

Service Manual

Multi Cooker SR-TMB18 (Russia/Ukraine)



Specification

Description		Model	SR-TMB18
Power Source			220 V 50 Hz
Power consumption	Cooking		670 W
	Warming		109.8 W
Cooking capacity	White Rice		0.54 ~ 1.8L (3 cup ~ 10 cups)
	Brown Rice		0.54 ~ 1.44L (3 cups ~ 8 cups)
	Soup		Max 3.1 L
	Slow Cook		Max 3.1 L
	Cake		900 g
Warming capacity (Plane Rice)			0.54 ~ 1.8 L (3 cup ~ 10 cups)
Cooked Rice warming temperature			70°C ~ 76°C
Temperature detector			Sensor thermistor
Thermal fuse specification			172 °C 250 V 10 A
Dimension (mm)			Width x Depth x Heigth 276 274 277
Weight			3.1 Kg.
Keep warm			12 Hrs.
Power Cord (approx)			1.0 m.
Accessories			Measuring cup, Scoop, Steaming basket

Specification subject to change without notice.

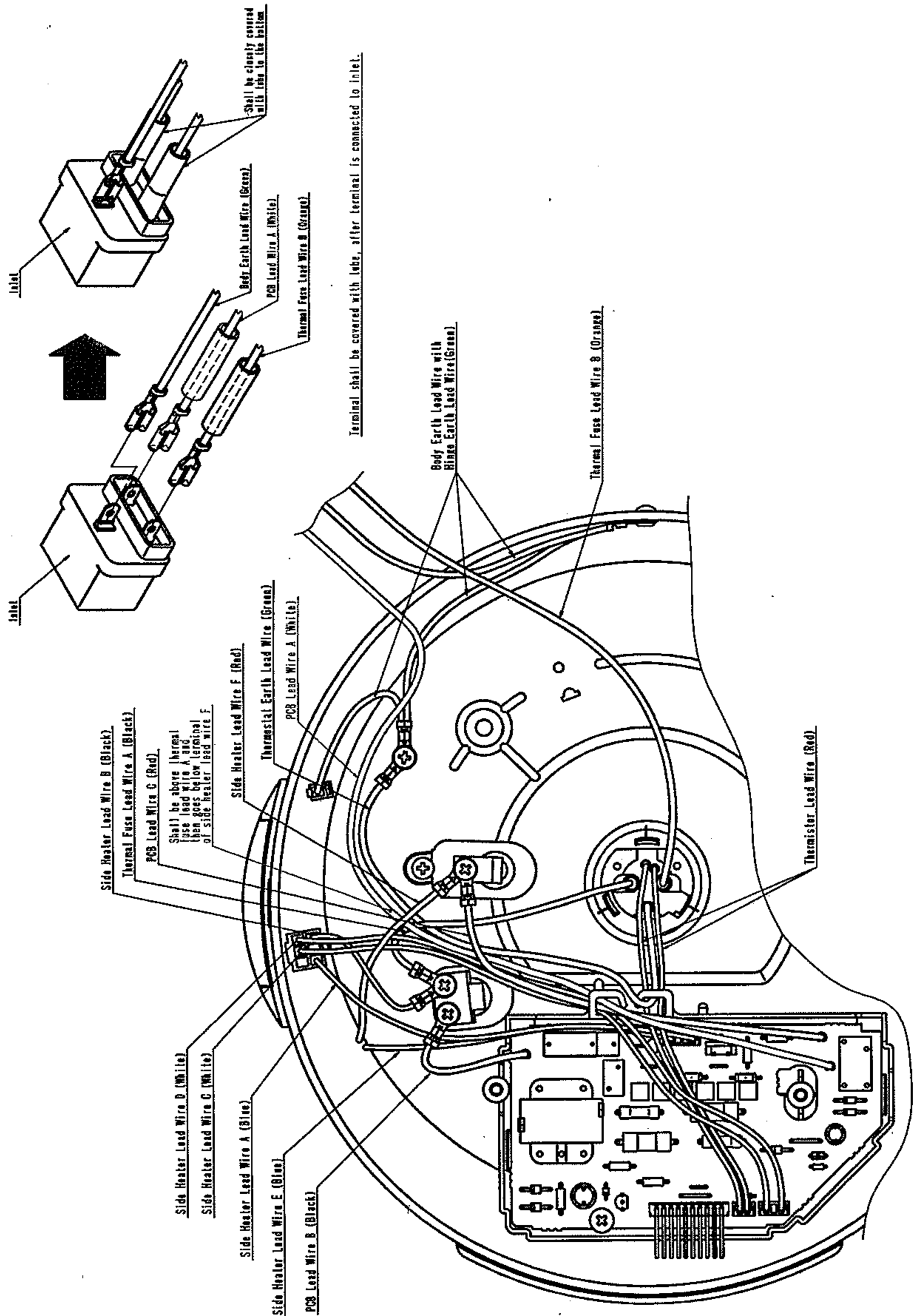
Panasonic®

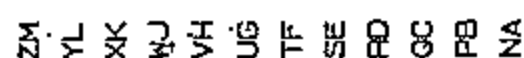
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WIRING DIAGRAM





TROUBLE SHOOTING GUIDE

When receiving a rice boiler to be repaired. Be sure to check that the main body is completely provide with the inner pan and the inner lid, and ask the condition (phenmenon) of the trouble in detail . Before trouble shooting single parts, be sure to disconnect the power supply plug from the receptacle.

TABLE 1

Condition	Trouble shooting	Remedy
Rice boiling section Plane Rice/Red Rice ● Rice is not boiling (The indicating lamp does not come on)	Is the power cord conductive → NO ↓ Yes Is the thermal fuse conductive → NO ↓ Yes Is the therminal conductive → NO ↓ Yes Are the parts on the P.C.B. mistake → Yes	● Replace the cord ● Isolate the cause which melt the thermal fuse, correct the cause ● Make sure insert therminal is fasten ● Replace the P.C.B complete
● Rice is not boiling (The indicating lamp is lit)	Is the cast heater conductive → NO ↓ Yes Are the parts on the P.C.B. mistake → Yes	● Replace the cast heater ● Replace the P.C.B complete
● Earlier cut off ● Poor boiling up Too hard Too soft Insufficient boiling	Is the pan bottom properly contacted with the cast heater (Check with the bubbling test.) → NO ↓ Yes Does the center thermostat operate properly (Check with the operation test.) → NO ↓ Yes Are the parts on the P.C.B mistake → Yes ↓ NO Improper operation → Yes ● Rice is excessive or insufficient. ● Water is excessive or insufficient. ● The switch is turned off once during boiling ● Immediately after the switch is turned off, open the cap ● Rice has not been scooped and mixed well	● Replace the inner pan or the cast heater. ● Replace the center thermostat ● Seeing at TABLE 2 ● Explain the proper operation

Condition	Trouble shooting	Remedy
Excessive burning (More than light brown)	Does the center thermostat operate properly (Check with the evaporation test) NO → Yes ↓ Are the parts on the P.C.B mistake Yes → NO ↓ Improper operation Yes → - Rice is not washed sufficiently (Bran remains still) - The pan bottom is conditioned to generate burning easily - The voltage is lower than specified - Water is excessive	- Replace the center thermostat - Seeing at TABLE 2 - Explain the proper operation
Display of "Slow Cook" and Rice Cook/Steam are flashing light	Check the sensor Lead Wire is connect completely with Control Unit Board No → Yes →	- To join it with CN5 - Take off and join it with CN5 again
Display of "Cake" and "Red Rice" are flashing light	Is the relay operation on/off alternately after flashing light occure No → Yes →	- Check the connector of wiring - Replace the Control Unit complete

TABLE 2

Condition	Trouble shooting	Remedy
● Rice is not boiling (The indication lamp does not come on)	Is the transformer operating NO → Yes →	● Replace the transformer ● Replace the P.C.B complete
● Rice is not boiling (The indication lamp is lit)	Is the relay operation NO → Yes →	● Replace the relay ● Replace the P.C.B complete
● The thermal fuse is blown off	Is the relay cut off NO → Yes →	● Replace the relay ● Replace the P.C.B complete
● Earlier cut off ● Poor boiling	Is the relay operation NO → Yes →	● Replace the relay ● Replace the P.C.B complete
● Excessive burning	Is the relay operation NO → Yes →	● Replace the relay ● Replace the P.C.B complete
● Heat is not reserved (The indication lamp does not come on)	Is the transformer operating NO → Yes →	● Replace the tranformer ● Replace the P.C.B complete
● Heat is not reserved (The indication lamp is lit)	Is the triac operating NO → Yes →	● Replace the tranformer ● Replace the P.C.B complete

TESTING PROCEDURE

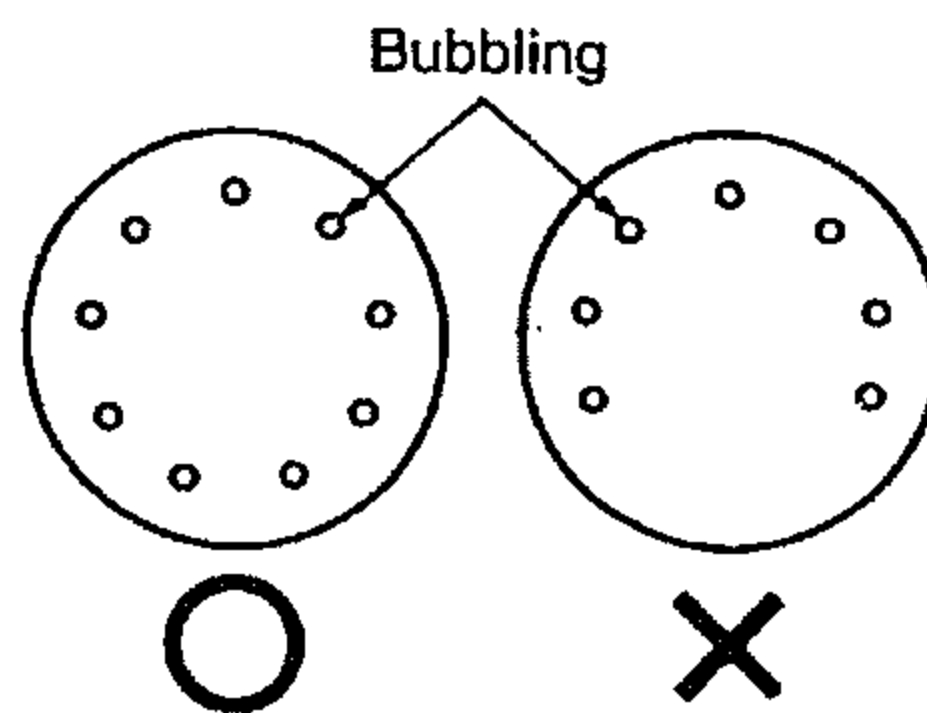
1. Bubbling test

Input the pan in the main body , and lightly rotate the pan clockwise and counter clockwise to settle the pan on the heating plate properly .

1. Fill water until center area of the pan bottom is dipped , and close the lid . Then turn on the boiling switch .
2. When it beings boiling to produce steam. Remove the lid immediately check the bubbling condition on the pan bottom.
3. As show in the right figure.

Bubbles generate through out the circumference of the pan bottom.....Proper

Bubbles does not generate on more than one quater part of the pan bottom circumference.....Improper

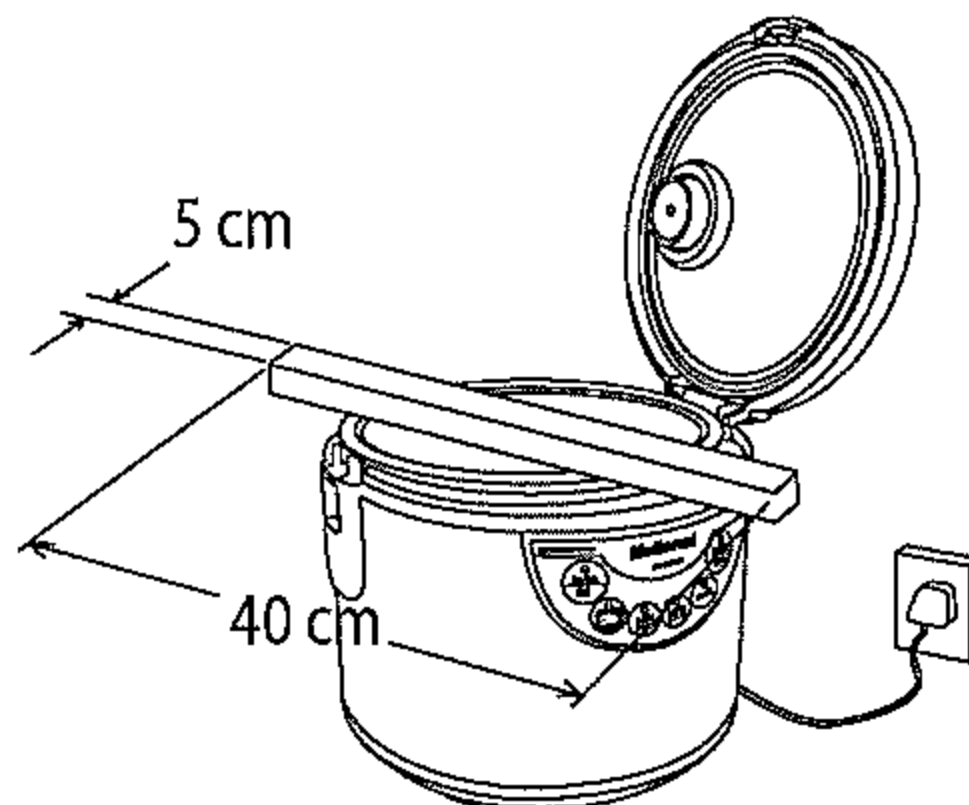


If it is improper , it may result from the insfficient contact between the pan bottom and heating plate. Check the pan bottom and the heating plate for foreign material remainder. Clane off foreign materials or replace the parts.

2. Evaporation test

1. Check that bubbling is proper , and open the lid and place a weight.

Note To prevent plastic parts from deformation caused by steam , be sure to open the lid fully.



Place a weight so that its gravity center may be aligned at the center

2. Fully cover 2 to 3 sheet of tissue paper (gauze is also applicable) on the pan bottom , and continuously flow electric current.

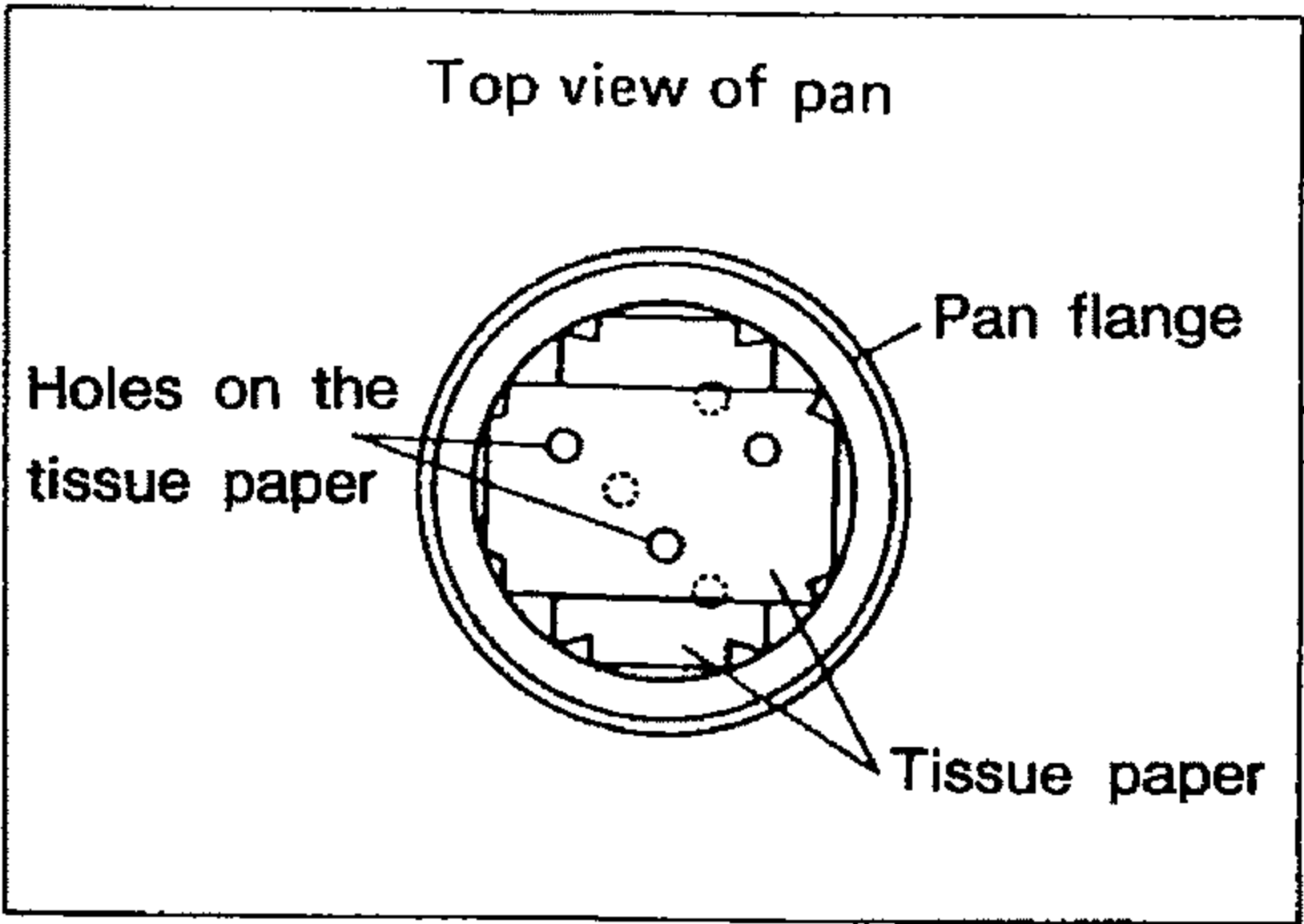
Note To prevent tissue paper from floating because of bubbling , previously hole the paper .

3. Water on the pan bottom is completely evaporated to be empty. This timing is an flollows :

Within 1 minute before the boiling switch is turned off.

Within 1 minute after the boiling switch is turned off.

The above conditions are proper .

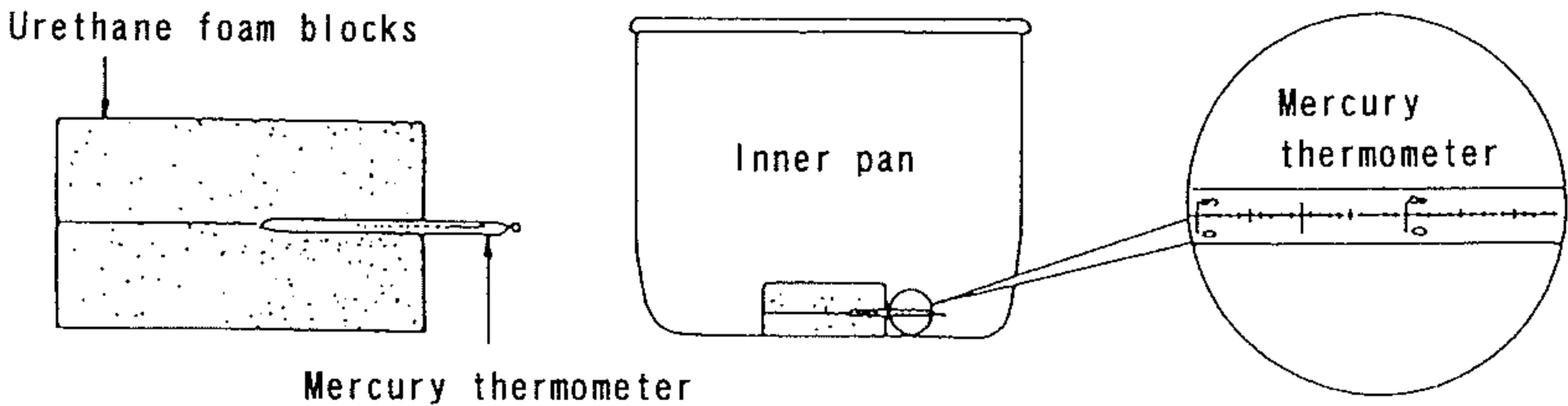


3. Heat reserving test

- 1. Put approx. 1 liter of water and the thermometer [repairing tool(mercury thermometer ASN-150H)] in the pan , close the lid and turn on the boiling switch.
- 2. When the beings boiling to generate steam turn off the boiling switch.
- 3. Add water or keep the lid opened until the reading of the thermometer falls to approx. 70°C.
- 4. When it becomes approx. 70°C , close the lid. After the warming heater is activated for 1 hour or more , check the hert reserving temperature.

Within 69°C to 77°C.....Proper.

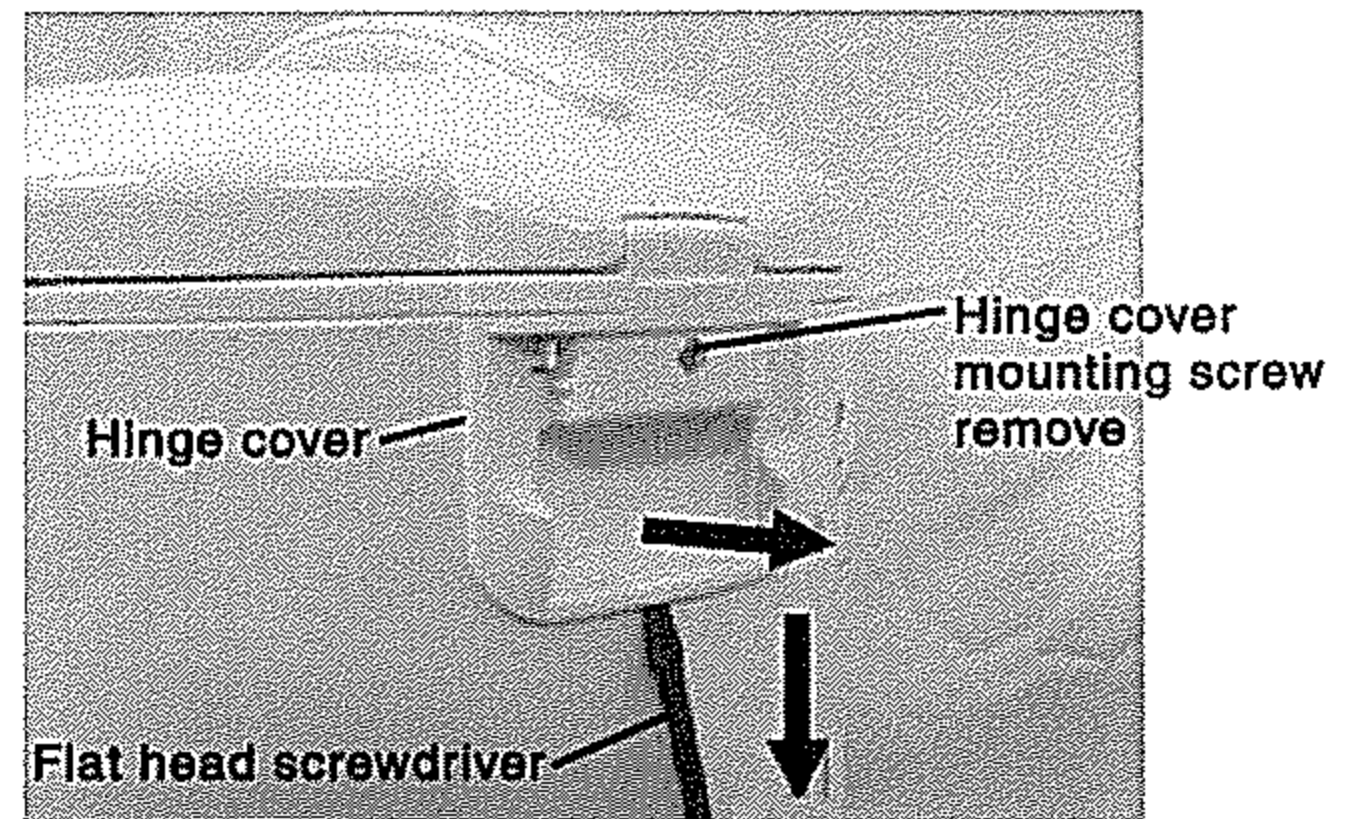
if outside 69°C to 77°C , check Triac mounting for irregularity . if it proper , replace warming heater.



DISASSEMBLING METHOD

1. Hinge cover removal (Hinge Cover)

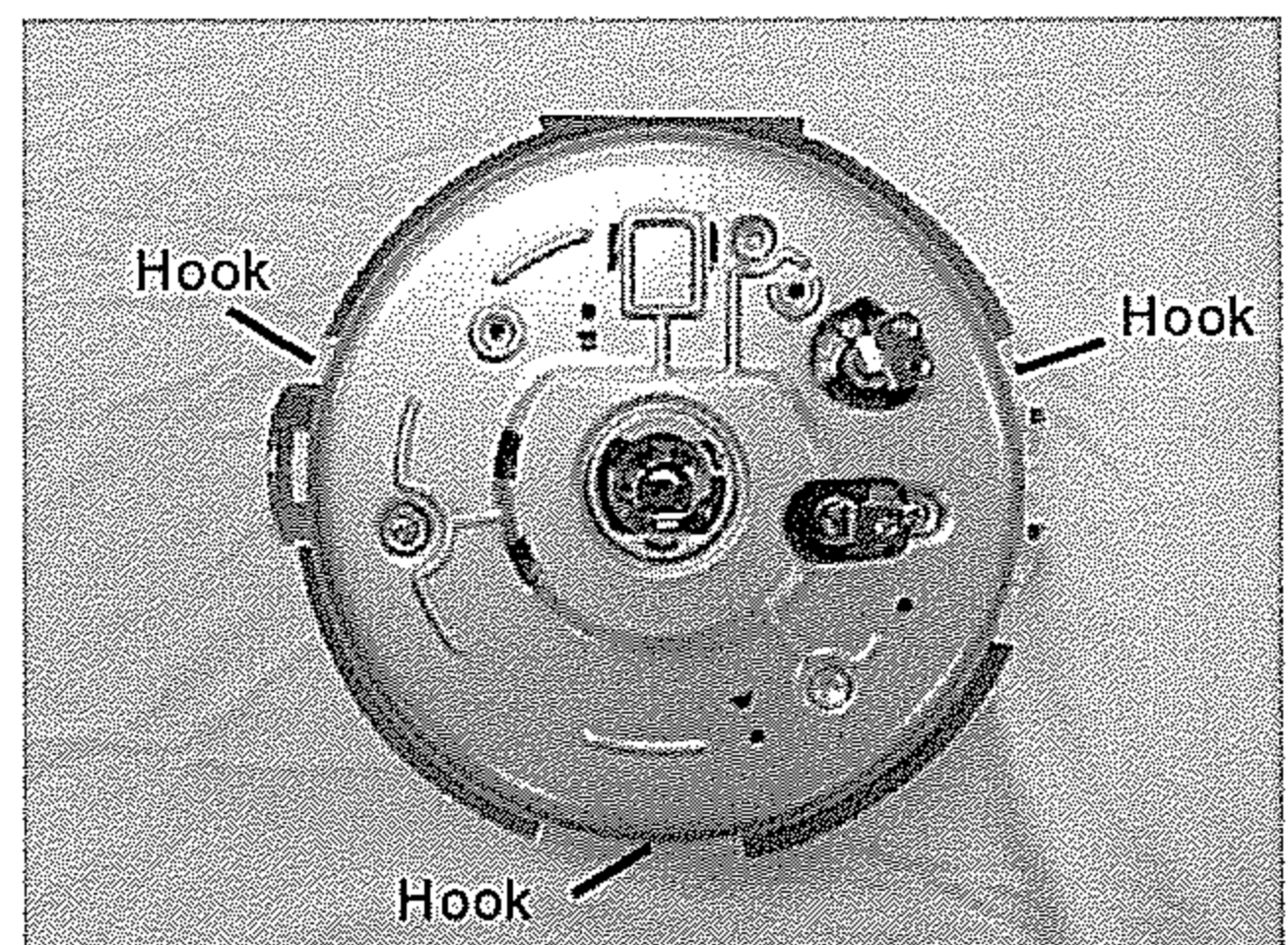
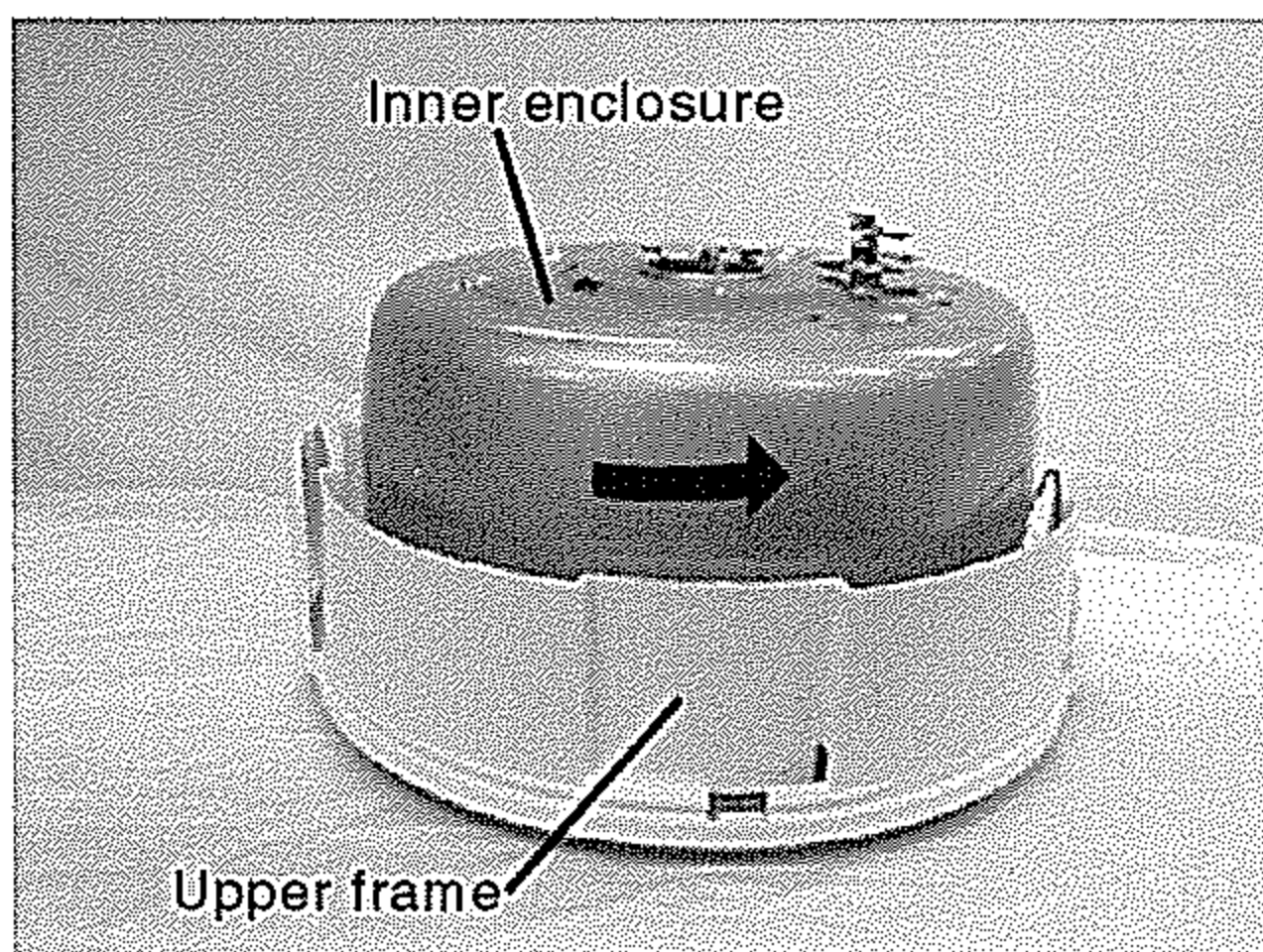
1. Remove the dew collector
2. Remove the hinge cover mounting screws.
3. As show in the figure , insert a narrow flat head screw driver from just below and pry off the hinge cover.

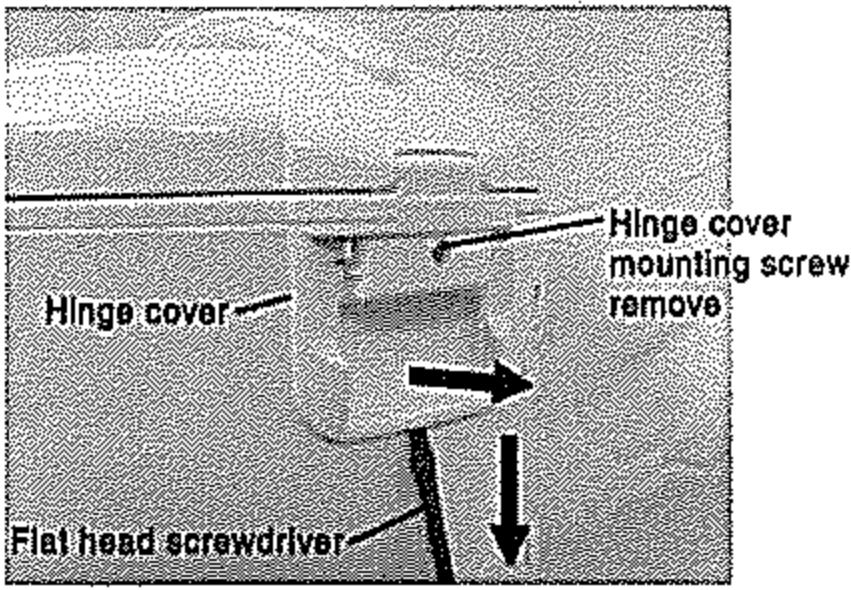
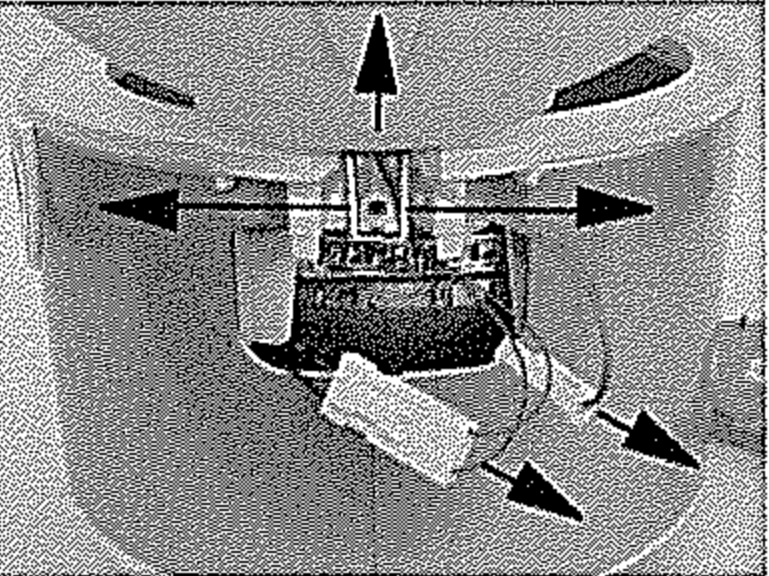
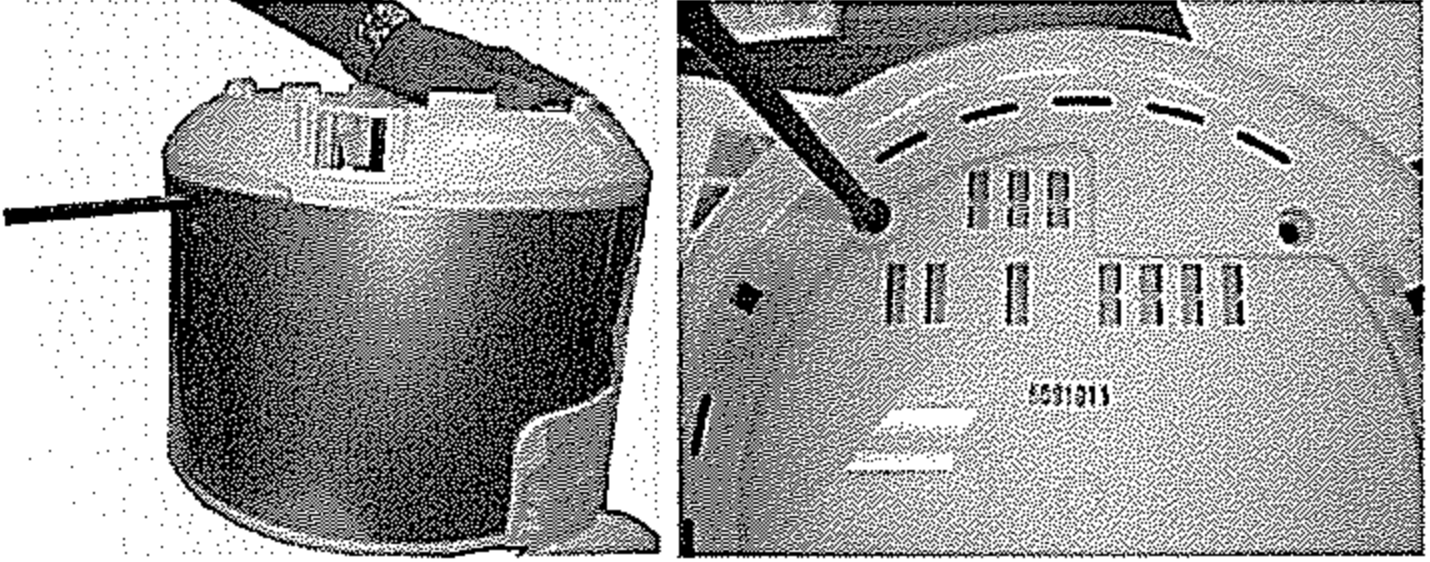
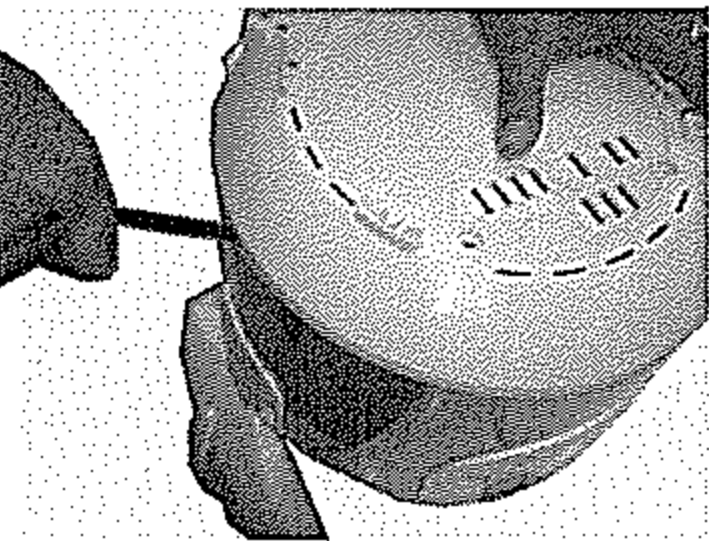
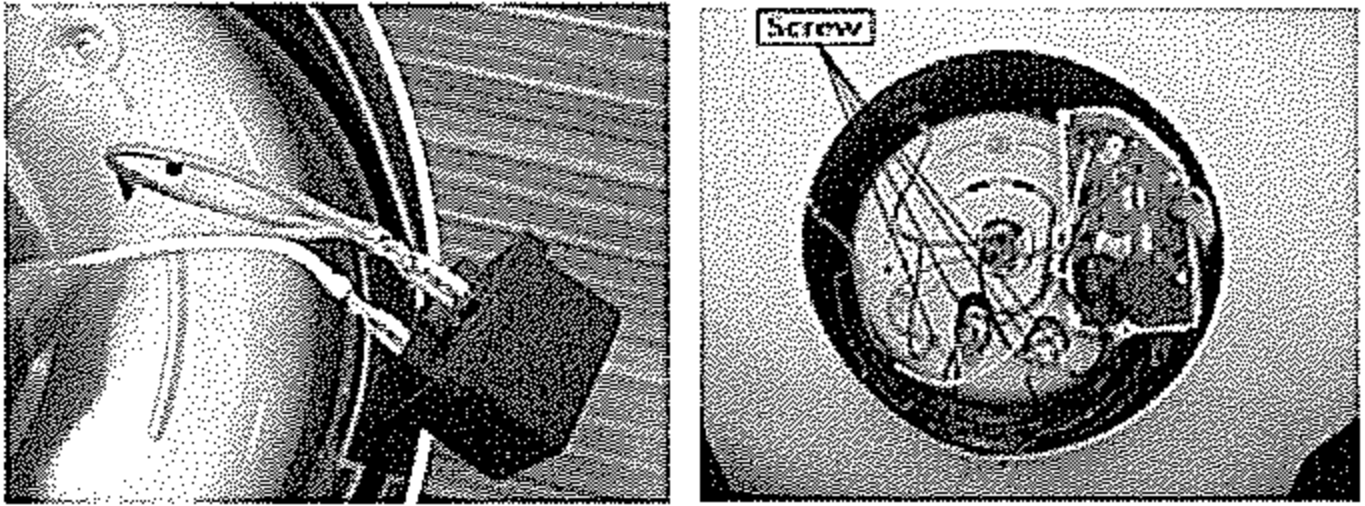
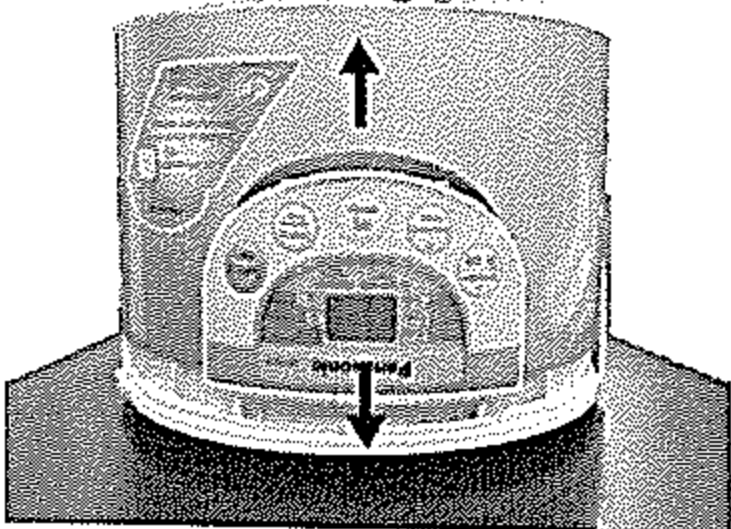


2. Inner Enclosure and Upper Frame removal

1. As show in the figure , pry up three fastening hooks. Fixing the upper frame , turn the inner enclosure in the arrow direction.
2. The upper frame will be seperated from the inner enclosure and the upper frame.

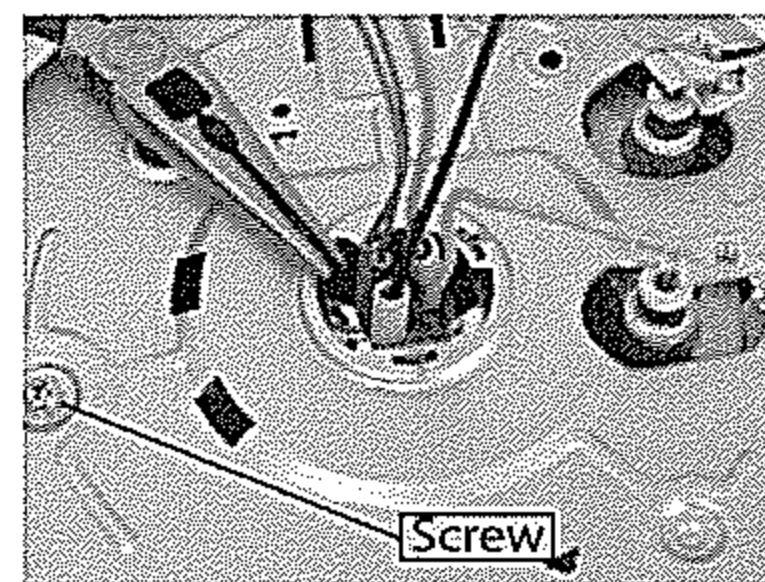
Note When assembling , refer to the illustration without the position relation ship between the inner enclosure and the upper frame.



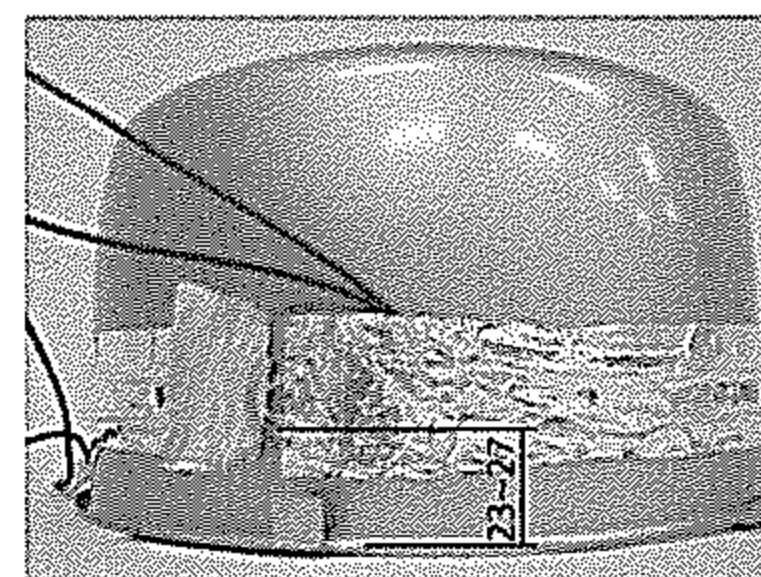
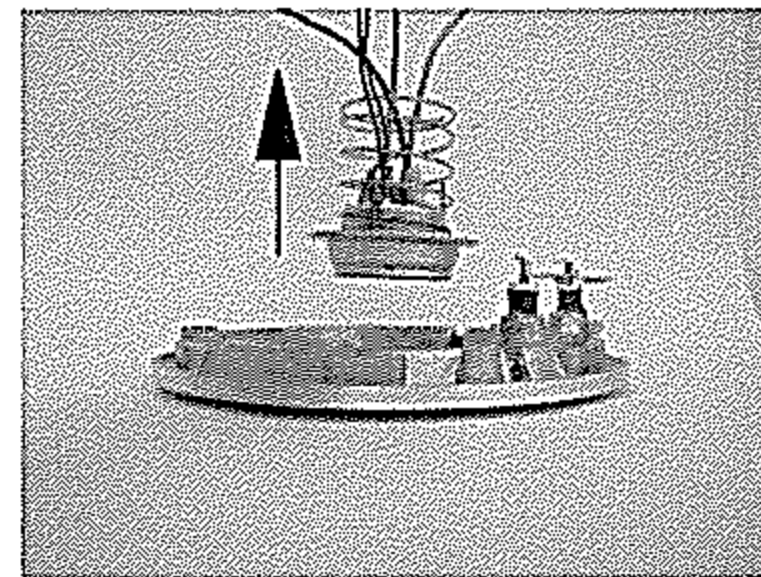
3. How to disassemble control unit. 1. Remove dew collector 2. Loosening the hinge cover screw 3. Taking hinge cover off using minus driver	
4. Remove hinge shaft 5. Disconnect lid sensor and lid heater connector then remove outer lid ass'y in the direction as shown.	
6. Loosening screw for bottom frame fixing. 7. Loosening screw for PCB base fixing.	
8. Taking bottom frame off using minus driver. 9. Remove body from upper frame.	
10. Disconnect all lead wire at inlet. 11. Loosening all wiring screw.	
12. Remove switch ass'y.	

4. How to remove Cast Heater and Thermostat Case Ass'y

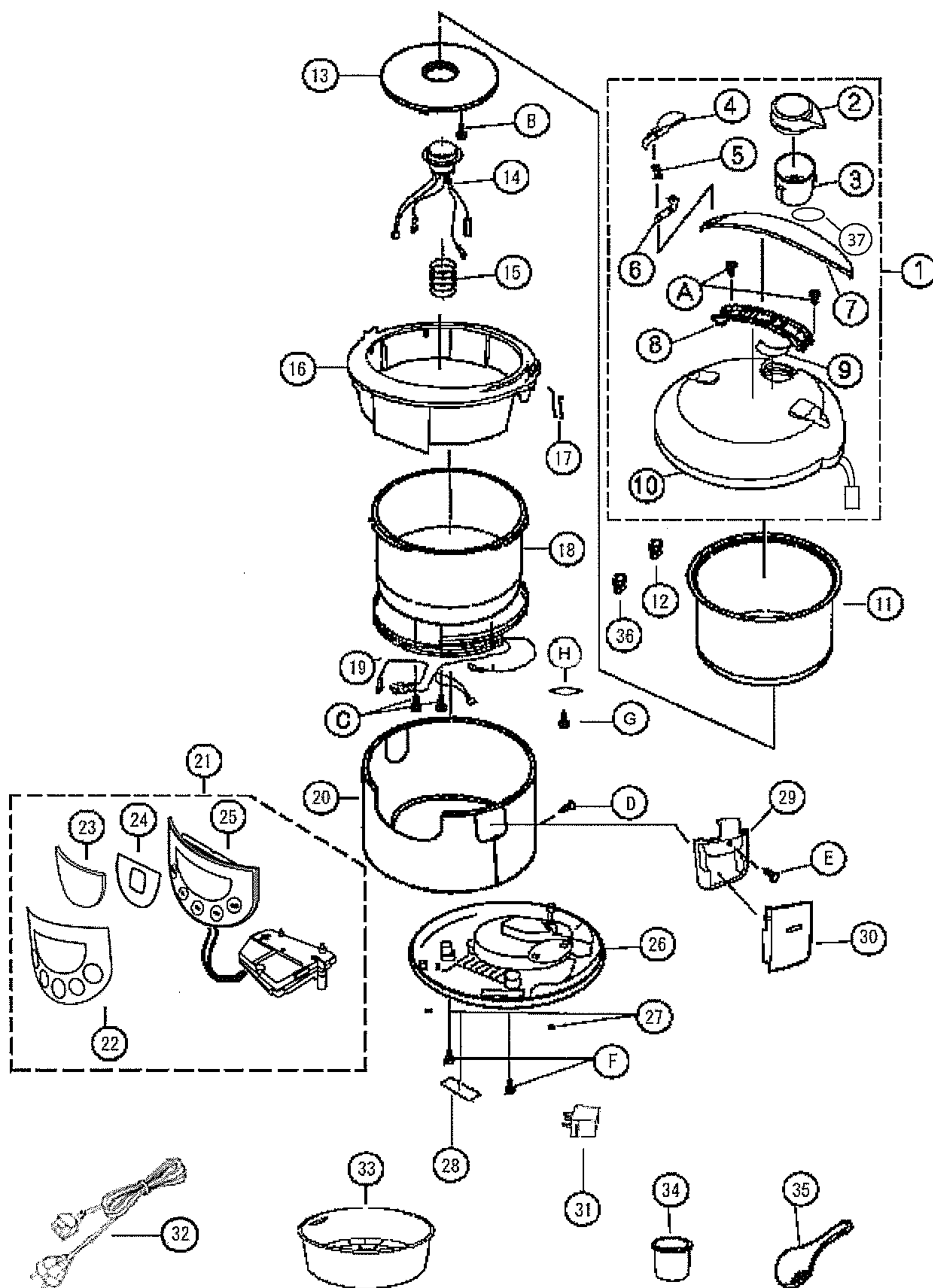
1. Remove cast heater fixing screw
2. Remove thermostat by adjusting its leg as shown in the picture.



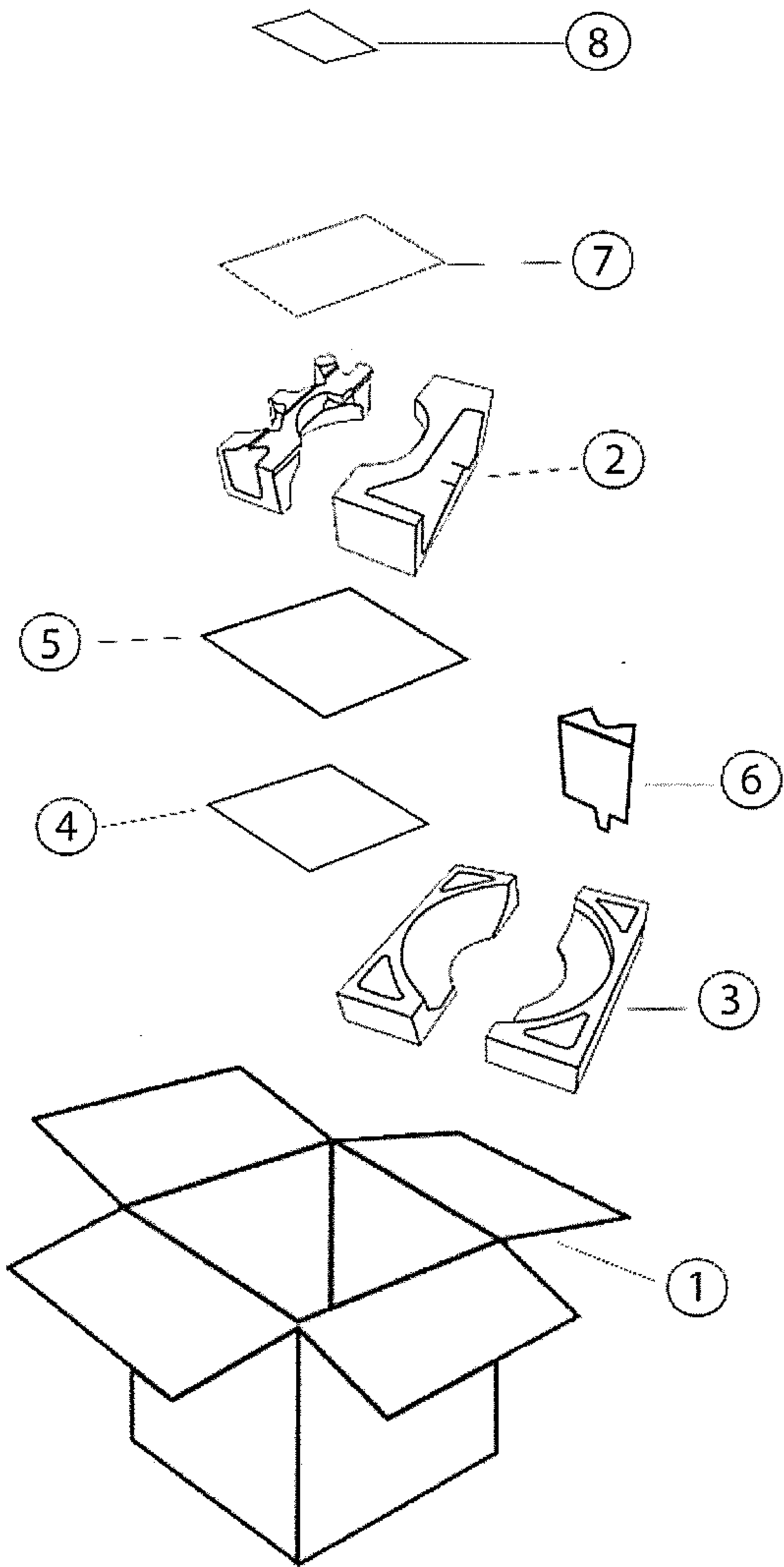
3. Remove thermostat case ass'y in the direction as shown.



Explode view



Explode view



PART LIST

RefNo.	Part Name	Part No.	SR-TMB18	REMARK
1	OUTER LID ASS'Y	ARB01K908W9U	1	
2	STEAM VENT ASS'Y	ARC19H616W9U	1	
3	VALVE HOLDER ASS'Y	ARB79H616W9U	1	
4	HOOK LEVER	ARE05H616-W9	1	
5	HOOK LEVER SPRING	ARE06H616	1	
6	HOOK LEVER BASE	ARC31H616	1	
7	HANDLE COVER	ARB15H616-W9	1	
8	HANDLE	ARB10H616-W9	1	
9	LID CAUTION LABEL	ARB32K908	1	
10	OUTER LID COMPLETE	ARB01T908-WU	1	
11	FLUORO PAN	ARE50H616	1	
12	RECEPTACLE HOUSING	ASLR-06VF	1	for lid heater/lid sensor
13	CAST HEATER ASS'Y	ARL20T908-0U	1	
14	THERMOSTAT CASE ASS'Y	ARS14T908-0U	1	
15	OUTER SPRING	ARS61H616	1	
16	UPPER FRAME	ARE00H616-W9	1	
17	HINGE SHAFT	ARB74H616		
18	PROTECTING FRAME	ARE20H616	1	
19	SIDE HEATER ASS'Y	ARL10T908-0U	1	
20	BODY	ARE10T908Z4U	1	Crystal Silver
21	SWITCH ASS'Y	ARN01H908W9U	1	
22	DECORATIVE PANEL A	ARN21K908-W9	1	
23	ACRYLIC COVER	ARN20T908-C0	1	
24	DECORATIVE PANEL B	ARN24K908-UH	1	
25	SWITCH PANEL ASS'Y	ARN10H908W9U	1	
26	BOTTOM FRAME ASS'Y	ARH30T908-WU	1	
27	FOOT RUBBER	ARH90H663	1	
28	NAME PLATE	ARY30K908-CS	1	
29	HINGE COVER	ARE40H6162W9	1	
30	DEW COLLECTOR	ARK10H616-C0	1	
31	INLET	ARG10T9200U	1	
32	POWER CORD ASS'Y	APN07T514-0U	1	
33	STEAM BASKET	ARK53H616-W9	1	
34	MEASURING CUP	ASR792-454BK	1	
35	SCOOP	ASR79WT281AK	1	
36	PLUG HOUSING	ASLP-01V	1	
37	VALVE PACKING	ARB78H616		

SR-TMB18**Small standardized metal parts**

Ref No.	Part Name	Part No.	SR-TMB18	REMARK
A	TAPPING SCREW	XTB4+10BFJ	2	for handle
B	SEMS SCREW	XYN4+C10FNS	1	for cast heater
C	SEMS SCREW	XYN4+C7FNS	3	for wiring
D	TAPPING SCREW	ASR118-972-W	1	for bottom frame
E	TAPPING SCREW	XTN4+16AVW	1	for hinge cover
F	TAPPING SCREW	XTB4+25CFJ	2	for PCB Base & Bottom Frame
G	TAPPING SCREW	XTN4+8FFU	1	for Body earth lead wire
H	SPRING WASHER	XWA4BPW	1	use with XTN4+8FFU

PACKING SPECIFICATION

Ref No.	Part Name	Part No.	SR-TMB18	REMARK
1	PACKING CASE	ARZ01A909-CS	1	
2	UPPER PAD ASS'Y	ARZ04H616-0U	1	
3	LOWER PAD ASS'Y	ARZ11T920-0U	1	
4	RUST PROOF PAPER	ASR758-344-A	1	
5	POLYETHYLENE SHEET	ASR762T929-K	1	
6	CORD PROTECTOR	ASR761H915-K	1	
7	OPERATING INSTRUCTION	ARZ19A909	1	
8	APPROVAL INFORMATION SHEET	ARZ07K908	1	