GC8220





**Philips Domestic Appliances and Personal Care** 

# ServiceManual

### **PRODUCT INFORMATION**

#### **Features**

#### Iron

- Careeza Soleplate
- Continuous steam in horizontal & vertical position
- Adjustable steam rate up to 110 g/min
- Shot Of Steam up to 120 g/min
- Steam activator lock
- Automatic drip stop
- Soft touch hand grip
- Steam tip for hard-to-reach places
- Steam hose length: 1.7 m

#### Stand

- Anti-corrosion Inox boiler

Boiler sensing : ElectronicBoiler pressure : 4.5 bar

- Fast heat-up : Steam ready in 2 mins.

- Cord length : 2.5m

- Hose cord storage

- Easy to rinse

- Iron lock for safe storage

- Detachable tank : 1.4 L

# 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 as officially laid down as this moment.

### **TECHNICAL INFORMATION**

Voltage : 220 - 240 V Frequency : 50 - 60 Hz Power Iron : 800 W

Boiler : 1200 W

Dimension (F-box) : 350 x 350 x 250 mm (L x W x H)

Weight (with packing) : 6.4 kg

#### Water advice

If the tap water in your area is very hard, it is advisable to mix the tap water with an equal amount of demineralised water.

# Careeza soleplate

Scratch resistant, non-stick, easy to clean & very durable.

#### Fast ironing

Steam ready in 2 minutes & up to 5 bar of steam pressure penetrating deeper into the fabrics.

#### Iron lock

Safely store the iron on the stand.

### Easy to rinse

The new design of the rinse cap makes it very easy to rinse the boiler regularly. Simply unscrew the cap and pour out the "dirty" water into the sink.

No hassle with coins, extra tubes or anything of this sort.

# Large detachable water tank

1.4 Liter water tank allows up to 3 hours freedom of ironing without refilling.

Published by Philips Domestic Appliances and Personal Care

Printed in the Netherlands

© Copyright reserved

Subject to modification



DISASSEMBLY ADVICE - IRON GC8220

# **BACKPLATE I**

**SWIVEL 2** 

# **HOSE CORD ASSY 3**

Remove Screw A
Disassemble BACKPLATE 1
Remove Screw B1, B2
Remove Clamping plate

Remove Power cord quick-connect S, E, L, N

Remove Hose clip (a)
Disassemble Steam hose

Disassemble HOSE CORD ASSY 3

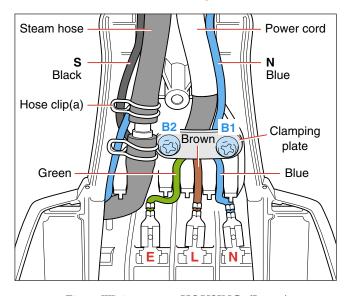


Fig 1. Wiring at rear HOUSING (Part 1)

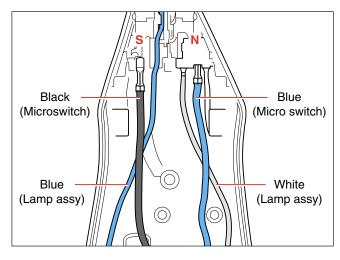


Fig 2. Wiring at rear HOUSING (Part 2)

# **INLAY 4**

**STEAM LOCK 6** 

**LAMP ASSY 7** 

**MICROSWITCH ASSY 9** 

**SWITCH HOLDER 10** 

PIVOT HOLDER II

**TRIGGER 12** 

**THERMOSTAT DIAL ASSY 14** 

**HOUSING PRINTED 16** 

**SOLEPLATE COVER 17** 

**THERMOSTAT BUSH 19** 

**RUBBER HOSE 20** 

**BRASS JOINT 21** 

# **SOLEPLATE ASSY 23**

Remove Screw A

Disassemble BACKPLATE 1

Release Inlay rear catch

Disassemble INLAY 4

Disassemble STEAM LOCK 6
Disassemble SWITCH HOLDER 10
Disassemble MICROSWITCH ASSY 9

Remove Screw C

Disassemble PIVOT HOLDER 11

Disassemble TRIGGER 12

Disassemble THERMOSTAT DIAL 14

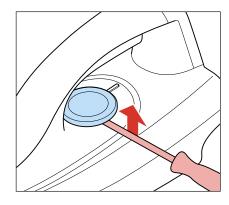


Fig 3.

Remove Screws D1, D2, D3

Disassemble HOUSING PRINTED 16

Remove Screws E1, E2, E3

Disassemble SOLEPLATE COVER 17

Remove Hose clip (b)

Disassemble RUBBER HOSE 20

Pos	Service code	Description
1	4239 026 21890	Backplate
2	4239 026 22160	Swivel
3	4239 021 31840	Hose cord assy
4	4239 026 24010	Inlay SOS (Blue)
5	4239 026 08280	Lamp cover
6	4239 026 21820	Steam lock
7	4239 021 32580	Lamp assy
8	4239 026 01220	Lamp holder
9	4239 021 31790	Microswitch assy
10	4239 026 21780	Switch holder
11	4239 026 21790	Pivot holder
12	4239 026 21800	Trigger
13	4239 010 09290	Trigger spring
14	4239 021 34920	Thermostat dial assy (Blue)
15	4239 014 53790	Rattle spring
16	4239 021 32820	Housing printed
17	4239 026 24000	Soleplate cover (Blue)
18	4239 015 70150	Ryton ring
19	4239 026 13220	Thermostat bush
20	4239 015 56520	Braided rubber hose (inlet)
21	4239 010 09350	Brass joint
22	4239 010 10280	Hose clip - braided rubber hose
23	4239 021 31710	Soleplate assy (Careeza) - 230 V
24	4239 015 56120	Rubber hose (SOS)
25	4239 015 56510	Rubber hose (dosing)
26	4239 026 24020	SOS knob (Blue)
27	4239 021 31780	Steam deviator assy
28	4239 010 10110	Hose clip

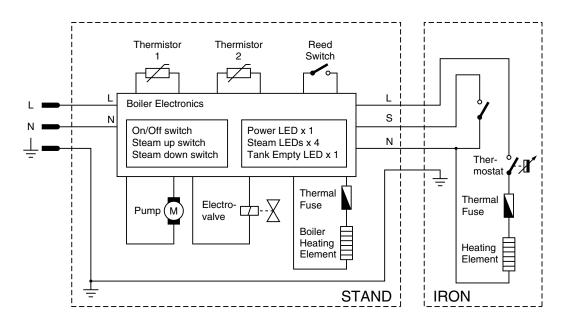
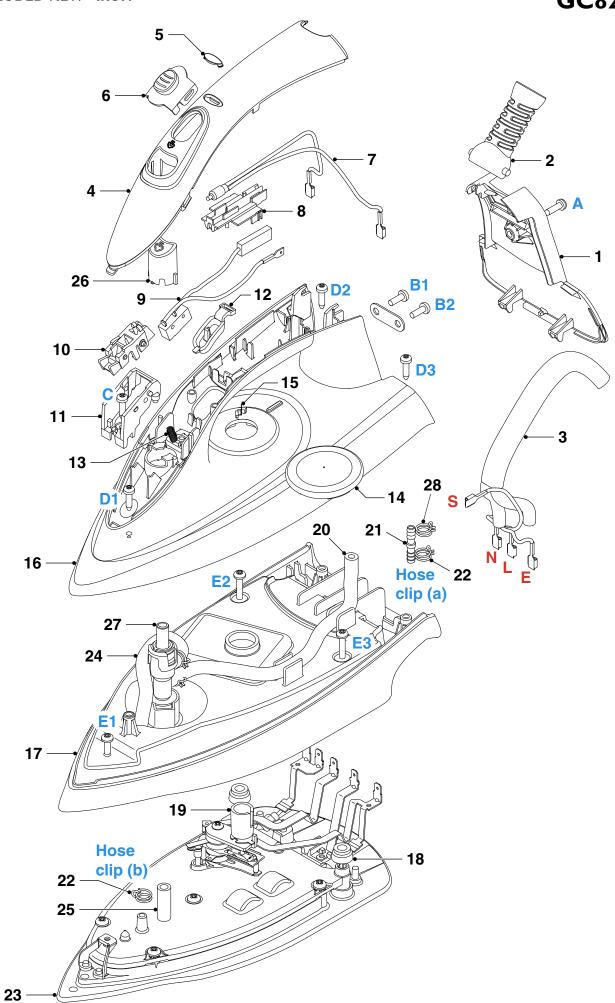


Fig 4 . Electrical diagram

GC8220



TRAY RUBBER (MAIN) 30

TRAY 33

STAND TOP 34

FRONT PANEL PRINTED 37

BOILER ASSY EE 38

ELECTROVALVE 40

POWER BOARD 43

CONTROL BOARD 44

PUMP ASSY 45

INLET TUBE 46

DE-AIR TUBE 47

RINSE RUBBER COUPLING 50

RINSE BUSH 51

SAFETY CAP ASSY 52

Remove WATER TANK ASSY 70

**REED SWITCH ASSY 53** 

Remove TRAY RUBBER (MAIN) 30 (3x)

Remove Screws J1, J2, J3

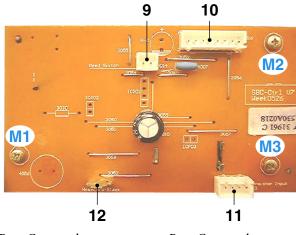
Disassemble TRAY 33

Remove Screws K1, K2, K3, K4
Disconnect INLET TUBE 46
Disconnect DE-AIR TUBE 47
Remove SAFETY CAP ASSY 52
Remove RINSE BUSH 51

Remove RINSE RUBBER COUPLING 50

Disassemble STAND TOP 34
Remove Screws L1, L2

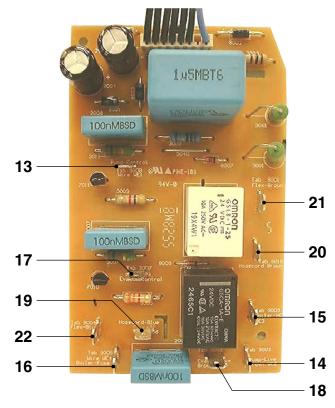
Disassemble FRONT PANEL PRINTED 37



Pos.Connected toPos.Connected to9Reed switch11Thermistor10Power board12Hosecord (Black)

Fig 5. Connections on CONTROL BOARD 44

Remove Connections 9, 10, 11, 12 (Fig 5)
Remove Screws M1, M2, M3 (Fig 5)
Disassemble CONTROL BOARD 44



Pos.	Connected to	Pos.	Connected to
13	Pump-Control	18	Electrovalve-Live
14	Pump-Live (Brown)	19	Hosecord (Blue)
15	Boiler-Heating Element	20	Hosecord (Brown)
16	Boiler-Fuse	21	Cordset (Brown)
17	Electrovalve-Control	22	Cordset (Blue)

Fig 6. Connections on POWER BOARD 43

# WATER TANK ASSY 70 TANK WASHER 71 TANK COUPLING 73 TANK LEVER 75 PICK UP TUBE 77 FILTER ASSY 78 Remove Screws N1

Disassemble TANK WASHER 71
Remove SCREWS N2, N3
Disassemble TANK COUPLING 73

Pos	Service code	Description
30	4239 015 56010	Tray rubber (Main)
31	4239 015 56030	Tray rubber (Rear)
33	4239 010 09310	Tray
34	4239 026 21920	Stand top
35	4239 026 21930	Nipple plate
36	4239 026 22080	Cord storage lever
37	4239 021 32160	Front panel printed
38	4239 021 31920	Boiler assy EE
39	4239 026 22280	C-Wall
40	4239 017 09890	Electrovalve
41	4239 015 56160	Braided hose
42	4239 010 09390	Inox clamp
43	4239 021 31970	Power board
44	4239 021 31940	Control board
45	4239 021 32480	Pump assy
46	4239 015 56140	Inlet tube
47	4239 015 56150	De-air tube

Pos	Service code	Description
48	4239 015 55980	Boiler rubber support A
49	4239 015 55990	Boiler rubber support B
50	4239 015 56050	Rinse rubber coupling
51	4239 026 22330	Rinse bush
52	4239 022 56470	Safety cap assy
53	4239 021 31820	Reed switch assy
54	4239 026 22050	Reed switch holder
55	4239 000 09780	Cordset EU
56	4239 026 22270	Stand bottom EE
57	4239 015 52340	Bung (Stand)
58	4239 026 05990	Filling cup
59	4239 015 56000	Power button cap (Silver)
60	4239 026 21990	Power button frame
61	4239 026 22010	Steam button frame
62	4239 026 22000	Light guide (ring)
63	4239 026 22030	Display lamp cover
65	4239 022 58590	Safety valve sealing ring

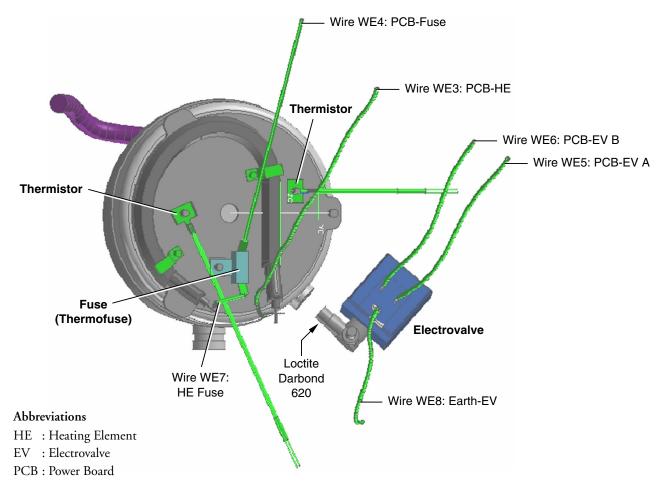
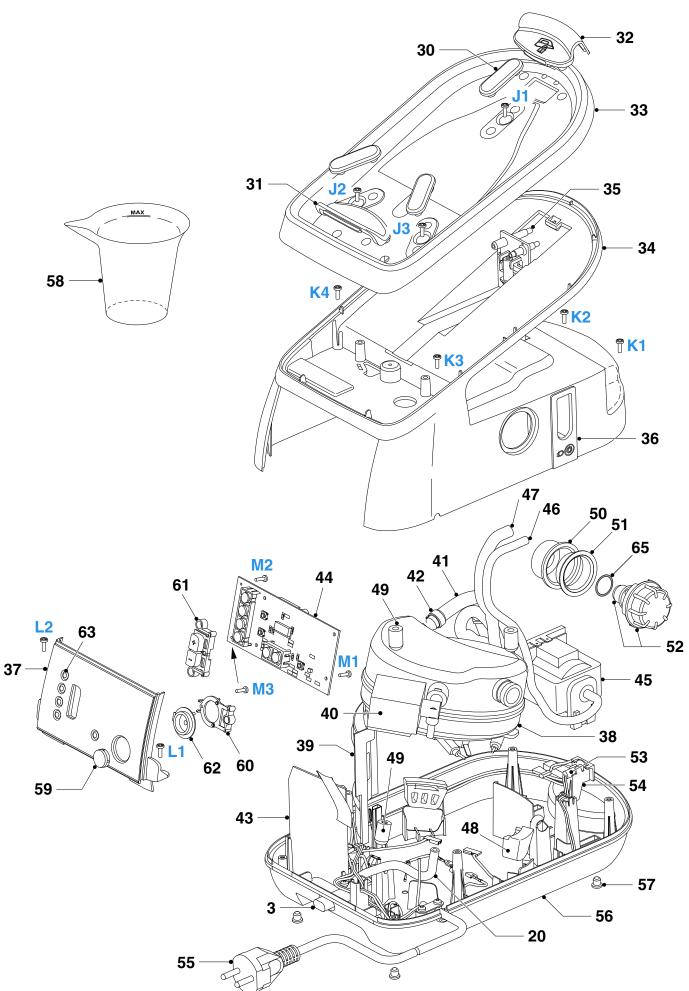
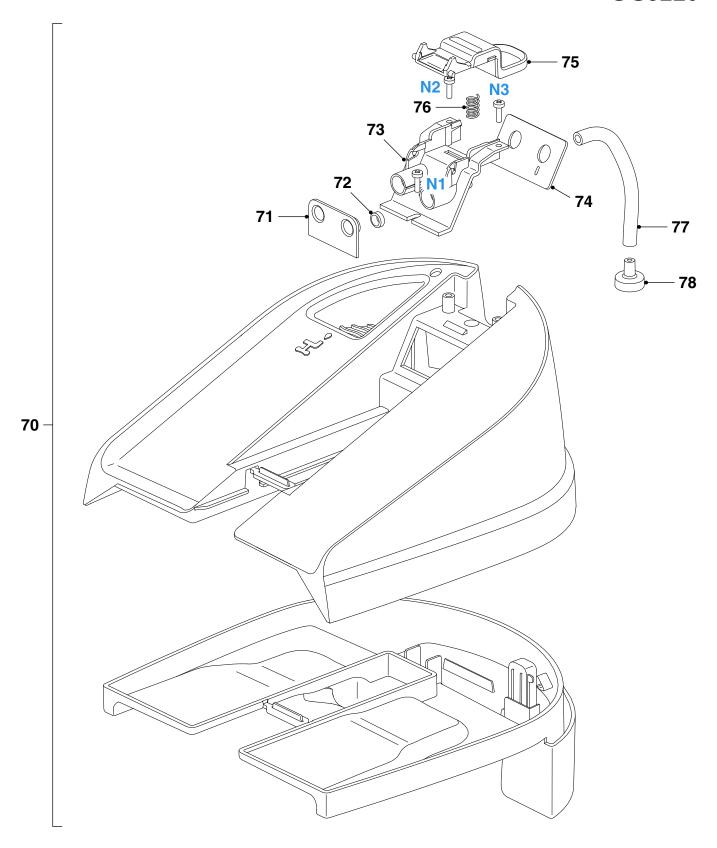


Fig 7. Boiler Assy EE - Wiring Diagram





Pos	Service code	Description
70	4239 021 34810	Water tank assy (Blue)
71	4239 026 22130	Tank washer
72	4239 015 55390	Sealing ring
73	4239 026 22110	Tank coupling
74	4239 015 56060	Tank coupling seal

Pos	Service code	Description
75	4239 026 22120	Tank lever (White)
76	4239 010 09330	Spring
77	4239 015 56070	Pick-up tube
78	4239 021 31860	Filter assy

REPAIR INSTRUCTIONS GC8220

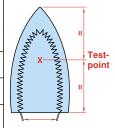
- Due to the high wattage of the iron, only the specified cord set must be used.
- Should damage be observed on the HOSE-CORD ASSY 3 or CORDSET 55, they must be replaced. Continued usage is not allowed.
- When replacing the MICROSWITCH ASSY 9, please dress the 2 attached wires such that they are free of tension. Pulling force on the wires may affect the steam triggering.
- To avoid damage to the sealing & components of the BOILER ASSY 38, NEVER clean the boiler assy with vinegar, descaling agent or other corrosive chemicals.
- When replacing ELECTROVALVE 40 or PUMP ASSY 45, 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.

) ( 1 ·	Soleplate temperature (Deg C)		rature (Deg C)	M . : 1 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.