

Service Manual

16-Mar-2016

Product information

Fast & powerful crease removal

- Vertical steam
- Steam Pressure: Max 4.3 - 5 bar
- Steam output control
- Continuous Steam up to: 95 - 110 g/min

Easy to use

- Water tank capacity: 1200 ml
- Filling and emptying water: Extra large filling hole
- Refill any time
- Heat-up time: 2 min
- Hose storage: Hose storage compartment
- Cord freedom (swivel): 180 degree cord freedom
- Hose length: 1.6 m
- Power cord length: 1.8 m

Calc management

- Suitable for tap water
- Calc clean solution: Smart Calc Clean
- Calc clean reminder
- Filtered water recommended

Safety Information









- This product meets the requirements regarding interference suppression on radio and TV.
- After the product has been repaired, it should function properly and has to meet the safety requirements and legal regulations as officially laid down at this moment.

Technical information

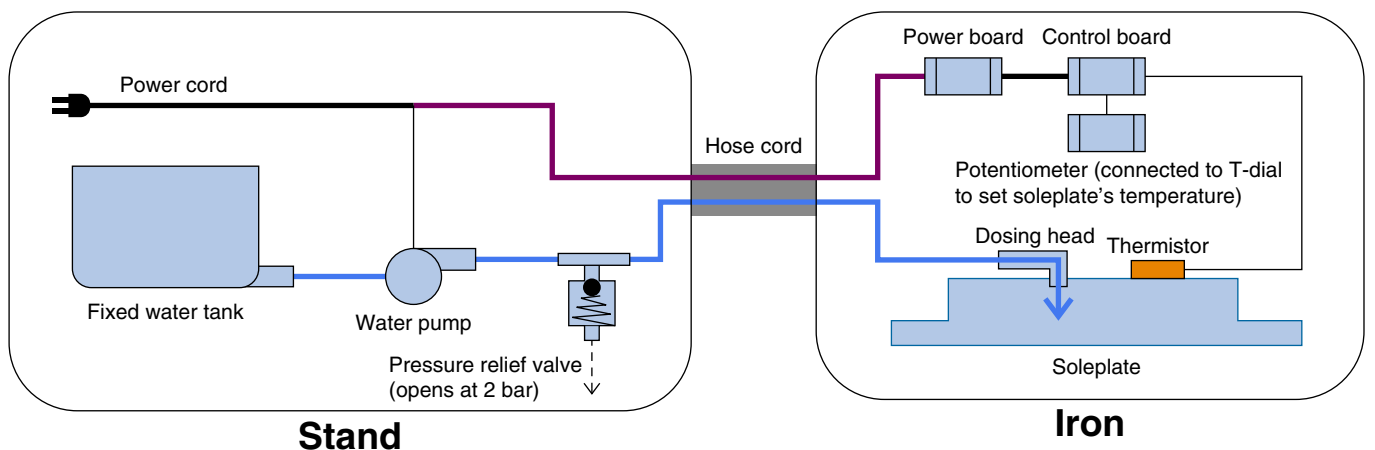
- Voltage : 220 - 240 V
- Frequency : 50 - 60 Hz
- Power : 2400 W
- Product dimensions : 19.8 x 21.7 x 34.6 cm
- Packaging dimensions : 26.4 x 30.3 x 40.4 cm
- Weight of iron : 1.1 kg
- Weight of iron + base : 2.6 kg

Product matrix

GC6603 - GC6636

								
Model Number	GC6603	GC6606	GC6612	GC6616	GC6627	GC6630	GC6635	GC6636
Power	2400 W	2400 W	2400 W	2400 W	2400 W	2400 W	2400 W	2400 W
Heat-up time	2 min	2 min	2 min	2 min	2 min	2 min	2 min	2 min
Steam pressure Max.	4.3 bar	4.4 bar	4.5 bar	4.5 bar	4.8 bar	4.8 bar	5 bar	5 bar
Continuous Steam	95 g/min	95 g/min	100 g/min	100 g/min	110 g/min	110 g/min	110 g/min	110 g/min
Steam boost	No	No	140	160 g	160 g	170 g	170 g	180 g
Soleplate	Ceramic	Ceramic	Ceramic	SteamGlide Ceramic	SteamGlide Ceramic	SteamGlide Ceramic	SteamGlide Ceramic	SteamGlide Ceramic
Calc clean solution	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean	Smart Calc Clean
Verical steam	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Steam output control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Safety auto off	No	No	No	No	Yes	Yes	Yes	Yes
Storage solution	No	No	Carry lock	Carry lock	Carry lock	Carry lock	Carry lock	Carry lock
Water tank	1200 ml	1200 ml	1200 ml	1200 ml	1200 ml	1200 ml	1200 ml	1200 ml
Cord length	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)	1.8 m (IEC)
Hose length	1.6 m	1.6 m	1.6 m	1.6 m	1.6 m	1.6 m	1.6 m	1.6 m
Accessories	Calc Clean container	Calc Clean container	Calc Clean container	Calc Clean container	Calc Clean container	Calc Clean container	Calc Clean container	Calc Clean container

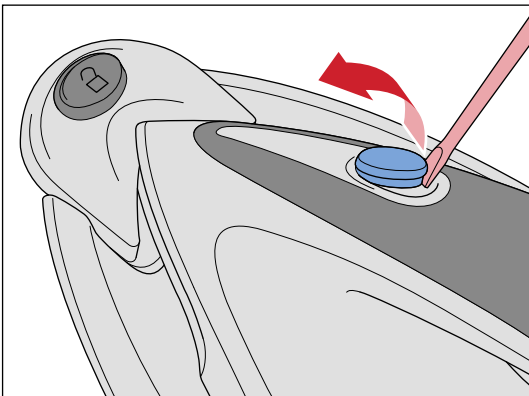
Electrical diagram



- BUTTON 23
- TOP COVER 17
- CORD BUSHING 15
- CONTROL & POWER PCBA 1, 18
- SWITCH HOLE COVER 22
- SPRING 4 21
- STEAM KNOB 2

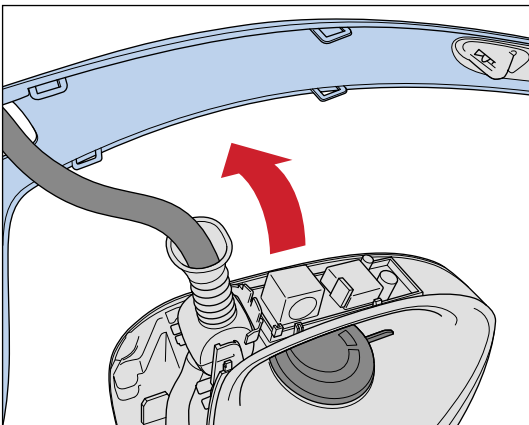
Remove **Screw A1, A2**

Remove **BUTTON 23**

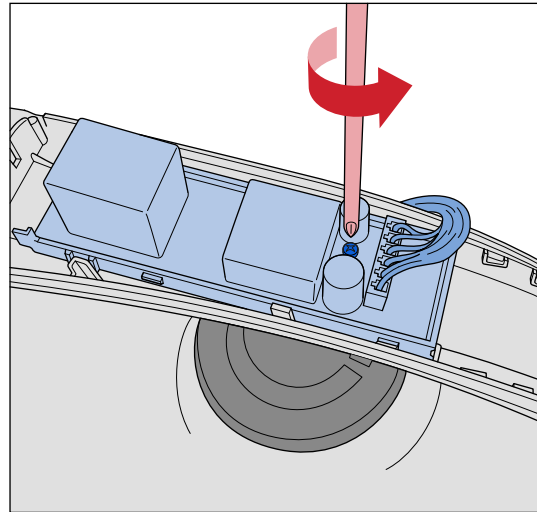


Remove **Screw B1**

Remove **TOP COVER 17**



Remove **Screw C1**



Remove **CORD BUSHING 15**

Remove **CONTROL & POWER PCBA 1,18**

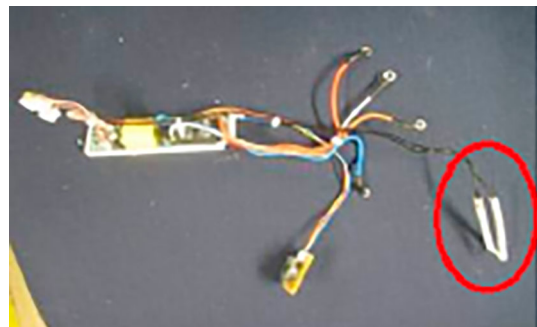
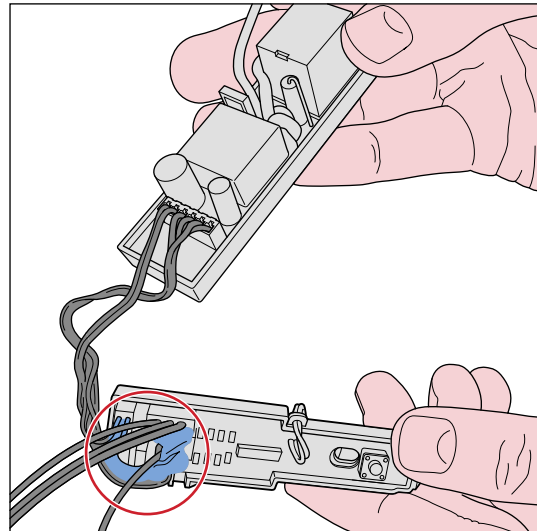


Fig 1: Thermistor is part of the Power PBCA Asm

Remove **SWITCH HOLE COVER 22**

Remove **SPRING 4 21**

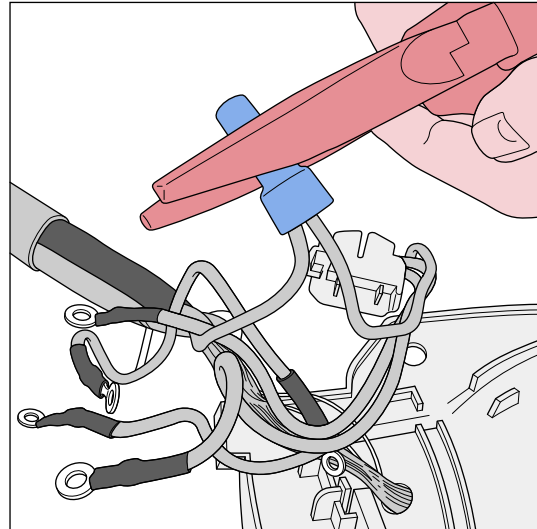
Remove **STEAM KNOB 2**

- DIAL KNOB 16
- CORD CLAMP 19
- HOUSING 3
- POTENTIOMETER BOX 14
- KNOB CYLINDER 4
- KNOB SPRING 5
- STEAM TUBE CONNECTOR 6

- Remove **Screw D1**
- Remove **DIAL KNOB 16**
- Remove **Screw E1, E2**
- Remove **CORD CLAMP 19**
- Remove **HOUSING 3**
- Remove **Screw F1, F2**
- Remove **POTENTIOMETER BOX 14**
- Remove **KNOB CYLINDER 4**
- Remove **KNOB SPRING 5**
- Remove **Potentiometer 501**
- Remove **Dial indicator 502**
- Remove **Screw G1, G2, G3**
- Remove **STEAM TUBE CONNECTOR 6**

- SEAL RING 1 13
- WIRE CONNECTOR 28
- CONNECTION WIRE ASM 24
- BASE 29
- SOLEPLATE ASSY 8

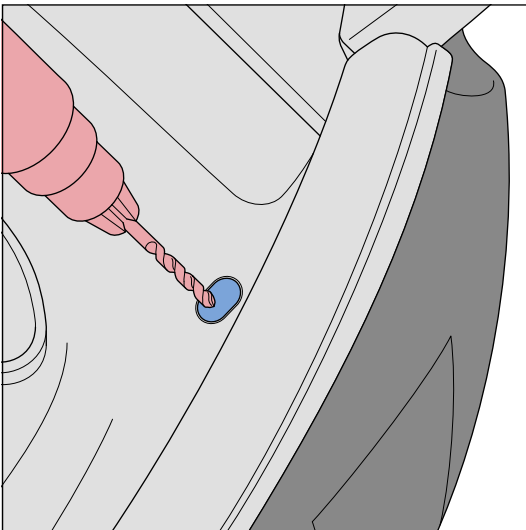
- Remove **SEAL RING 1 13**
- Remove **Screw H1, H2, H3**
- Remove **WIRE CONNECTOR 28**



- Remove **CONNECTION WIRE ASM 24**
- Remove **BASE 29**
- Remove **SOLEPLATE ASSY 8**

SCREW CAP
SILICON CUSHION
INSULATION BASE
LOCK FASTENER 36
RELEASE BUTTON 40
1 SPRING 1 38
BOLT BASE 37
UNIT BASE COVER 58
BOTTOM FOOT 45
WATER TANK ASM 41
UNIT BASE BODY 48

Remove **SCREW CAP**



- Remove **Screws J1, J2**
- Remove **SILICON CUSHION**
- Remove **Screws M7, M8**
- Remove **INSULATION BASE**
- Remove **LOCK FASTENER 36**
- Remove **RELEASE BUTTON 40**
- Remove **1 SPRING 1 38**
- Remove **Screws K1 - K3**
- Remove **BOLT BASE 37**
- Remove **Screws L1 - L7**
- Remove **UNIT BASE COVER 58**
- Remove **BOTTOM FOOT 45**
- Remove **Screws M1 - M6**
- Remove **WATER TANK ASM 41**
- Remove **UNIT BASE BODY 48**

PUMP BRACKET 46, 49
PUMP ASSY 47
CORD CLAMP 50
CORD BOX COVER 57
TERMINAL BLOCK 51
SWITCH ASM 52
POWER CORD ASM 59

- Remove **Screw N1, N2**
- Remove **PUMP BRACKETS 46, 49**
- Remove **PUMP ASSY 47**
- Remove **Screw O1 - O4**
- Remove **CORD CLAMP 50**
- Remove **Screw P1**
- Remove **CORD BOX COVER 57**
- Remove **Screw Q1**
- Remove **TERMINAL BLOCK 51**
- Remove **Screw R1, R2**
- Remove **SWITCH ASM 52**
- Remove **POWER CORD ASM 59**

Pos	Description	GC6603 Service code	GC6606 Service code	GC6612 Service code	GC6616 Service code
1	Control PCB Box	9965 100 73706	9965 100 73706	9965 100 73706	9965 100 73706
1a	Control PCB Assy	9965 100 73699	9965 100 73699	9965 100 73699	9965 100 73699
1b	Control PCB Box	9965 100 70251	9965 100 70251	9965 100 70251	9965 100 70251
2	Steam Knob	9965 100 73681	9965 100 73681	9965 100 73681	9965 100 73681
3	Housing	9965 100 73687	9965 100 73687	9965 100 73687	9965 100 73687
4	Knob Cylinder	9965 100 70238	9965 100 70238	9965 100 70238	9965 100 70238
5	Knob Spring	9965 100 70215	9965 100 70215	9965 100 70215	9965 100 70215
6	Steam Tube Connector	9965 100 70223	9965 100 70223	9965 100 70223	9965 100 70223
7	Thermal Insulation Pad	9965 100 70202	9965 100 70202	9965 100 70202	9965 100 70202
8	Soleplate ASM	9965 100 73682	9965 100 73682	9965 100 73844	9965 100 73844
9	Silicon Fiber Tube	9965 100 70198	9965 100 70198	9965 100 70198	9965 100 70198
10	Throat Clamp	9965 100 70224	9965 100 70224	9965 100 70224	9965 100 70224
11	Bend Connector	9965 100 70246	9965 100 70246	9965 100 70246	9965 100 70246
12	Throat Clip	9965 100 70203	9965 100 70203	9965 100 70203	9965 100 70203
13	Seal Ring 1	9965 100 70237	9965 100 70237	9965 100 70237	9965 100 70237
14	Potentiometer Box	9965 100 70227	9965 100 70227	9965 100 70227	9965 100 70227
15	Cord Bushing	9965 100 73693	9965 100 73693	9965 100 73693	9965 100 73693
16	Dial Knob	9965 100 73683	9965 100 73683	9965 100 73683	9965 100 73683
17	Top Cover + Lamp Cover	9965 100 73701	9965 100 73863	9965 100 73855	9965 100 73858
18	Power PCB ASM + Power PCB	9965 100 73686	9965 100 73686	9965 100 73686	9965 100 73686
19	Cord Clamp	9965 100 70247	9965 100 70247	9965 100 70247	9965 100 70247
20	Silicon Pad	9965 100 70225	9965 100 70225	9965 100 70225	9965 100 70225
21	Spring 4	9965 100 70239	9965 100 70239	9965 100 70239	9965 100 70239
22	Switch Hole Cover	9965 100 70194	9965 100 70194	9965 100 70194	9965 100 70194
23	Button	9965 100 73684	9965 100 73684	9965 100 73684	9965 100 73684
24	Connection Wire ASM	9965 100 73711	9965 100 73861	9965 100 73849	9965 100 73711
25	Iron Base Support	9965 100 70231	9965 100 70231	9965 100 70231	9965 100 70231
26	Bracket	9965 100 73698	9965 100 73698	9965 100 73698	9965 100 73698
27	Fuse Clamp	9965 100 73707	9965 100 73707	9965 100 73707	9965 100 73707
28	Wire Connector	9965 100 70228	9965 100 70228	9965 100 70228	9965 100 70228
29	Base	9965 100 70218	9965 100 70218	9965 100 70218	9965 100 70218
30		N/A	N/A	N/A	N/A
31		N/A	N/A	N/A	N/A
32		N/A	N/A	N/A	N/A
33		N/A	N/A	N/A	N/A
34	Carry Lock ASM	N/A	N/A	9965 100 73843	9965 100 73843
35		N/A	N/A	N/A	N/A
36	Lock Fastener	N/A	N/A	9965 100 70285	9965 100 70285
37	Bolt Base	N/A	N/A	9965 100 70274	9965 100 70274
38	1 Spring 1	N/A	N/A	9965 100 70278	9965 100 70278
39	Spring 3	N/A	N/A	9965 100 73712	9965 100 73712
40	Release Button	N/A	N/A	9965 100 73856	9965 100 73859
41	Water Tank ASM	9965 100 73704	9965 100 73862	9965 100 73854	9965 100 73857
42	Seal Ring	9965 100 73685	9965 100 73685	9965 100 73685	9965 100 73685
43	Water Tube Connector	9965 100 70243	9965 100 70243	9965 100 70243	9965 100 70243
44	Silicon Tube	9965 100 73705	9965 100 73705	9965 100 73705	9965 100 73705

Pos	Description	GC6603 Service code	GC6606 Service code	GC6612 Service code	GC6616 Service code
45	Bottom Foot	9965 100 70206	9965 100 70206	9965 100 70206	9965 100 70206
46	2 Pump Bracket 2	9965 100 70216	9965 100 70216	9965 100 70216	9965 100 70216
47	Pump (JYPC-4)	9965 100 73694	9965 100 73694	9965 100 73694	9965 100 73694
48	Unit Base Body	9965 100 73689	9965 100 73689	9965 100 73689	9965 100 73689
49	1 Pump Bracket 2	9965 100 70248	9965 100 70248	9965 100 70248	9965 100 70248
50	Cord Clamp	9965 100 70205	9965 100 70205	9965 100 70205	9965 100 70205
51	Terminal Block	9965 100 73696	9965 100 73696	9965 100 73696	9965 100 73696
52	Switch ASM	9965 100 73702	9965 100 73702	9965 100 73702	9965 100 73702
53		N/A	N/A	N/A	N/A
54		N/A	N/A	N/A	N/A
55	Safety Valve ASM	9965 100 73695	9965 100 73695	9965 100 73695	9965 100 73695
56	Silicon Tube	9965 100 70219	9965 100 70219	9965 100 70219	9965 100 70219
57	Cord Box Cover	9965 100 70213	9965 100 70213	9965 100 70213	9965 100 70213
58	Unit Base Cover	9965 100 73697	9965 100 73697	9965 100 73697	9965 100 73697
59	Power Cord ASM	9965 100 73703	9965 100 73703	9965 100 73703	9965 100 73703
60	Screw cap	9965 100 70253	9965 100 70253	9965 100 70253	9965 100 70253

Non spare part table

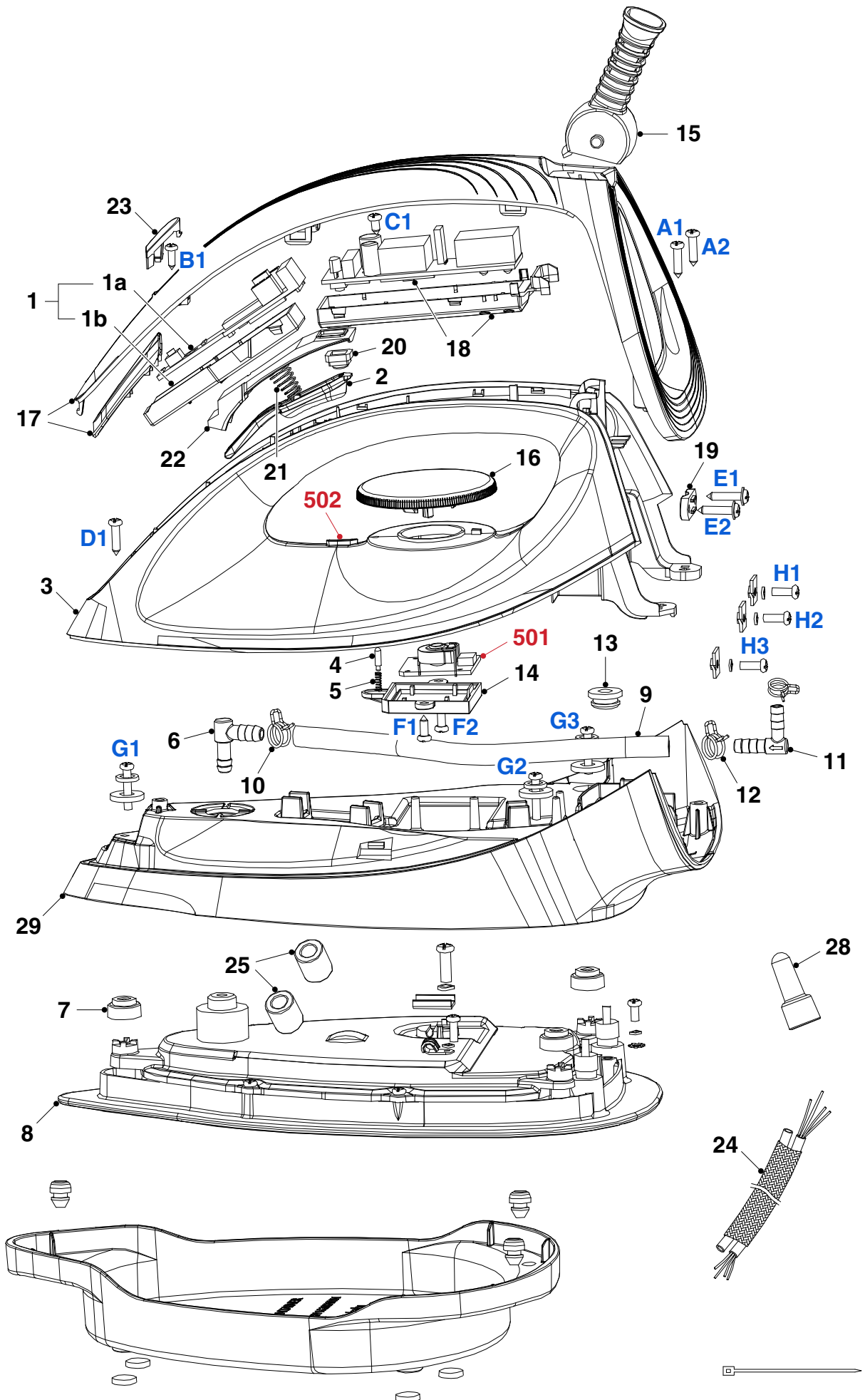
Pos	Description
501	Potentiometer
502	Dial indicator

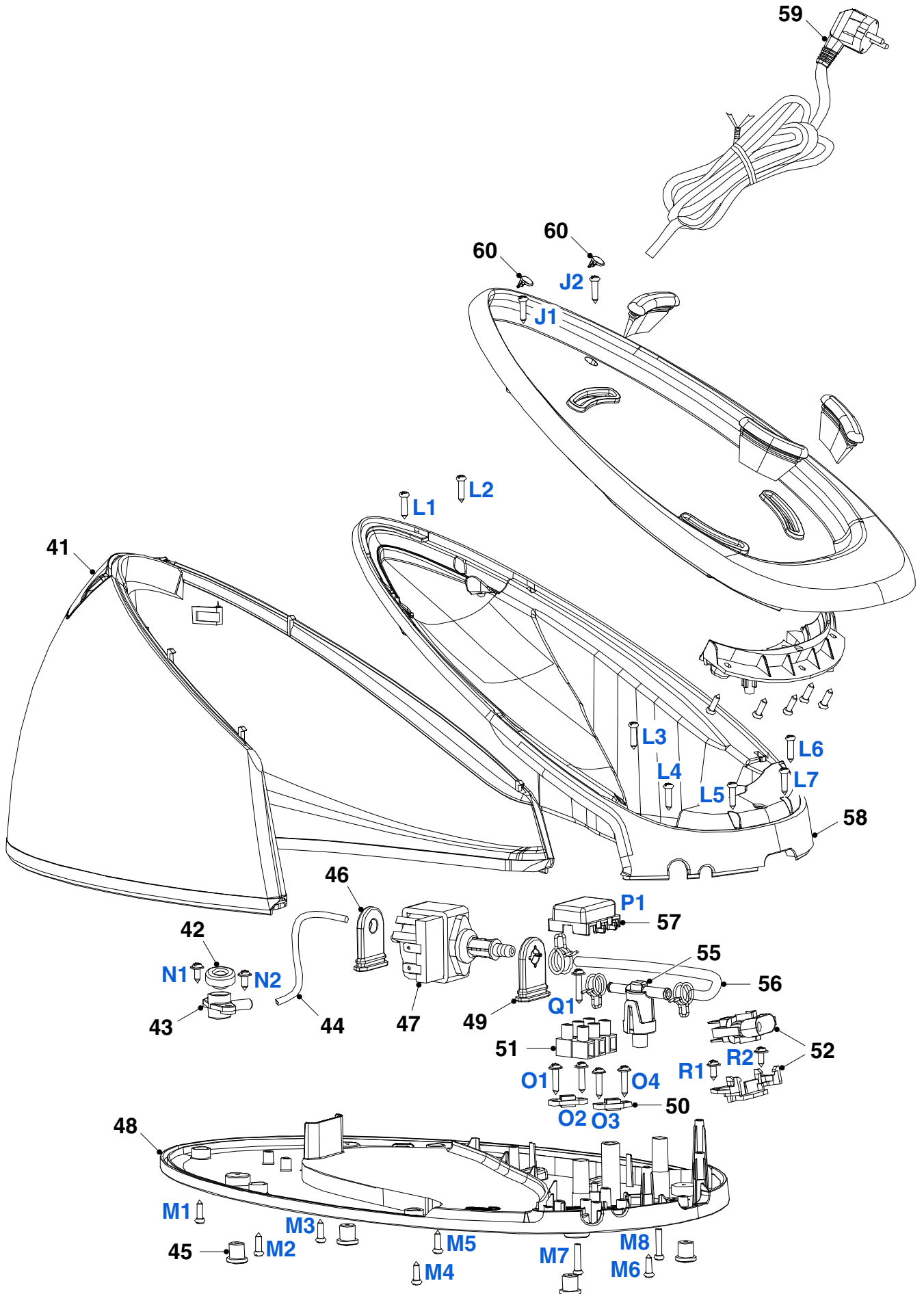
Pos	Description	GC6627 Service code	GC6630 Service code	GC6635 Service code	GC6636 Service code
1	Control PCB Box	9965 100 73706	9965 100 73706	9965 100 73706	9965 100 73706
1a	Control PCB Assy	9965 100 73699	9965 100 73699	9965 100 73699	9965 100 73699
1b	Control PCB Box	9965 100 70251	9965 100 70251	9965 100 70251	9965 100 70251
2	Steam Knob	9965 100 73681	9965 100 73681	9965 100 73681	9965 100 73681
3	Housing	9965 100 73687	9965 100 73687	9965 100 73687	9965 100 73687
4	Knob Cylinder	9965 100 70238	9965 100 70238	9965 100 70238	9965 100 70238
5	Knob Spring	9965 100 70215	9965 100 70215	9965 100 70215	9965 100 70215
6	Steam Tube Connector	9965 100 70223	9965 100 70223	9965 100 70223	9965 100 70223
7	Thermal Insulation Pad	9965 100 70202	9965 100 70202	9965 100 70202	9965 100 70202
8	Soleplate ASM	9965 100 73844	9965 100 73844	9965 100 73844	9965 100 73844
9	Silicon Fiber Tube	9965 100 70198	9965 100 70198	9965 100 70198	9965 100 70198
10	Threat Clamp	9965 100 70224	9965 100 70224	9965 100 70224	9965 100 70224
11	Bend Connector	9965 100 70246	9965 100 70246	9965 100 70246	9965 100 70246
12	Throat Clip	9965 100 70203	9965 100 70203	9965 100 70203	9965 100 70203
13	Seal Ring 1	9965 100 70237	9965 100 70237	9965 100 70237	9965 100 70237
14	Potentiometer Box	9965 100 70227	9965 100 70227	9965 100 70227	9965 100 70227
15	Cord Bushing	9965 100 73693	9965 100 73693	9965 100 73693	9965 100 73693
16	Dial Knob	9965 100 73683	9965 100 73683	9965 100 73683	9965 100 73683
17	Top Cover + Lamp Cover	9965 100 73851	9965 100 73848	9965 100 73928	9965 100 73928
18	Power PCB ASM + Power PCB	9965 100 73686	9965 100 73686	9965 100 73686	9965 100 73686
19	Cord Clamp	9965 100 70247	9965 100 70247	9965 100 70247	9965 100 70247
20	Silicon Pad	9965 100 70225	9965 100 70225	9965 100 70225	9965 100 70225
21	Spring 4	9965 100 70239	9965 100 70239	9965 100 70239	9965 100 70239
22	Switch Hole Cover	9965 100 70194	9965 100 70194	9965 100 70194	9965 100 70194
23	Button	9965 100 73684	9965 100 73684	9965 100 73684	9965 100 73684
24	Connection Wire ASM	9965 100 73849	9965 100 73846	9965 100 73861	9965 100 73861
25	Iron Base Support	9965 100 70231	9965 100 70231	9965 100 70231	9965 100 70231
26	Bracket	9965 100 73698	9965 100 73698	9965 100 73698	9965 100 73698
27	Fuse Clamp	9965 100 73707	9965 100 73707	9965 100 73707	9965 100 73707
28	Wire Connector	9965 100 70228	9965 100 70228	9965 100 70228	9965 100 70228
29	Base	9965 100 70218	9965 100 70218	9965 100 70218	9965 100 70218
30		N/A	N/A	N/A	N/A
31		N/A	N/A	N/A	N/A
32		N/A	N/A	N/A	N/A
33		N/A	N/A	N/A	N/A
34	Carry Lock ASM	9965 100 73843	9965 100 73843	9965 100 73843	9965 100 73843
35		N/A	N/A	N/A	N/A
36	Lock Fastener	9965 100 70285	9965 100 70285	9965 100 70285	9965 100 70285
37	Bolt Base	9965 100 70274	9965 100 70274	9965 100 70274	9965 100 70274
38	1 Spring 1	9965 100 70278	9965 100 70278	9965 100 70278	9965 100 70278
39	Spring 3	9965 100 73712	9965 100 73712	9965 100 73712	9965 100 73712
40	Release Button	9965 100 73853	9965 100 73845	9965 100 73927	9965 100 73927
41	Water Tank ASM	9965 100 73852	9965 100 73847	9965 100 73926	9965 100 73926
42	Seal Ring	9965 100 73685	9965 100 73685	9965 100 73685	9965 100 73685
43	Water Tube Connector	9965 100 70243	9965 100 70243	9965 100 70243	9965 100 70243
44	Silicon Tube	9965 100 73705	9965 100 73705	9965 100 73705	9965 100 73705

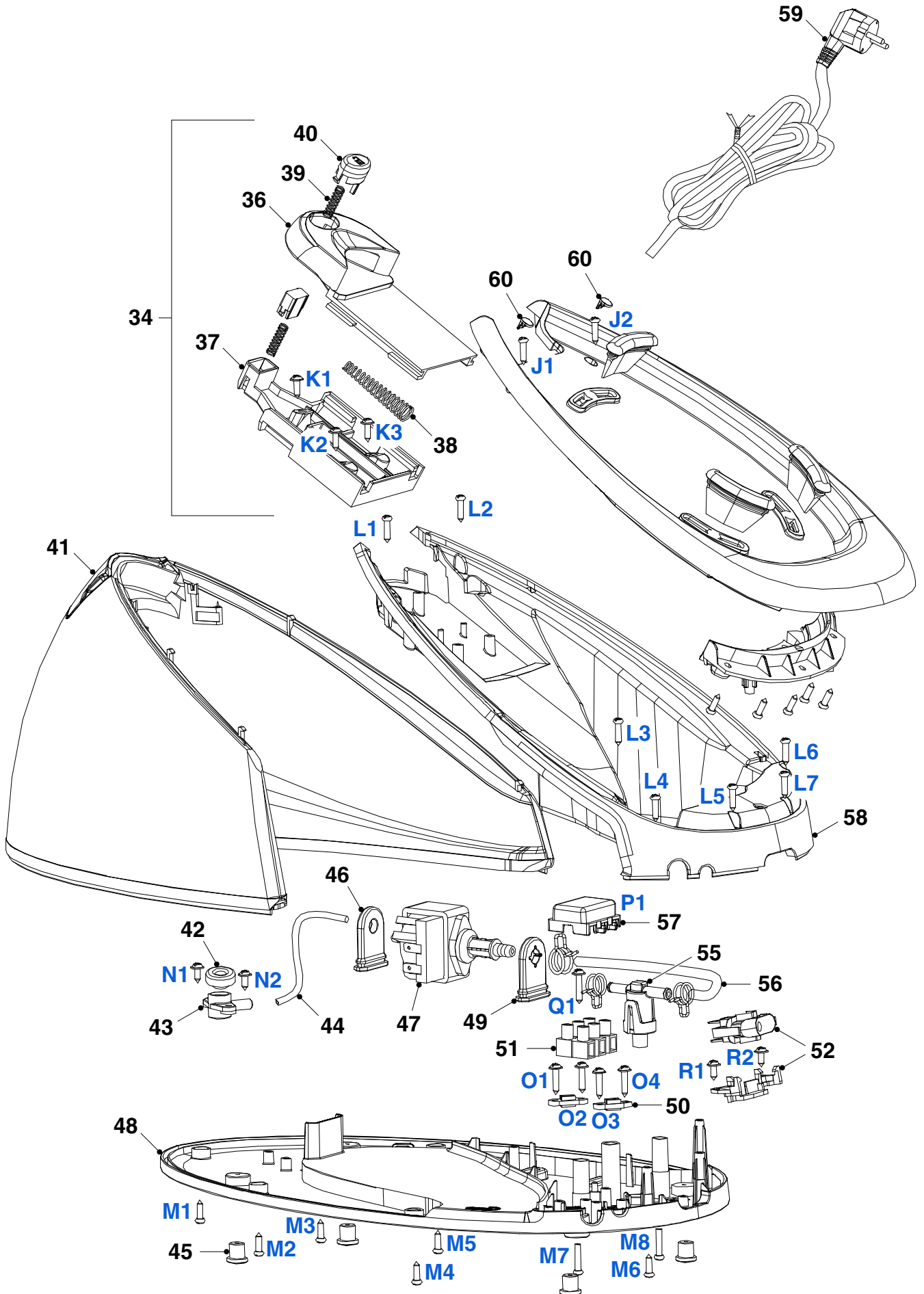
Pos	Description	GC6627 Service code	GC6630 Service code	GC6635 Service code	GC6636 Service code
45	Bottom Foot	9965 100 70206	9965 100 70206	9965 100 70206	9965 100 70206
46	2 Pump Bracket 2	9965 100 70216	9965 100 70216	9965 100 70216	9965 100 70216
47	Pump (JYPC-4)	9965 100 73694	9965 100 73694	9965 100 73694	9965 100 73694
48	Unit Base Body	9965 100 73689	9965 100 73689	9965 100 73689	9965 100 73689
49	1 Pump Bracket 2	9965 100 70248	9965 100 70248	9965 100 70248	9965 100 70248
50	Cord Clamp	9965 100 70205	9965 100 70205	9965 100 70205	9965 100 70205
51	Terminal Block	9965 100 73696	9965 100 73696	9965 100 73696	9965 100 73696
52	Switch ASM	9965 100 73702	9965 100 73702	9965 100 73702	9965 100 73702
53		N/A	N/A	N/A	N/A
54		N/A	N/A	N/A	N/A
55	Safety Valve ASM	9965 100 73695	9965 100 73695	9965 100 73695	9965 100 73695
56	Silicon Tube	9965 100 70219	9965 100 70219	9965 100 70219	9965 100 70219
57	Cord Box Cover	9965 100 70213	9965 100 70213	9965 100 70213	9965 100 70213
58	Unit Base Cover	9965 100 73697	9965 100 73697	9965 100 73697	9965 100 73697
59	Power Cord ASM	9965 100 73703	9965 100 73703	9965 100 73703	9965 100 73703
60	Screw cap	9965 100 70253	9965 100 70253	9965 100 70253	9965 100 70253

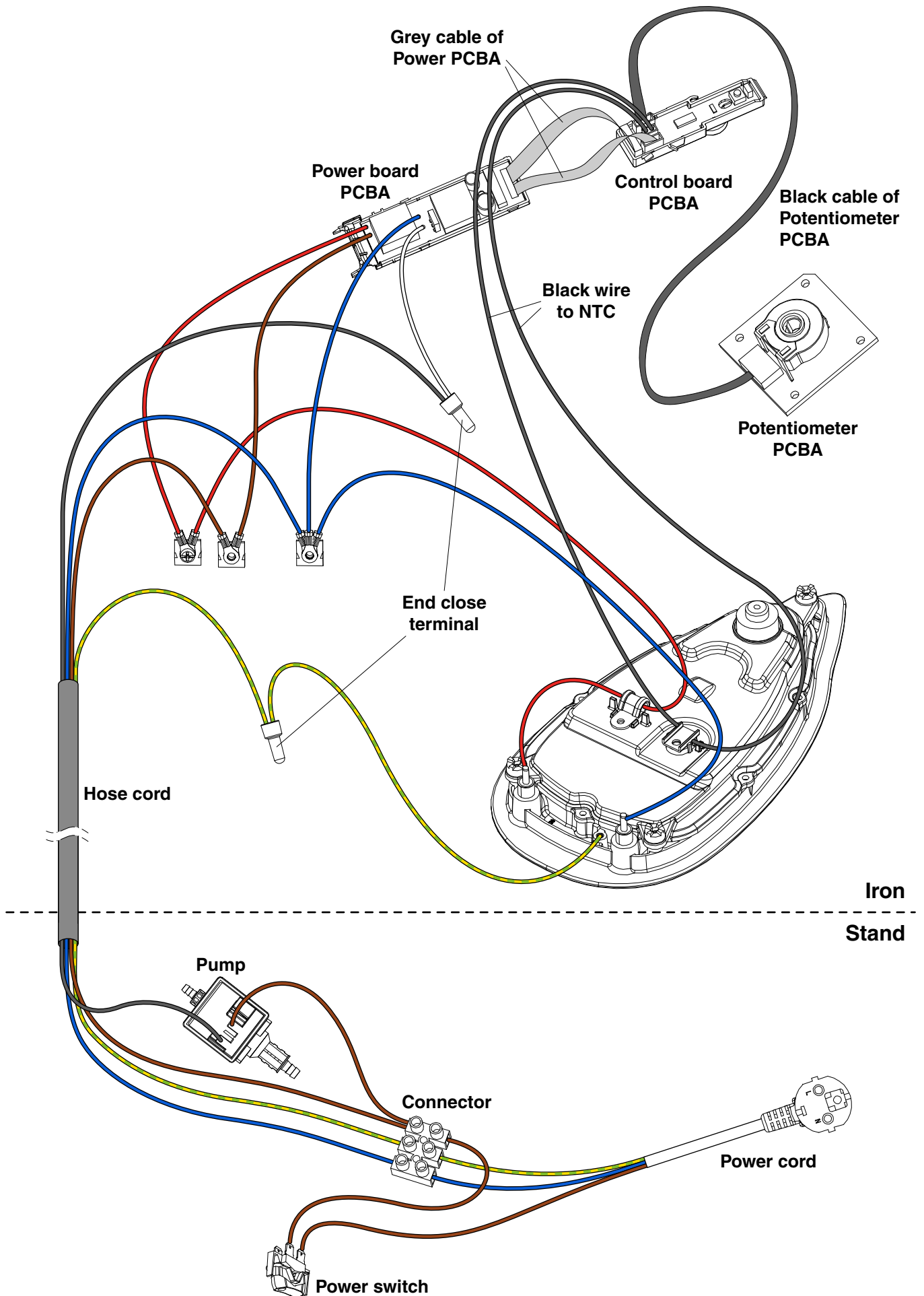
Non spare part table

Pos	Description
501	Potentiometer
502	Dial indicator









Note: Color of lines represent actual color of wires

“Calc Clean” LED light blinking & Buzzing Sound Alarming

Conduct a Calc Clean to reset the SW. The Alarm function will auto activate after every 120 min of steam usage to inform user to maintain the Iron Symptom & Cure: SDA_110589

End

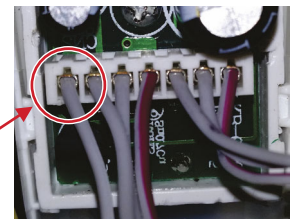
No Steam (1)

Check Blue LED

No, LED Light

Yes, Blue LED light On (End)

Check the Power board Output supply to Control Board. (that is Located on the extreme Left)
Supply = 5V



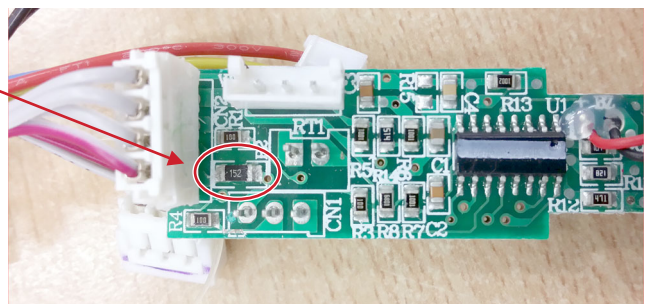
Yes

No

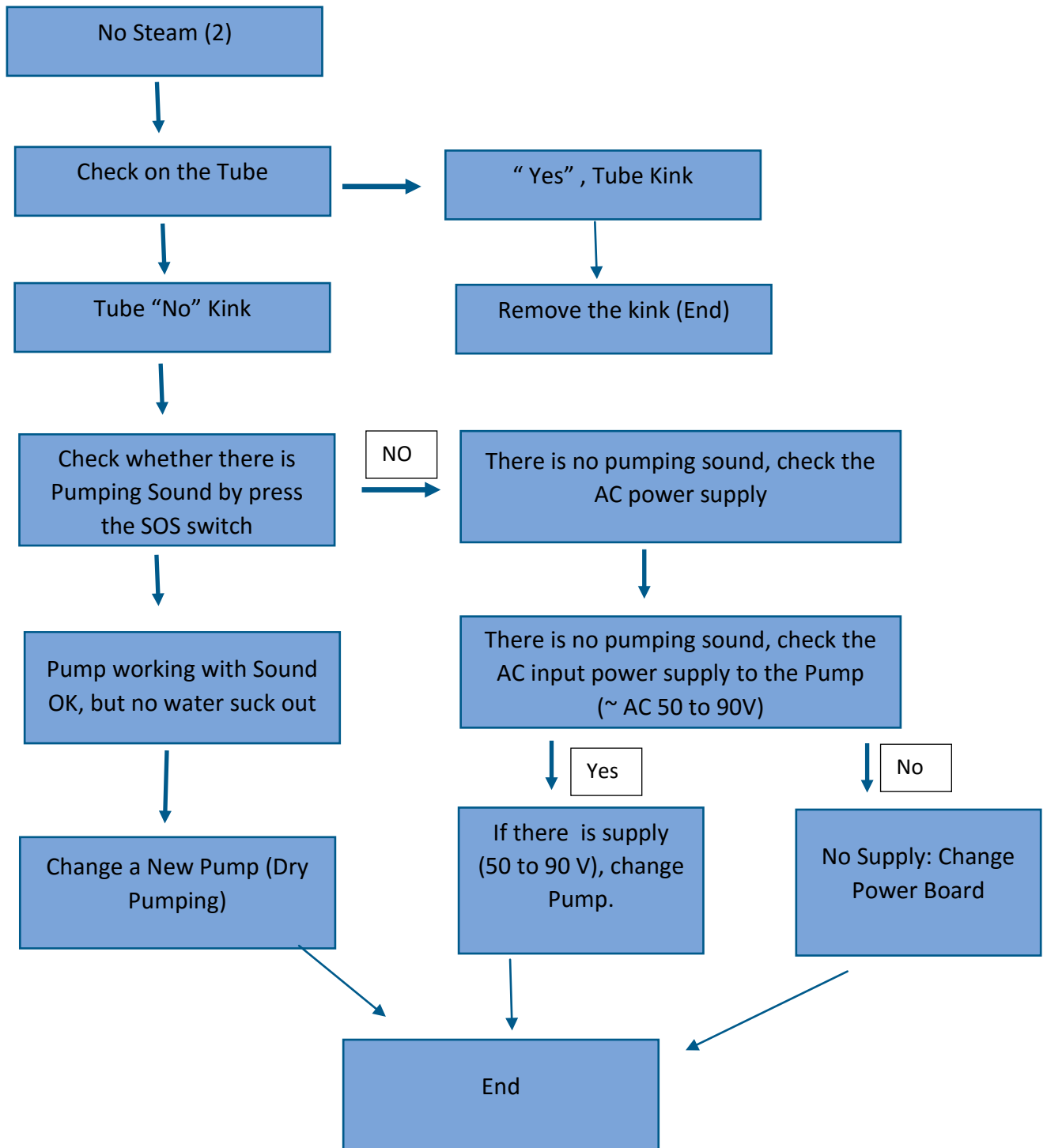
Yes, there is Power (5V). Change **Control Box** (End)

No Power, change “Power PCB Assy” (End)

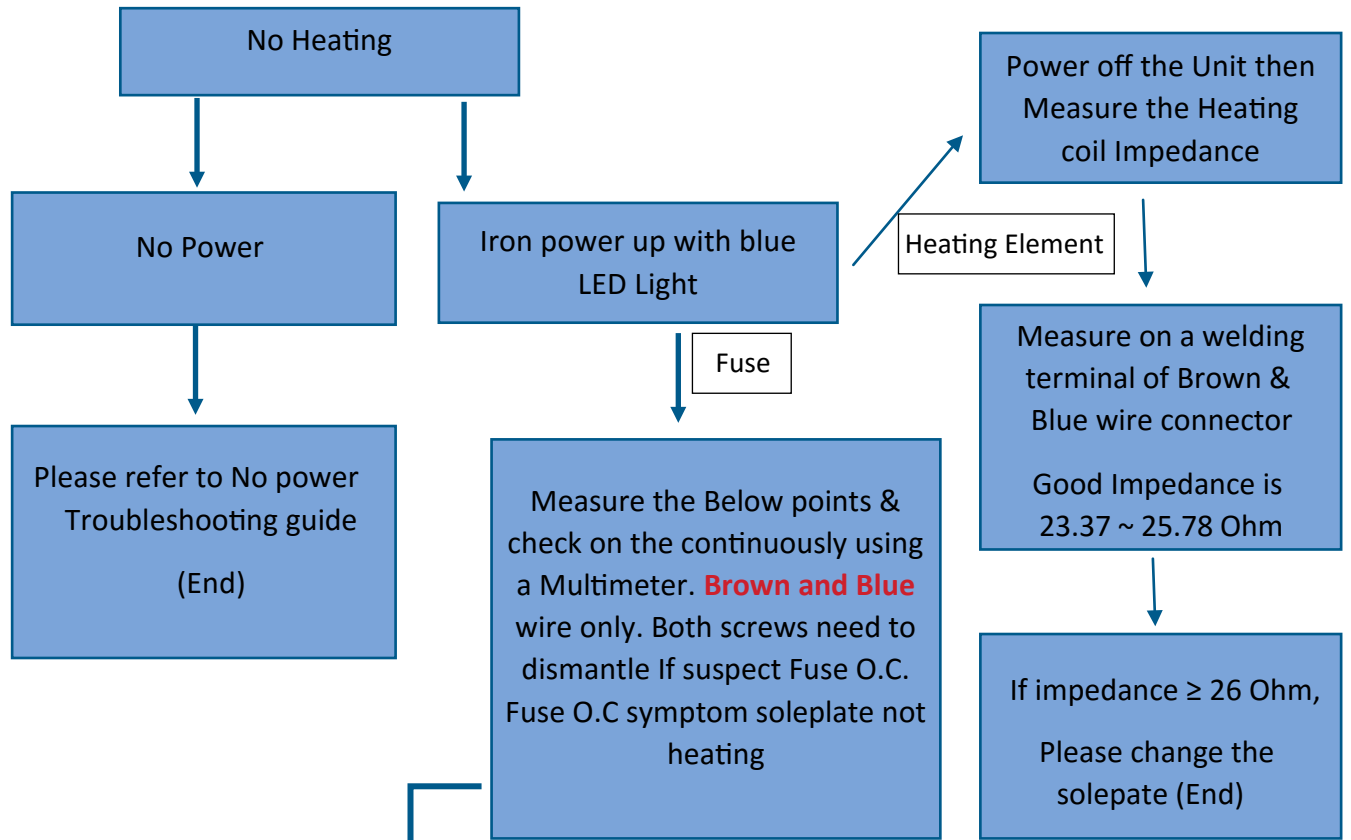
• **Cure:**
>Measure R2 resistance on the control PCB ASSY
Good Resistor is ~ 1.48 K Ohms
Bad Resistance is > 2.8 K to 15 K Ohm



End

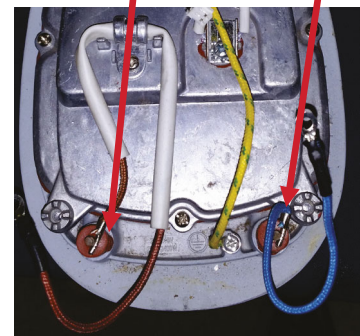
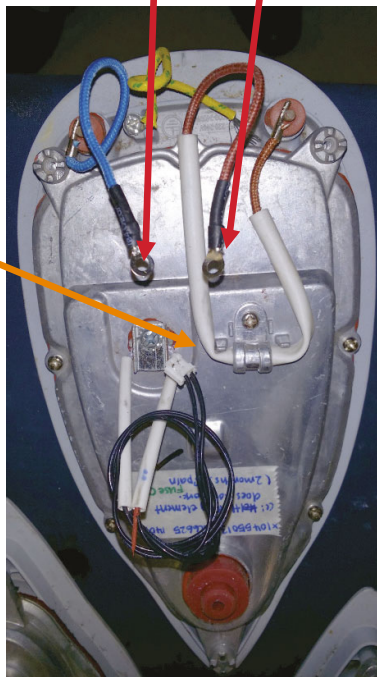


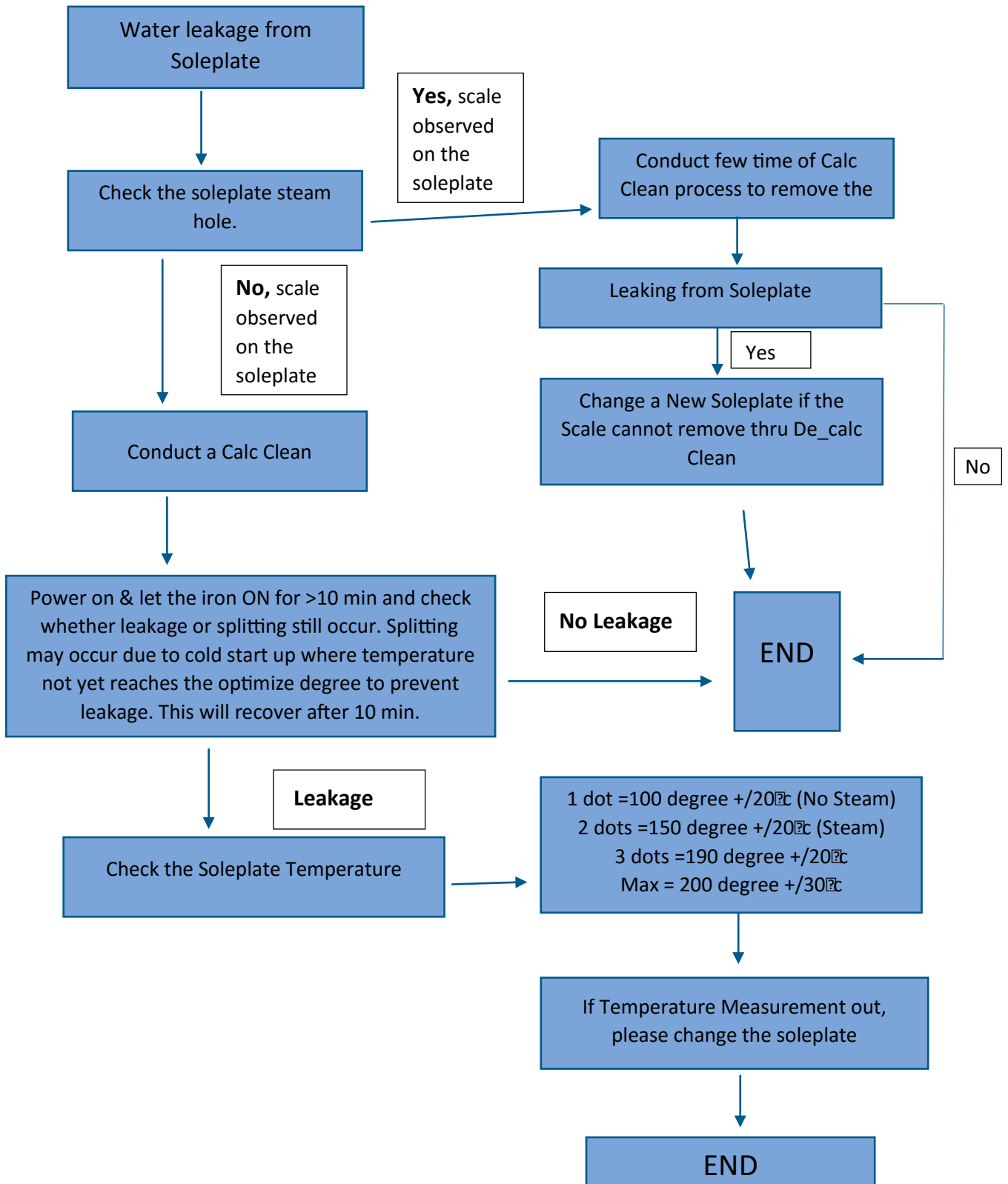
Type	Power consumption	Impedance
EC1739	240 V - 2400 W (+3/-7%)	23.37 ~ 25.73 Ohm
EC1739A	230 V - 2200 W (+3/-7%)	23.42 ~ 25.78 Ohm

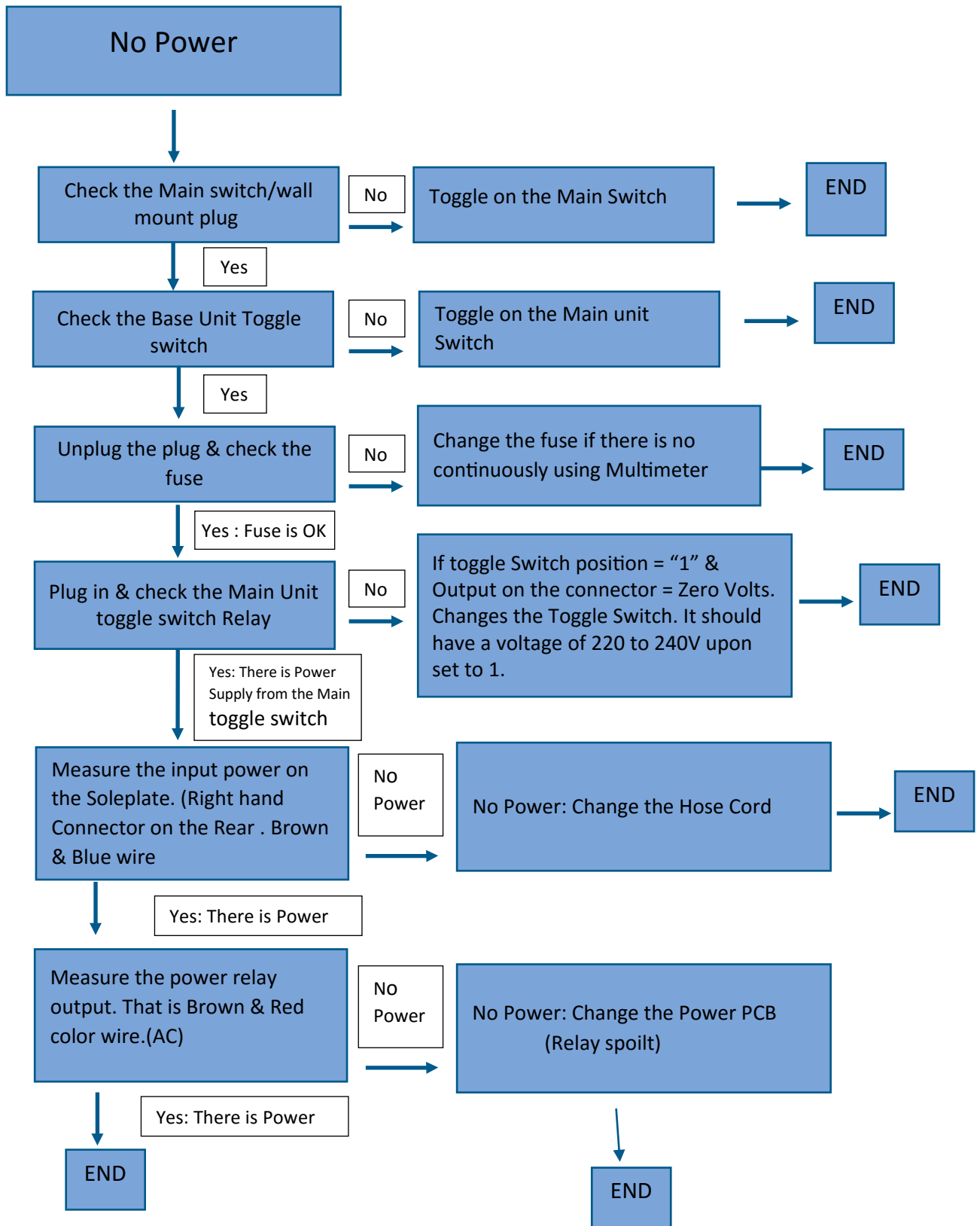


If Fuse Open circuit, change the soleplate (End)

Thermal Fuse



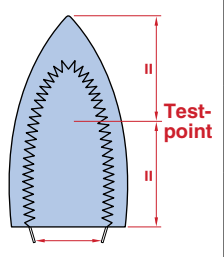




- Due to the high wattage of the iron, only the specified cord set must be used.
- Should damage be observed on the **POWER CORD ASM 59**, it must be replaced.
- Continued usage is not allowed.
- If **UNIT BASE BODY 48** is provided without type plate information eg. Type number, voltage etc. When replacing the cover, engrave the type number & voltage on the type plate with a sharp object.
- After the product has been repaired, it should function properly and has to meet the safety requirements & legal regulation as laid down & officially established at this moment.
- The following tests are common checks that are conducted on a repaired product before it is returned to the consumer.

1. Soleplate temperature

Check the soleplate temperature is within IEC requirement.

Soleplate temperature (Deg C)		Materials, for example	
Minimum	Maximum		
170	230	All fabric types	

2. Leakage current

Check that leakage current is within IEC requirement.

Measure leakage current between LIVE/NEUTRAL & EARTH.

IEC requirement is that at 230 V supply, the EARTH leakage current must be less than 0.75 mA.

3. Water leakage / Functionality

Check that there is no water leakage from any part of product during operation.

Check that the functionality of the product (product dependent) eg. Steaming, steam trigger, variable steam, SOS, PCBA etc is working properly.

4. Loose part

Check that there are no loose parts eg. Extra screws in the product that can cause short-circuit or product malfunctions.

5. Fuse open circuit

When replacing fuse, to also service the water tubes which is probably choked with calc.

6. PCBAs ESD control

All failed PCBAs including to be packed with ESD bags for shipment.

7. Screws

Screws should be the defined screws in terms of length and material used.

The torque of the thermistor-soleplate screw is 9 - 12 kg f.cm.

8. Self-Check mode

8.1. Introduction of Self-Check mode

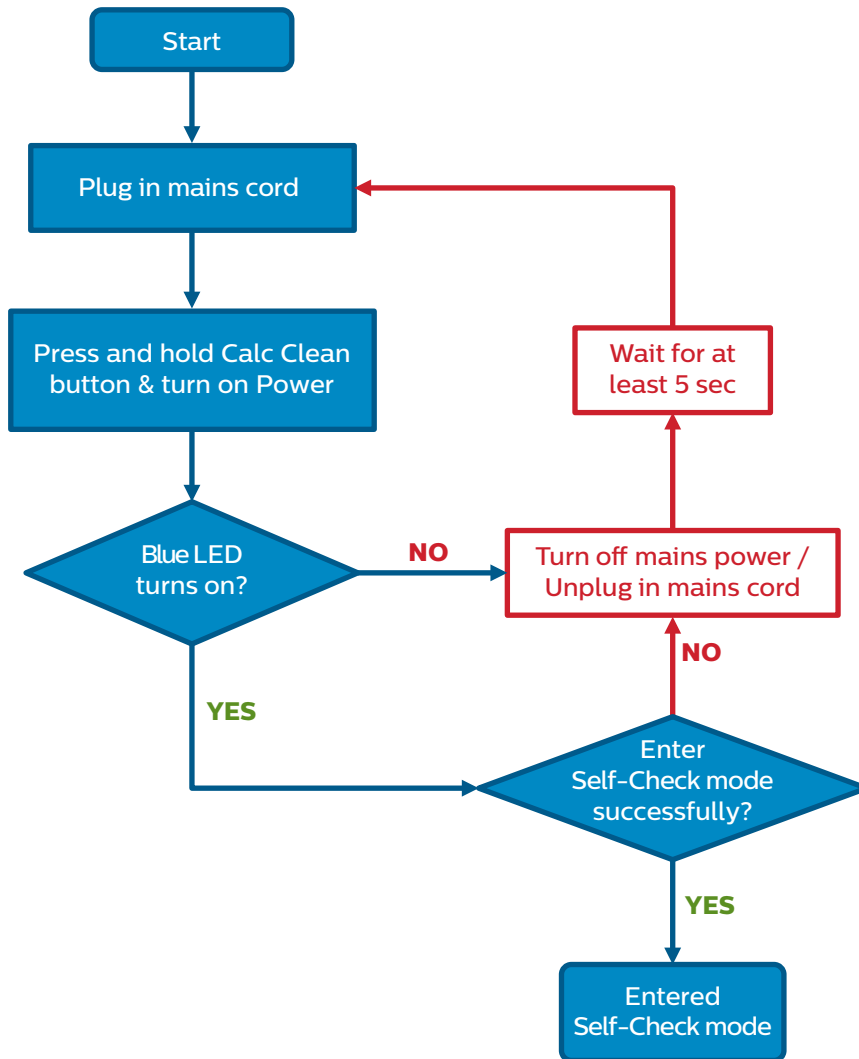
Self-Check mode is **NOT** an exhaustive diagnosis, but a quick preliminary check on all the hardware function.

Further test and troubleshooting may still be required by Service Center to identify the root cause.

8.2. Before start Self-Check mode, please do the following checking

1. Make sure Soleplate is cold (<100 °C)
2. Water tank with water above min mark

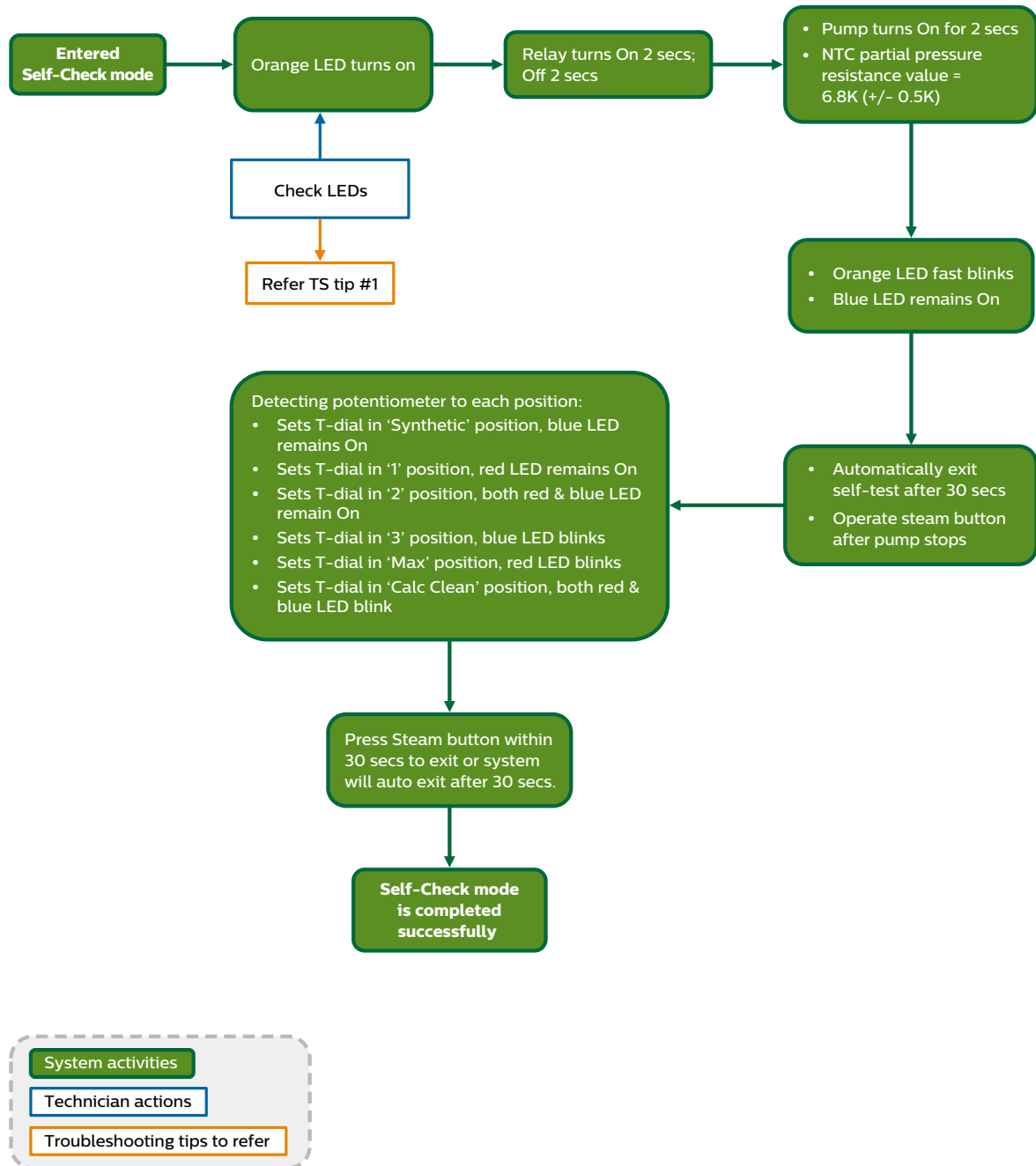
8.3. Enter Self-Check mode Process Flow Chart



If fail to enter Self-Check mode, could be due to:

- 1. No power to PCBA
- 2. Buttons malfunction
- 3. Zero crossing circuit malfunction

8.4. Perform Self-Check mode Process Flow Chart



8.5. Troubleshooting Tips

- | | |
|--|-----------|
| <ol style="list-style-type: none"> 1. LEDs do not light up as specified, fault should be on PCBA; 2. Zero cross circuit malfunction, fault should be on PCBA; 3. No heat up/Power in 2s relay, fault could be ON PCBA or heater, fuse; 4. No pumping sound, fault should be on pump, or PCBA; 5. T-dial checking LED do not light up as specified, fault should be on potentiometer PCBA; | TS tip #1 |
|--|-----------|

Version 1 - Updated on Oct 2015

- Corrected the labelling in exploded view
- Removed the duplicated steps in dismantle steps
- Added in picture view of critical steps under dismantle steps
- Indicated the non spare part with table in part list page
- Indicated the non spare part location with numbering in exploded view
- Corrected the screw labelling in exploded view
- Highlighted critical component with zoom in picture in exploded view
- Added in troubleshooting guide
- Added in Self-Check mode

Version 2 - Updated on Feb 2016

- On page 16 added table at the top of the page and changed impedance in the Flow chart to 23.37 ~ 25.78 Ohm.

Version 3 - Updated on Mar 2016

- On page 16 changed text: If impedance greater than 25 ohm into If impedance \geq 26 Ohm.

Version 4 - Updated on Mar 2016

- Added in position 60, 9965 100 70253 screw cap in part list.