAST HEATER ASSY	1	SR-JP185SWVA/SR-JP185WVA

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	23	1100000681	CAST HEATER ASSY	1	SR-JP185TSH/SR-JP185WSH
⚠	23	1100000682	CAST HEATER ASSY	1	SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
⚠	23	1100000704	CAST HEATER ASSY	1	SR-JP185WSW
	24	1100010161	KEEP WARM HEATER	1	SR-JP185SBSR/SR-JP185WSR
	24	1100010185	KEEP WARM HEATER	1	SR-JP185TSH/SR-JP185WSH
	24	1100010193	KEEP WARM HEATER	1	SR-JP185WSW
	24	1100010181	KEEP WARM HEATER	1	SR-JP185SWVA/SR-JP185WVA
	24	1100010184	KEEP WARM HEATER	1	SR-JP185SSK/SR-JP185TSK/SR-JP185WSK

6.3.2. Screws

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	A	2100000222	SCREW ST4X8FT	7	SR-JP185SBSR (OUTER LID ASSY)
	A	2100000222	SCREW ST4X8FT	6	(OUTER LID ASSY)
	B	2100070003	SCREW SET M4X8	2	
	C	2100000222	SCREW ST4X8FT	1	
	D	2100000097	SCREW M4X10	1	SR-JP185SBSR/SR-JP185WSR/SR-JP185TSH/SR-JP185WSH/SR-JP185WSW/SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
	E	2100000390	SCREW XTN4X8FFJ	2	
	F	2100000207	SCREW ST3X6C	1	
	G	2100000299	SCREW ST4X14FT	1	
	H	2100030048	WASHER 4	1	SR-JP185SBSR/SR-JP185WSR/SR-JP185TSH/SR-JP185WSH/SR-JP185WSW/SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
	I	2100070046	SCREW SET XTN4X8FFJ	2	
	J	2100000391	SCREW M4X30	1	
	K	2100000393	SCREW XTN4X5FFJ	2	
	K	2100000393	SCREW XTN4X5FFJ	4	SR-JP185WSR/SR-JP185SWVA
	L	2100030009	SPRING WASHER 4	2	
	L	2100030009	SPRING WASHER	4	SR-JP185WSR/SR-JP185SWVA

6.3.3. Packing List

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P1	5000041542	PACKING BOX	1	SR-JP185SBSR
	P1	5000041543	PACKING BOX	1	SR-JP185WVA/SR-JP185SWVA
	P1	5000041545	PACKING BOX	1	SR-JP185TSH
	P1	5000041545	PACKING BOX	1	SR-JP185WSH/SR-JP185WSW
	P1	5000041574	PACKING BOX	1	SR-JP185WSR/SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
	P2	5400020307	LOWER PAD	1	
	P3	5400020306	UPPER PAD	1	
	P4	5200001448	OPERATING INSTRUCTIONS	1	SR-JP185SBSR/SR-JP185WSR
	P4	5200001500	OPERATING INSTRUCTIONS	1	SR-JP185TSH/SR-JP185WSH/SR-JP185WSW/SR-JP185SSK/SR-JP185TSK/SR-JP185WSK
	P4	5200001502	OPERATING INSTRUCTIONS	1	SR-JP185WSW-MN
	P4	5200001501	OPERATING INSTRUCTIONS	1	SR-JP185WVA/SR-JP185SWVA