GC9220





Philips Consumer Lifestyle

ServiceManual

PRODUCT INFORMATION

Fast & powerful crease removal

- Soleplate: SteamGlide
- OptimalTemp
- Continiuous steam output: 120 g/min
- Steam boost: 230 g/min
- Vertical steam
- Steam pressure: Up to 5 bar
- Steam tip
- Power: 2400 W

Easy to use

- Water tank capacity: 1500 ml
- Filling and emptying water: Detachable water tank Extra large opening door
- Refill any time
- Heat-up time: 2 min
- Hose storage: Hose storage compartment
- Cord storage: Cord storage compartment
- Power cord lenght: 1.8 m
- Cord freedom (swivel): 180 degree cord freedom
- Hose length: 1.7 m
- Safe for all fabrics: Even for delicates like silks

Calc management

- Suitable for tap water
- Calc clean solution: Easy De-calc
- Calc clean reminder

EMF & Service Information

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

TECHNICAL INFORMATION

Voltage : 220 - 240 V Frequency : 50 - 60 Hz Power - Iron : 800 W at 230 V - Boiler : 1370 W at 230 V

Dimension (F-box) : 491 mm x 305 mm x 335 mm

(Depth x Width x Height)

Weight : Weight of iron: 1.2 kg

Weight of iron + base: 5 kg

Optimal Temp technology

- Delivers always perfect combination of steam and temperature
- 100% easy to use, no adjustment required
- 100% safe on all ironable garments
- 100% effective on all fabrics, no other iron is faster
- Tested and approved by independent textile experts



Always the perfect setting thanks to:

- 1 Cylonic steam chamber
- 2 Advanced Smart control processor

Easy De-calc

Easy De-calc cap allows hassle free & effective scale removal to extend the life of the steam generator.

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Subject to modification



DISASSEMBLY ADVICE - IRON

BACKPLATE ASSY 16

SOS KNOB 13

INLAY MOLDED 17

MICRO-SWITCH ASSY 12

HOSE CORD MOUNTED
ASSY SOS 15

HOUSING & LENS ASSY PRINTED 9

LIGHT GUIDE ASSY 10

COVER MOLDED SOS 8

DEVIATOR ASSY 3

SOLEPLATE MOUNTED
ASSY I

Remove Screw A

Disassemble BACKPLATE SCREW PLATE 21

Remove Screws B1, B2

Disassemble BACKPLATE ASSY 16

Remove Screws C1, C2
Remove Cord clamp

Disassemble SOS KNOB COVER 18

Tip for disassembling SOS KNOB COVER 18:

Carefully insert a sharp object into the gap at the side & slowly lift up the part

Disassemble SOS KNOB 13

Remove Screw D

Disassemble INLAY MOLDED 17

Remove Screw E

Disassemble MICRO-SWITCH ASSY 12

Remove Screw F

Disassemble HOUSING & LENS ASSY PRINTED 9

Remove Screws G1, G2

Disassemble LIGHT GUIDE ASSY 10

Remove Screws H1 - H3

Disassemble COVER MOLDED SOS 8

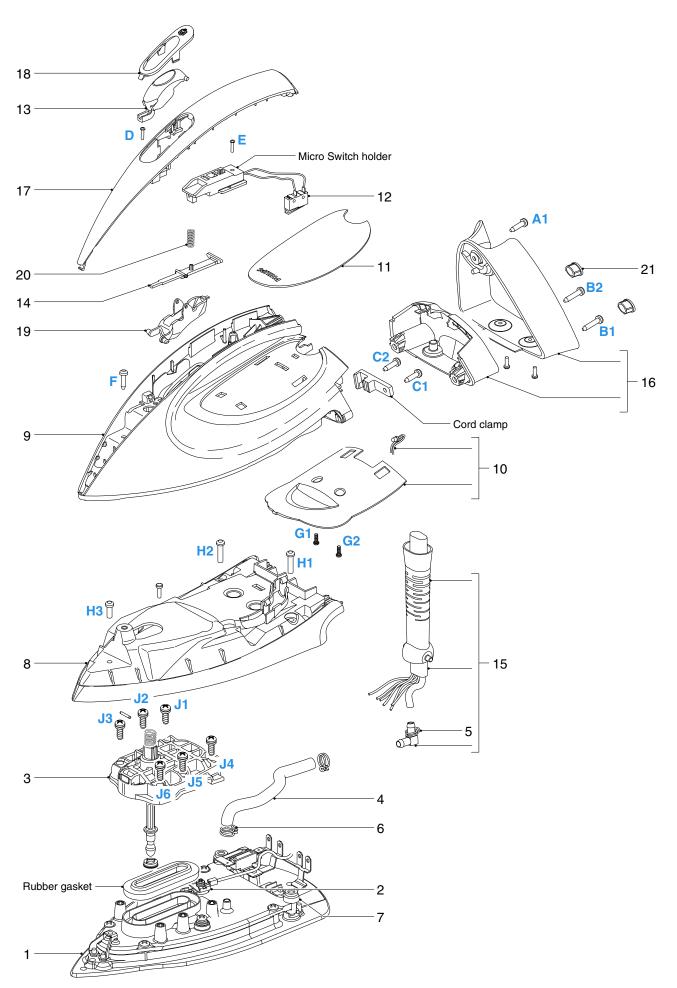
Remove Screws J1 - J6

Disassemble DEVIATOR ASSY 3

PARTS LIST - IRON GC9220

Pos	Service code	Description	
1	4239 021 61371	Soleplate mounted assy 230 V / 800 W	
2	4239 021 61471	Thermistor assy Iron	
3	4239 021 61523	Deviator assy	
4	4239 015 59151	Braided rubber hose iron	
5	4239 010 11991	Hose clip (ID=8.7)	
6	4239 010 10281	Hose clip-Braided rubber hose	
7	4239 015 70153	Ryton ring	
8	4239 026 44621	Cover molded SOS	
9	4239 021 65741	Housing & Lens assy printed	
10	4239 021 61771	Light Guide assy	
11	4239 021 64361	Deco_Plate & top Cover assy printed	
12	4239 021 61561	Micro-switch assy	
13	4239 021 65531	SOS knob sprayed painted	
14	4239 026 42481	SOS lever molded	
15	4239 021 63482	Hose cord mounted assy SOS	
16	4239 021 63491	Backplate assy	
17	4239 026 44651	Inlay molded	
18	4239 026 42521	SOS knob cover	
19	4239 026 42531	Trigger molded	
20	4239 014 54961	Trigger spring	
21	4239 026 42551	Backplate screw cap	

EXPLODED VIEW - IRON GC9220



WATER TANK PRINTED
ASSY 58

TRAY MOLDED 53

DISPLAY COVER PRINTED
ASSY 50

STAND TOP MOLDED 45

POWER CORD STORAGE MOLDED 42

HOSE CORD STORAGE COMPARTMENT ASSY 43

RINSE CAP ASSY 56

RINSE HOUSING PRINTED 39

BOILER ASSY 36

BUTTON PANEL ASSY 51

POWER BOARD PCB ASSY 60

Remove WATER TANK PRINTED ASSY 58

Remove TRAY RUBBER CAP 54

Remove Screws K1, K2

Disassemble TRAY MOLDED 53

Remove Screws L1 - L4
Remove Screw M

Remove Screws N1 - N4

Disassemble DISPLAY COVER PRINTED ASSY 50

Remove Screws P1 – P3

Disassemble STAND TOP MOLDED 45

Remove Screws Q1, Q2

Disassemble POWER CORD STORAGE MOLDED 42
Disassemble HOSE CORD STORAGE COMPARTMENT

ASSY 43

Remove RINSE CAP ASSY 56

Remove Screws R1, R2

Disassemble RINSE HOUSING PRINTED 39

Remove Screws S1, S2, S3

Disassemble BOILER SUPPORT BRACKET MOLDED 41

Disassemble BOILER ASSY 36
Remove Screws T1, T2

Disassemble BUTTON PANEL ASSY 51

Remove Screw U

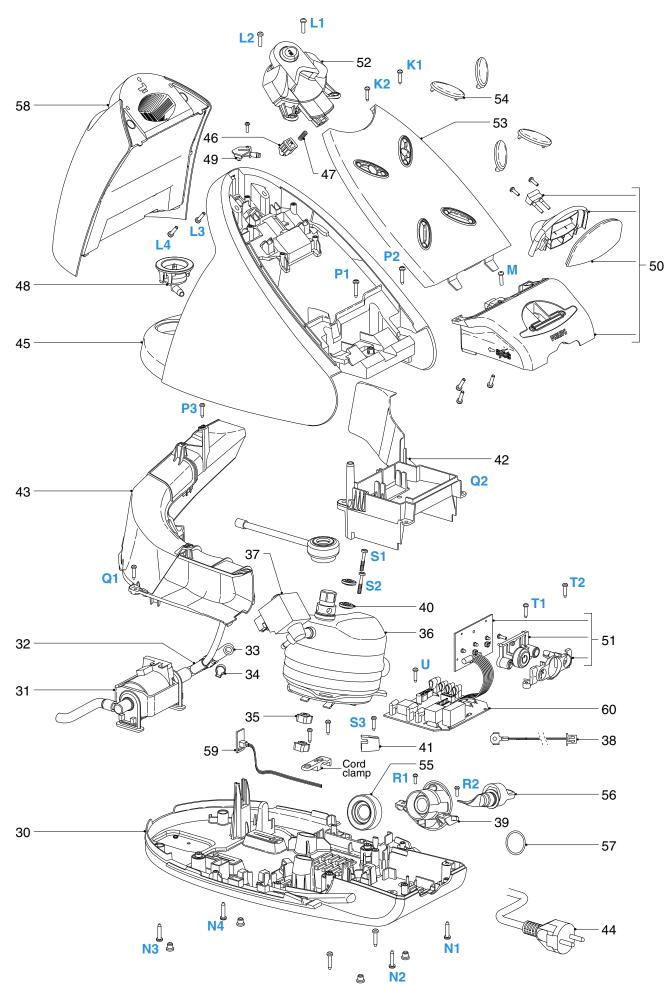
Disassemble POWER BOARD PCB ASSY 60

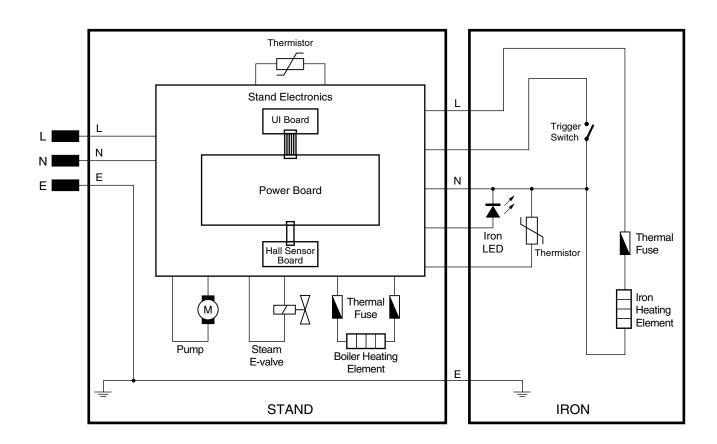
PARTS LIST - STAND GC9220

Pos	Service code	Description		
30	4239 021 63531	Stand bottom assy		
31	4239 021 61601	Pump assy		
32	4239 026 42081	De-air valve		
33	4239 015 59201	Braided rubber hose boiler		
34	4239 010 10261	Inox clamp		
35	4239 026 32181	Spacer Bottom molded		
36	4239 021 61611	Boiler assy		
37	4239 017 10902	Electrovalve		
38	4239 021 61812	Thermistor assy Boiler		
39	4239 021 65611	Rinse Housing printed		
40	4239 026 31641	Spacer top molded		
41	4239 026 42581	Boiler support bracket molded		
42	4239 026 44731	Power cord storage molded		
43	4239 021 63551	Hose cord storage compartment assy		
44	4239 000 11571	Cord set EU		
45	4239 026 44761	Stand top molded		
46	4239 026 44771	Tank Catch molded		
47	4239 014 54982	Tank Catch Spring		
48	4239 021 63561	Inlet coupling plate welded		
49	4239 026 44801	De-air coupling molded		
50	4239 021 63571	Display cover printed assy		
51	4239 021 63591	Button panel assy		
52	4239 021 63601	Front Bracket assy		
53	4239 026 44851	Tray molded		
54	4239 015 59221	Tray rubber cap		
55	4239 015 59231	Rinse Rubber Bush		
56	4239 021 63611	Rinse cap assy		
57	4239 015 58201	O-ring		
58	4239 021 63621	Water tank printed assy		
59	4239 021 61721	Hall sensor PCBA assy		
*60	4239 021 77331	Power Board PCB assy (8pin)		

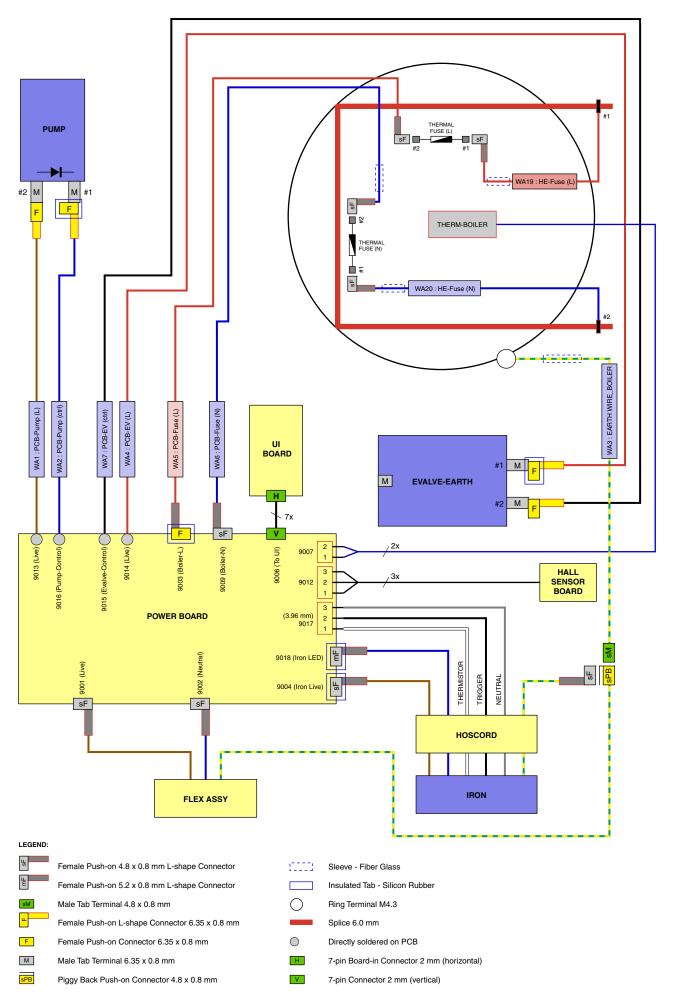
 $[\]ensuremath{^{*}}$ Refer service instruction (item #5) for additional service recommendation.

EXPLODED VIEW - STAND GC9220





WIRING DIAGRAM GC9220



REPAIR INSTRUCTIONS GC9220

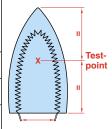
- Due to the high wattage of the iron, only the specified cord set must be used.
- Should damage be observed on the HOSE CORD MOUNTED ASSY 15 or CORD SET 44, they must be replaced. Continued usage is not allowed.
- When replacing the MICROSWITCH ASSY 12, please dress the 2 attached wires such that they are free of tension. Pulling force on the wires may affect the steam triggering.
- To avoid damage to the sealing & components of the BOILER ASSY 36, NEVER clean the boiler assy with vinegar, descaling agent or other corrosive chemicals.
- When replacing ELECTROVALVE 37 or PUMP ASSY 31, please be reminded to apply loctite at the joints for good sealing.
- After the product has been repaired, it should function properly and has to meet the safety requirements & legal regulations 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 that soleplate temperature is within IEC requirement.

Measure the temperature of the soleplate after the iron has reached steady state i.e connected to the mains for at least 15 minutes. The table below shows the temperature requirement.

	Soleplate temperature (Deg C)		rature (Deg C)	
Marking	Minimum	Maximum	Nominal + Tolerance	Material, for example
• (1 dot)	70	120	95 ± 25	Acetate, elastane, polyamide, polyproylene
•• (2 dots)	100	160	130 ± 30	Cupro, polyester, silk, triacetate, viscose, wool
••• (3 dots)	140	210	175 ± 35	Cotton, linen



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 the product during operation.

Check that the functionality of the product (product dependent) eg. steaming, variable steam, SOS, ASO etc is working properly.

4. Loose part

Check that there are no loose parts eg. extra screw in the product that can cause short-circuit or product malfunction.

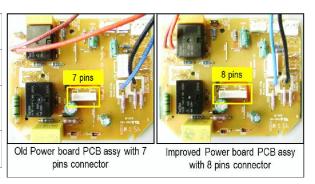
5. Power Board PCB assy

Dismantle the old Power Board PCB assy and replace with a improved Power Board PCB assy for all sets with production week code before wk1212.

Repair option:

Return set PerfectCare Expert GC92xx	Repair Options	Service Code to order
If Power Board PCB Assy is	Option 1 *	Pos 60 : 423902175591
7 pins connector version	Replace Power Board PCB Assy	Power Board PCB Assy (7-pin connector)
	Option 2 Replace Power Board PCB Assy and Button Panel Assy	Pos 60: 423902177331 Power Board PCB Assy (8-pin connector) Pos 51: 423902170311 Button Panel Assy (8-pin connector)
If Power Board PCB Assy is	Option 3	Pos 60: 423902177331
8 pins connector version	Replace Power Board PCB Assy	Power Board PCB Assy (8-pin connector)

^{*} If Repair Option 1 Power Board PCB Assy (423902175591) is not available, please use Repair Option 2.



REPAIR INSTRUCTIONS GC9220

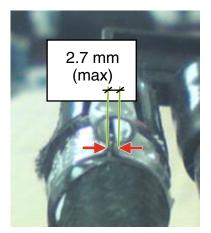
5. Crimping INOX CLAMP 34

When exchanging BOILER ASSY 36 or DE-AIR VALVE 32 or BRAIDED RUBBER HOSE BOILER 33, it is necessary to replace the INOX CLAMP 34. Below instructions ensure that the inox clamp is crimped correctly.

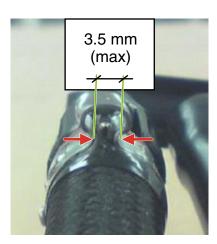


Knipex Crimping tool

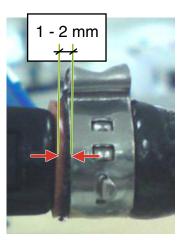




Direct crimp form



Fold in crimp



Distance from edge of crimp to rubber hose

CAUTION: When crimping on plastic part like DE-AIR VALVE, avoid over crimping which may lead to plastic part crack.

REPAIR INSTRUCTIONS GC9220

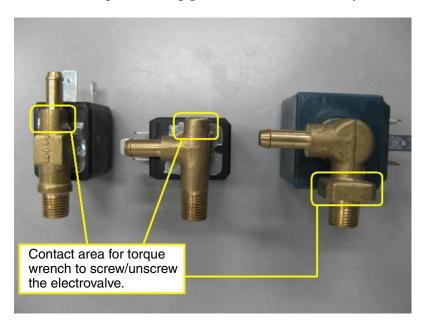
6. Replacing ELECTROVALVE 37

To prevent damage to the electrovalve during service activity, please observe below precautions during disassembly & reassembly.

Tools required: Torque wrench (set to 6 kgf)



CAUTION #1: The torque wrench engagement is allowed ONLY at the yellow box locations in below picture.



CAUTION #2: Ensure torque wrench jaw does not contact the solenoid body.

