Service Service Service



GC9220/02

Version 2

**Philips Consumer Lifestyle** 

# **Service Manual**

13-Jul-2017

#### **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

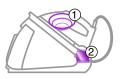
- Boiler : 1370 W at 230 V Dimension (F-box) : 491 mm x 305 mm x 335 mm

(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.

Published by Philips Consumer Lifestyle

Printed in the Netherlands

© Copyright reserved

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

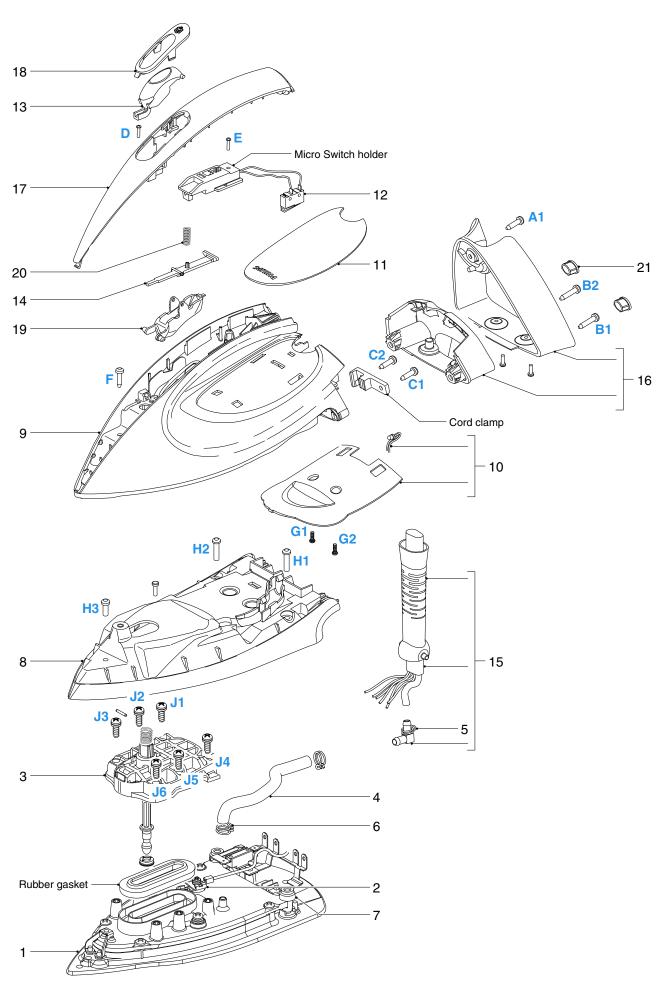
Remove Screws J1 - J6

Disassemble **DEVIATOR ASSY 3** 

PARTS LIST - IRON GC9220/02

| Pos | GC9220/02<br>889922002470<br>Korea<br>Service code | Description                          |  |
|-----|--|--------------------------------------|--|
| 1   | 4239 021 78102                                     | 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 (Sky blue)            |  |
| 20  | 4239 014 54961                                     | Trigger spring                       |  |
| 21  | 4239 026 42551                                     | Backplate screw cap (Chalk white)    |  |

GC9220/02



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 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

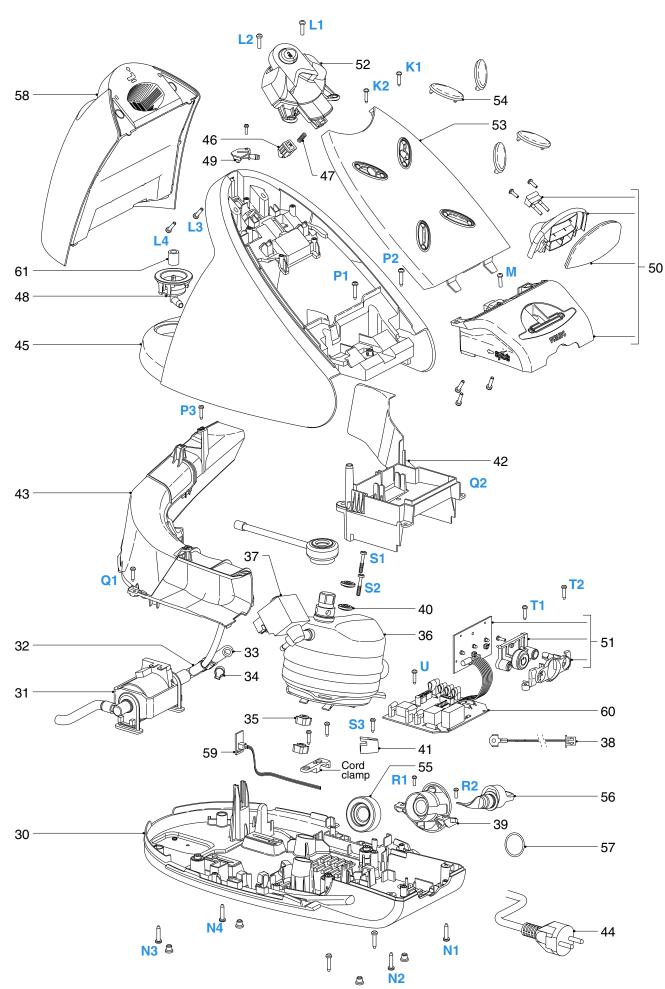
Disassemble BUTTON PANEL ASSY 51

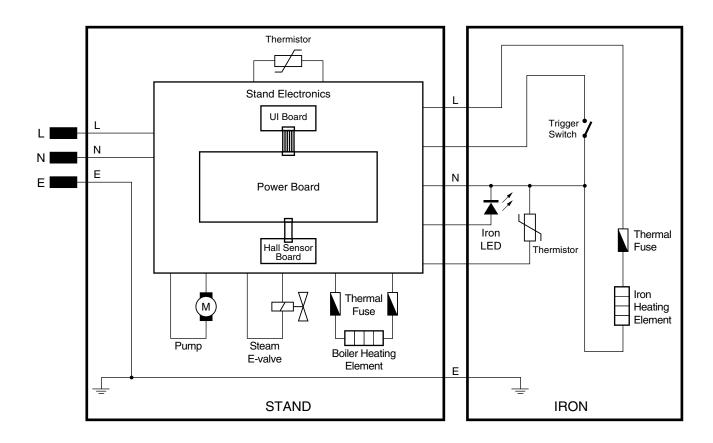
Remove Screw U

Disassemble POWER BOARD PCB ASSY 60

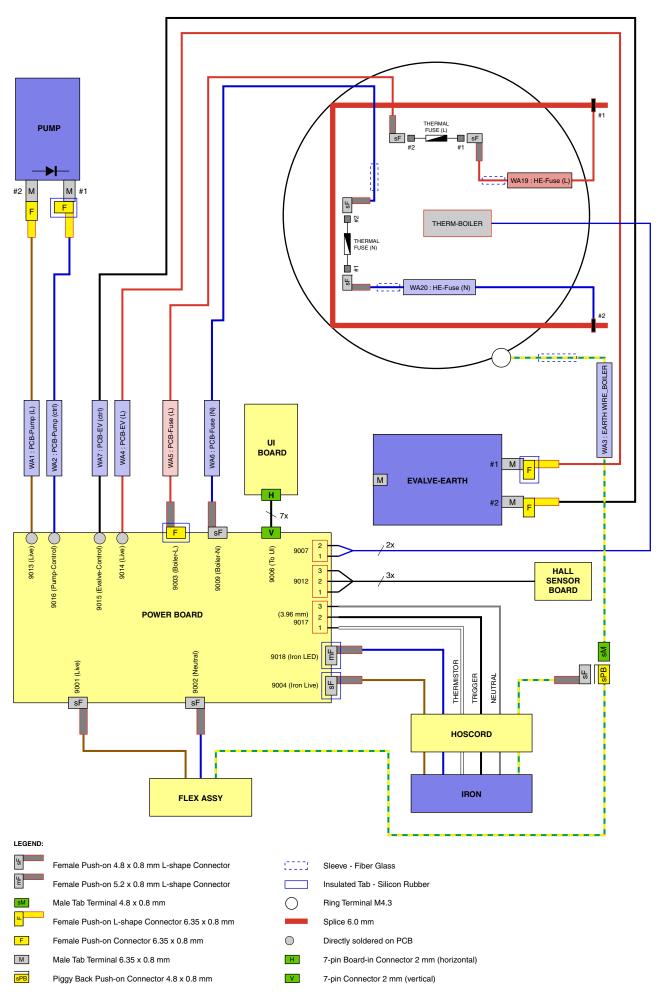
PARTS LIST - STAND GC9220/02

| Pos | GC9220/02<br>889922002470<br>Korea<br>Service code | Description                         |
|-----|--|-------------------------------------|
| 30  | 4239 021 63531                                     | Stand bottom assy                   |
| 31  | 4239 021 61601                                     | Pump assy                           |
| 32  | 4239 026 42081                                     | De-air valve - HE                   |
| 33  | 4239 015 59201                                     | Braided rubber hose Boiler          |
| 34  | 4239 010 10261                                     | Inox clamp                          |
| 35  | 4239 026 32181                                     | Spacer Bottom molded                |
| 36  | 4239 021 68333                                     | Boiler assy_Vienna                  |
| 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 70301                                     | Display cover printed assy (D.Blue) |
| 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 63615                                     | Rinse cap assy (Workwear Dark blue) |
| 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                                     | Vienna UG Power BD PCBA             |





WIRING DIAGRAM GC9220/02



REPAIR INSTRUCTIONS GC9220/02

- 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 below 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 tempo | erature (Deg C) | Marriele Community     | un Muzz   |
|-----------------|-----------------|------------------------|-----------|
| Minimum         | Maximum         | Materials, for example | X Z point |
| 120             | 143             | 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 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.

REPAIR INSTRUCTIONS GC9220/02

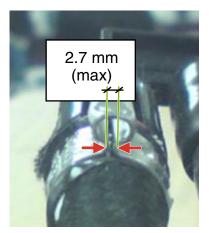
# 5. Crimping INOX CLAMP 34

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.

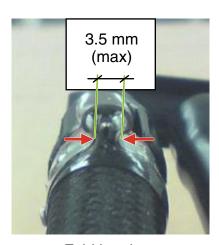


Knipex Crimping tool

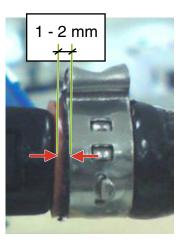




Direct crimp form



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 GC9220/02

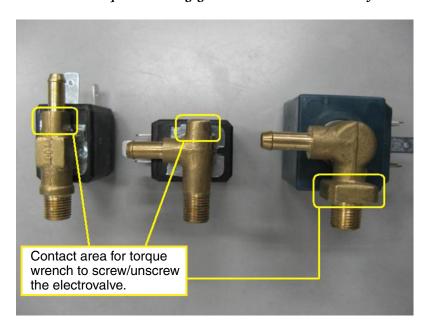
# 6. Replacing ELECTROVALVE 37

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

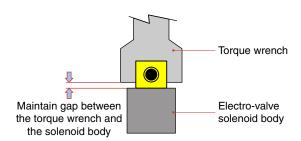
Tools required: Torque wrench (set to 6 kgf)



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.



# GC9220/02

Version 1: publish in Yr2012

Version 2: update on Jul 2017