# PerfectCare Aqua GC8651





#### Philips Consumer Lifestyle

# Service Manual

## **PRODUCT INFORMATION**

#### Fast & powerful crease removal

- Soleplate: SteamGlide
- OptimalTemp
- Continuous steam output
- Continuous steam output: 120 g/min
- Steam boost: 220 g
- Vertical steam
- Steam pressure: Up to 5 bar
- Steam tip
- Power: 2400 W

#### Easy to use

- Water tank capacity: 2200 ml
- Filling and emptying water: Extra large filling hole
- Refill any time
- Heat-up time: 2 min
- Safety auto off
- Storage solution: Carry lock
- Hose storage: Hose storage compartment
- Power cord length: 1.8 m
- Hose length: 1.6 m
- Safe for all fabrics: Even for delicates like silks
- Low water alarm

#### Calc management

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

#### **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
Dimension (F-box)	: 362 (D) x 270 (W) x 263 (H) mm
Weight of iron	: 1 kg
Weight of iron + base	: 4.5 kg

#### Water Advice

Suitable for tap water use. Advice to mix with equal portion of distilled water or use only distilled water if the tap water is very hard.

#### Soleplate: Steam Glide

New SteamGlide soleplate is the best Philips soleplate. It has great scratch resistancy, glides excellent and is easy to clean.

#### **OptimalTemp Technology**

- Always deliver 1 perfect setting for all your clothes thanks to:
  - 1. Cylonic steam chamber
- 2. Advance Smart control processor
- 100% easy to use, no adjustment required.
- 100% safe on all delicate fabrics.
- 100% fast on the toughest fabrics.

#### Tested and approved by experts

Tested and approved by independent textile experts institutes.

#### Steam pressure: Up to 5 bar

Double your ironing speed with pressurized steam.

#### 2.2L fully visible water tank

Large water tank ensures long hours of ironing without refill of water tank.

#### Lock your iron securely

Lock your iron securely and carry your steam generator easily

#### **Easy De-Calc**

Easy De-Calc, hassle free & effective scale removal to extend the life of your steam generator.

# **DISASSEMBLY ADVICE - IRON**

Light strip cap assy 1 Inlay and light strip assy 2 **Reflector molded 3** LED microswitch holder assy 4 **Trigger spring 5 Trigger molded 6** Mica plate 7 Plastic washer (1x) 8 (Front) **Decoration cap printed 9** Remove Screw A

Disassemble

Light strip 1



Fig 1 Using "-" screw driver to lift up the Inlay and release the catch at the end of the handle

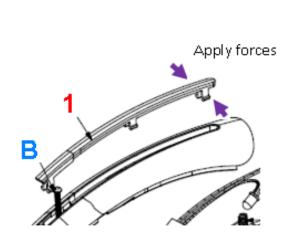


Fig 2 position of the catch to be applied forces

Remove

Disassemble Disassemble Remove

Disassemble Disassemble Disassemble Remove Disassemble Disassemble Remove Remove

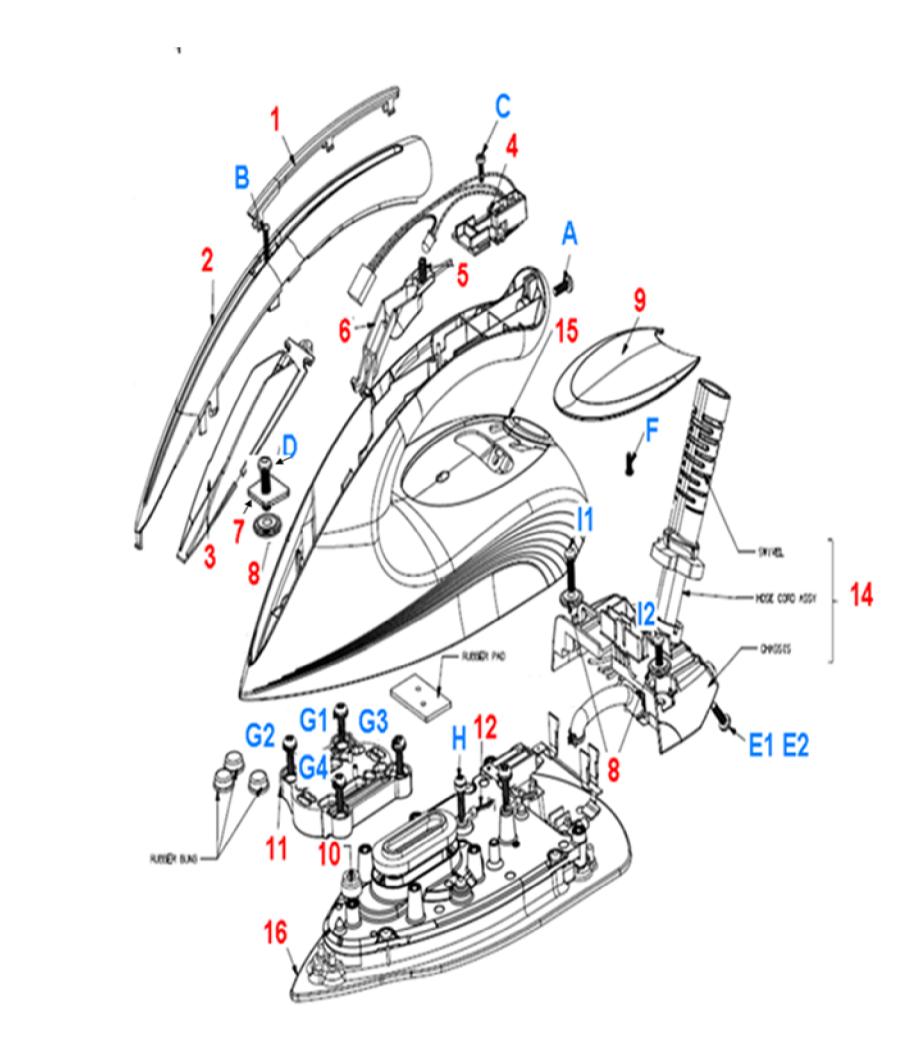
Disassemble

Screw B Inlay and light strip assy 2 **Reflector molded 3** Screw C LED microswitch holder assy 4 **Trigger spring 5 Trigger molded 6** Screw D Mica plate 7 Plastic washer (1x) 8 Screw E1 E2 F **Decoration cap printed** 9

Ryton ring 10			
Deviat	Deviator housing molded 11		
Iror	thermistor assy 12		
Plstic	Plstic washer (2x) 8 (Rear)		
Hose	cord mounted assy 14		
Н	ousing printed 15		
Solep	late mounted assy 16		
Remove	Screw A		
Disassemble	Light strip 1		
Remove	Screw B		
Disassemble	Inlay and light strip assy 2		
Disassemble	Reflector molded 3		
Remove	Screw C		
Remove	Screw E1 E2		
Remove	Screw D		
Disassemble	Mica plate 7		
Disassemble	Plastic washer (1x) 8		
Disassemble	Ryton ring 10		
Remove	Screw G1 G2 G3 G4		
	Deviator housing molded		
Disassemble	11		
Remove	Screw H		
Disassemble	Iron thermistor assy 12		
Remove	Screw I1 I2		
Disassemble	Plastic washer (2x) 8		
Disconnect	Wires		
Release	hose clip (2x)		
Remove	J		
Disconnect	Wires		
Disassemble	Hose cord mounted assy 14		
Disassemble	Housing printed 15		
Disassemble	Soleplate mounted assy 16		

# GC8651

Pos	Service Code	Description	
1	423902170734	Light strip cap assy	
2	42390217072 <mark>3</mark>	Inlay and light strip assy	
3	423902649561	Reflector molded	
4	423902171942	LED microswitch holder assy	
5	423901454961	Trigger spring	
6	423902649752	Trigger molded	
7	423901012911	Mica plate	
8	423902649501	Plastic washer	
9	423902170741	Decoration cap printed	
10	423901570153	Ryton ring	
11	423902649491	Deviator housing molded	
12	423902169942	Iron thermistor assy	
14	423902170703	Hose cord mounted assy	
15	423902170692	Housing printed	
16	423902170651	Soleplate mounted assy	



## **DISASSEMBLY ADVICE - STAND**

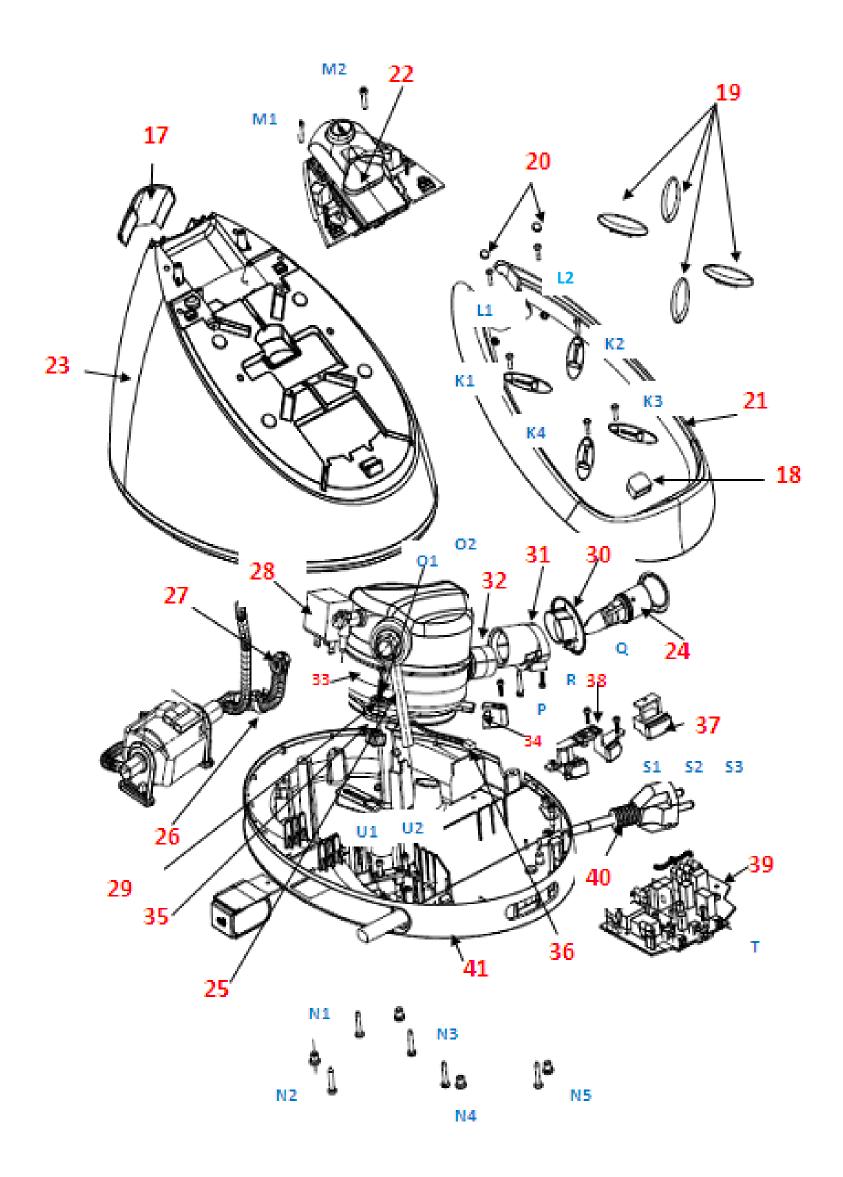
Filling door molded 17			
Rear lock rubber 18			
Tra	Tray rubber cap 19		
Tray cap molded 20			
Tray printed 21			
Front lock assy 22			
Water tank assy 23			
Disassemble	Filling door molded 17		
Disassemble	Rear lock rubber 18		
Remove	Tray rubber cap 19 (4x)		
Remove	Screw K1 K2 K3 K4		
Remove	Tray cap molded 20 (2x)		
Remove	Screw L1 L2		
Disassemble	Tray printed 21		
Remove	Screw M1 M2		
Disassemble	Front lock assy 22		
Remove	Screw N1 N2 N3 N4 N5		
Disassemble	Water tank assy 23		

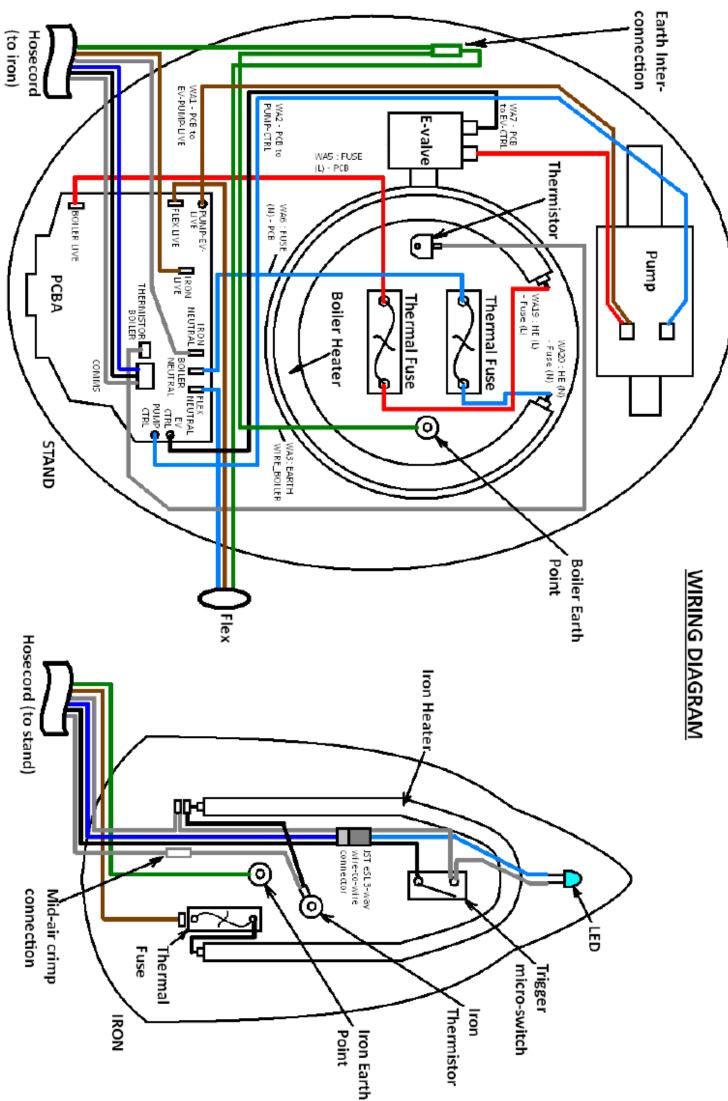
Power button printed 37			
	Button frame printed 38		
Power board PCB-Pump service kit 39			
	Power Cord EU 40		
	Stand bottom molded 41		
Remove	Screw N1 N2 N3 N4 N5		
Disassemble	Water tank assy 23		
Remove Screw S1 S2 S3			
DisassemblePower button printed 37DisassembleButton frame printed 38			
			Remove
Release	Inox clamp 26 (2x)		
Disassemble	Braided rubber hose Boiler 27		
Disconnect	Wires		
Disassemble Power board PCB-Pump service kit 39			
Remove	Screw U1 U2		
Disassemble	Cord clamp		
Disassemble	Power Cord EU 40		
Disassemble Stand bottom molded 41			

	Rinse cap assy 24				
	Safety cap 25				
		Inox clamp 26			
	Brai	ded rubber hose Boiler 27			
		Electrovalve 28			
		Spacer top 29			
	Rin	se housing cap printed 30			
	R	inse housing molded 31			
		O ring 32			
		Boiler assy 33			
	B	oiler support bracket 34			
		Spacer bottom 35			
	В	oiler thermistor assy 36			
	Disassemble Rinse cap assy 24				
	Remove	Screw N1 N2 N3 N4 N5			
Disassemble		Water tank assy 23			
	Remove	Safety cap 25			
		Inox clamp 26 (2x)			
		Braided rubber hose Boiler 27			
	Release	Hose clip			
	Disconnect	Wires			
	Disassemble	Electrovalve 28			
	Remove	Screw O1 O2 P			
	Remove Spacer top 29				
	Remove Screw Q				
	Disassemble	Rinse housing cap printed 30			
	Remove	Screw R			
	Disassemble				
	Disassemble	O ring 32			
	Disassemble	Boiler assy 33			
	Disassemble	Boiler support bracket 34			
	Remove	Spacer bottom 35			
	Disassemble	Boiler thermistor assy 36			

# GC8651

Pos	Service Code	Description	
17	423902649714	Filling door molded	
18	423901559741	Rear lock rubber	
19	423901559731	Tray rubber cap	
20	423902651831	Tray cap molded	
21	423902170802	Tray printed	
22	423902185101	Front lock assy	
23	423902170812	Water tank assy	
24	423902171672	Rinse cap assy	
25	423901559791	Safety cap	
26	423901010261	Inox clamp	
27	423901559771	Braided rubber hose Boiler	
28	423901712802	Electrovalve	
29	423902651241	Spacer top	
30	423902172612		
31	423902649732	Rinse housing molded	
32	423901559751	O ring	
33	423902169891	Boiler assy	
34	423902642581	Boiler support bracket	
35	423902632181	Spacer bottom	
36	423902169951	51 Boiler thermistor assy	
37	423902170772	Power button printed	
38	423902170762	Button frame printed	
39	423902267101	Power board PCB-Pump service kit	
40	242207098401	Power Cord EU	
41	423902650438	Stand bottom	





# **REPAIR INSTRUCTIONS**

# GC8651

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** or **CORDSET 14**, they must be replaced.

Continued usage is not allowed.

• When replacing the MICROSWITCH ASSY 4, 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 33, NEVER clean the boiler assy with vinegar,

descaling agent or other corrosive chemicals.

• When replacing ELECTROVALVE 28 or PUMP ASSY 39, 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 tempe	erature (Deg C)	Materials, for example	Test-point
Minimum	Maximum		
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.