

SAECO PREMIUM AND EXTRA



TECHNICAL ASSISTANCE MANUAL

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CHAPTER 1

INTRODUCTION

REV.00

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1.1 **Documentation required**

The following documentation is needed for repair operations:

Instruction booklet for specific model Technical documentation for specific model (diagrams, exploded drawings)

1.2 **Tools and equipment required**

As well as the standard equipment, the tools listed below are required.

1 special screwdriver with Torx T10 and T15 tips.

- 1 4 mm Allen key
- 1 cross head screwdriver

1 digital thermometer with 200°C full scale

This must be suitable for measuring the temperature of liquids and surfaces.

- 1 pliers for Oetiker clamps
- 1 pincers

1 CC - A - Vdc tester

1.3 Safety

Consult the instruction booklet before starting operations on the machine.

Observe all applicable standards related to the repair of domestic appliances.

Always disconnect the power plug from the mains before carrying out repairs. Simply turning off the main switch is not sufficient to prevent electrical shock.

This domestic appliance is rated in insulation class I.

Insulation and dielectric rigidity tests must be performed on completion of any repair.

1.4 Range

REV00 - August 07

Saeco PREMIUM Saeco EXTRA Basic model. Coffee strength selection. PREMIUM - EXTRA Chapter 01





CHAPTER 2 TECHNICAL

SPECIFICATIONS

REV.00

PREMIUM - EXTRA Chapter 02



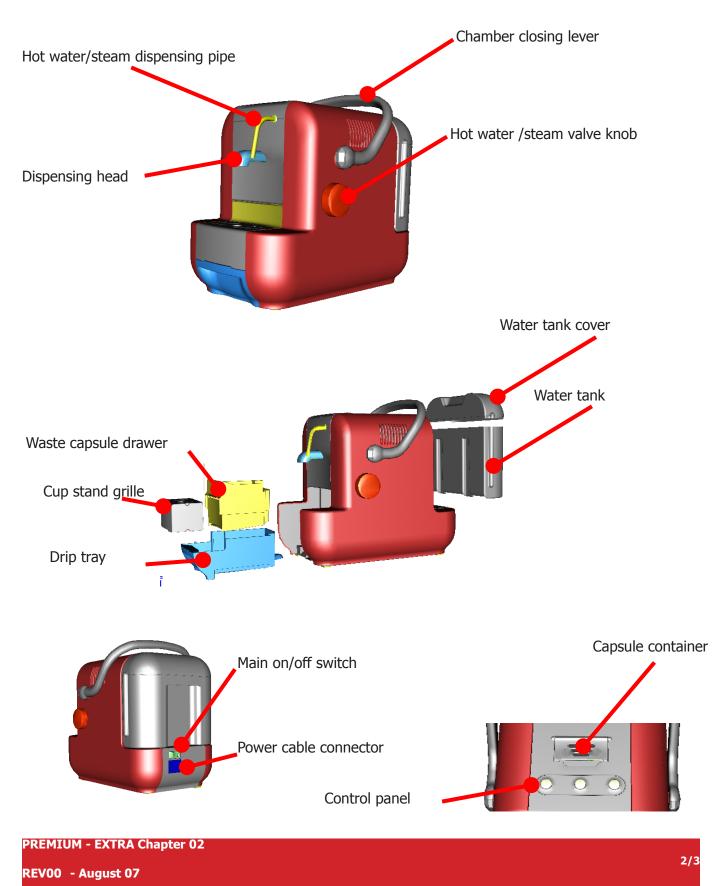
2.1 Technical specifications

Power supply and output:	230/240 V~, 50 Hz, 1050 W	
Temperature control:	Premium: 1 variable resistance sensor (NTC)	
	Extra: 2 thermostats, coffee 87°C - steam 127°C	
	automatic reset at -10/12° from threshold	
	value	
Safety system:	Premium: 1 thermostat. 175°C Schott	
	1 fuse, 184°C	
	Extra: 1 fuse, 184°C	
Heat exchanger output:	1000 W to dispense coffee, hot water and steam	
Stainless steel		
Boiler capacity	Approx. 180 cc / 0.34 oz	
Pump:	Ulka with reciprocating piston and 120°C cutout	
	48 W, 230V, 50 Hz, Type EP5 GW approx. 13-15 bars	
Pressure relief valve:	Opens at approx. 16-18 bars	
Water filter:	In tank	
Solenoid valve	230V 13.5 VA 50/60 Hz ED 100%	
	(can be permanently powered)	
Amps:	During heating phase - approx. 5A	
Dimensions: W x H x D in mm:	235/330/305	
Weight:	5 kg (average)	
Water tank capacity:	1 I.	
Waste capsule drawer capacity	10	
Water circuit filling time:	Approx. 15 seconds for first filling cycle	
Heating time:	Approx. 45 seconds	
Dispensed drink temperature:	Approx. 73°C - 83°C	
Temperature in cup	Approx. 78°C - 82°C	
Temperature in boiler, Premium	Approx. 94°C - 96°C	
Temperature in boiler, Extra	Approx. 78°C - 87°C	



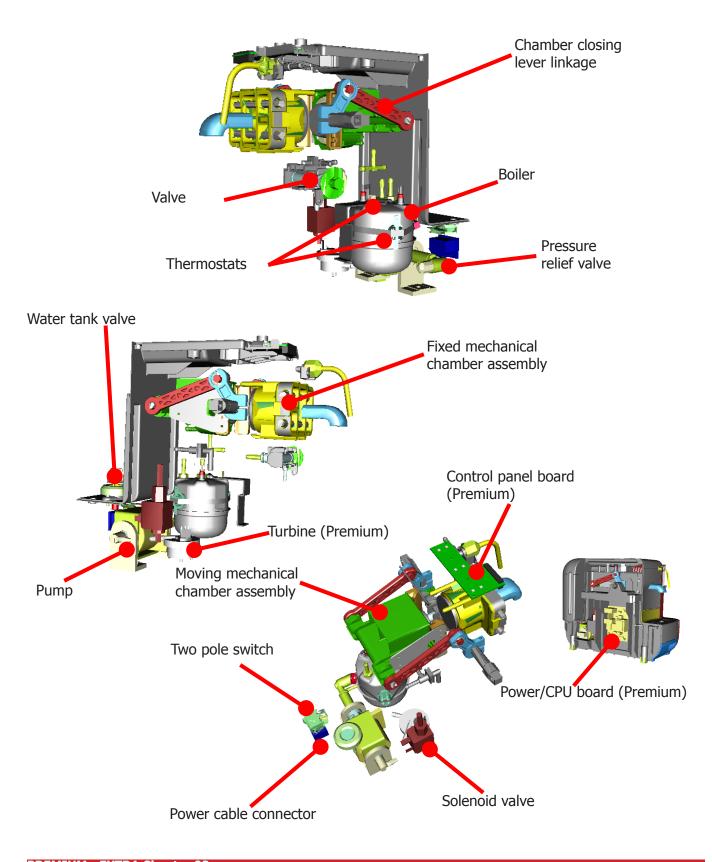
2.2 External / internal parts

Saeco PREMIUM - EXTRA





Internal parts







CHAPTER 3

BRIEF

INSTRUCTIONS

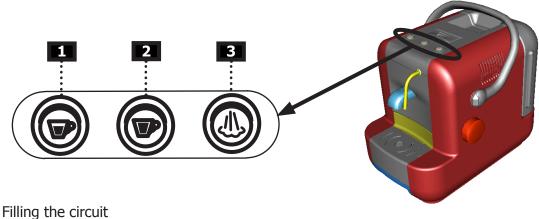
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PREMIUM - EXTRA Chapter 03



3.1 Customer and programming menu

Premium

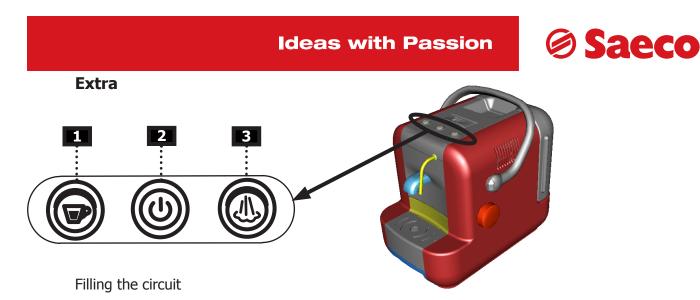


The water circuit must be filled on initial installation and whenever the water runs out.

- 1 Switch on the machine (all indicators flash).
- 2 Place a container under the water/steam pipe.
- 3 Turn the water/steam knob anticlockwise.
- 4 Press key 2 and wait until a constant jet of water flows out; the machine stops dispensing automatically.
- 5 Turn the water/steam knob clockwise to close the circuit.

FUNCTION			
Machine ready	lit	lit	
Strong coffee (dispensing stops at the set quantity) *	press		
Long coffee (dispensing stops when you press the key again)		press	
Stop dispensing	press selected coffee		
Hot water (pressing key 1 dispenses the quantity of water set for the coffee program)	lit	lit and press	
Steam (press key 3, - flashing, wait - fixed, steam ready) press the key again to exit the function, all three keys start flashing immediately, open the valve and press the central long coffee key. Wait for the machine to automatically return to coffee ready status (keys 1 and 2 lit) or heating status (keys 1 and 2 flashing)			press

 * To set your preferred coffee strength, hold down the key until the desired amount of coffee is dispensed, then release the key to memorise the quantity. Minimum 100 turbine pulses, equivalent to approx. 50cc. Maximum 500 turbine pulses, equivalent to approx. 250cc.



The water circuit must be filled on initial installation and whenever the water runs out.

- 1 Switch on the machine (indicator 2 lights).
- 2 Place a container under the water/steam pipe.
- 3 Turn the water/steam knob anticlockwise.
- 4 Press switch 1 and wait until a constant jet of water flows out, then press the switch again to stop dispensing.
- 5 Turn the water/steam knob clockwise to close the circuit.

FUNCTION		
Machine ready	lit	
Start dispensing	press	
Stop dispensing	press	
Hot water (turn knob)	lit and press	
Steam ready (hold key 3 pressed, indicator 1 goes out, when indicator 3 lights the machine is ready in steam ready mode, release the key (indicators 1/3 lit)		keep pressed until lit
Steam (turn knob)		



3.2 Maintenance and cleaning

	STEPS		
А	Empty the waste capsule drawer	As instructed	
В	Empty the drip tray	As necessary	
С	Clean the water tank	Weekly	
E	Clean casing	As necessary	
Н	Clean the infusion chamber (dispense water with no capsule in place with the lever closed)	As necessary	
J	Descaling	As instructed	

DESCALING			
Hardness N°	Water hardness	Descaling frequency	Descaling frequency when Aqua Prima is used
1	Soft water (up to 7°dH)	Approx. 3 months or 120 litres	Approx. 3 months or 125 litres
2	Medium water (7° - 14°dH)	Approx. 2 months or 90 litres	Approx. 2 months or 120 litres
3	Hard water (15° - 21° dH)	Approx. 6 months or 60 litres	Approx. 6 months or 90 litres
4	Very hard water (over 21°dH)	Approx. 4 months or 30 litres	Approx. 4 months or 60 litres



CHAPTER 4 DIAGRAMS

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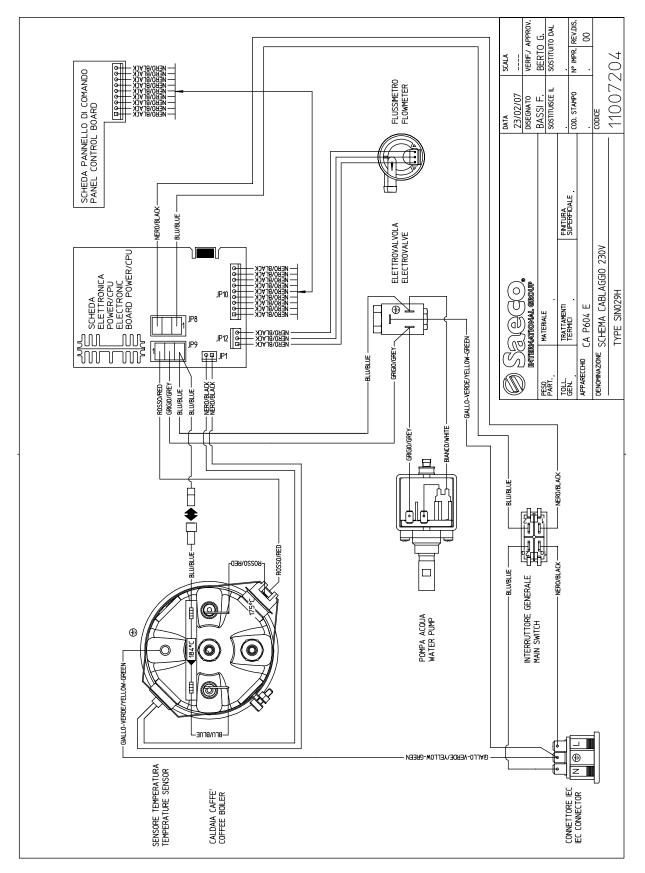
PREMIUM - EXTRA Chapter 04



Ideas with Passion

4.1 Wiring diagrams

Premium

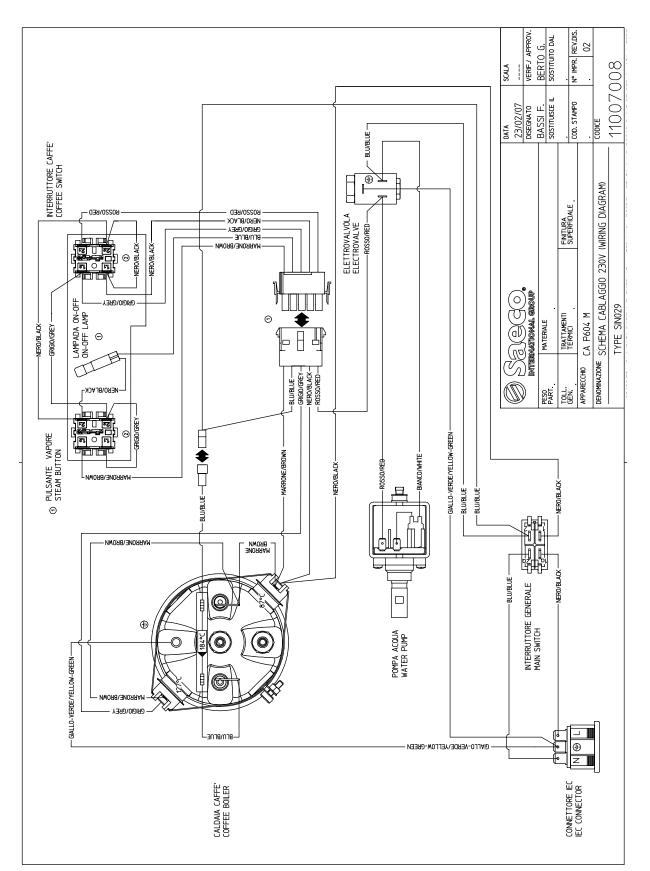


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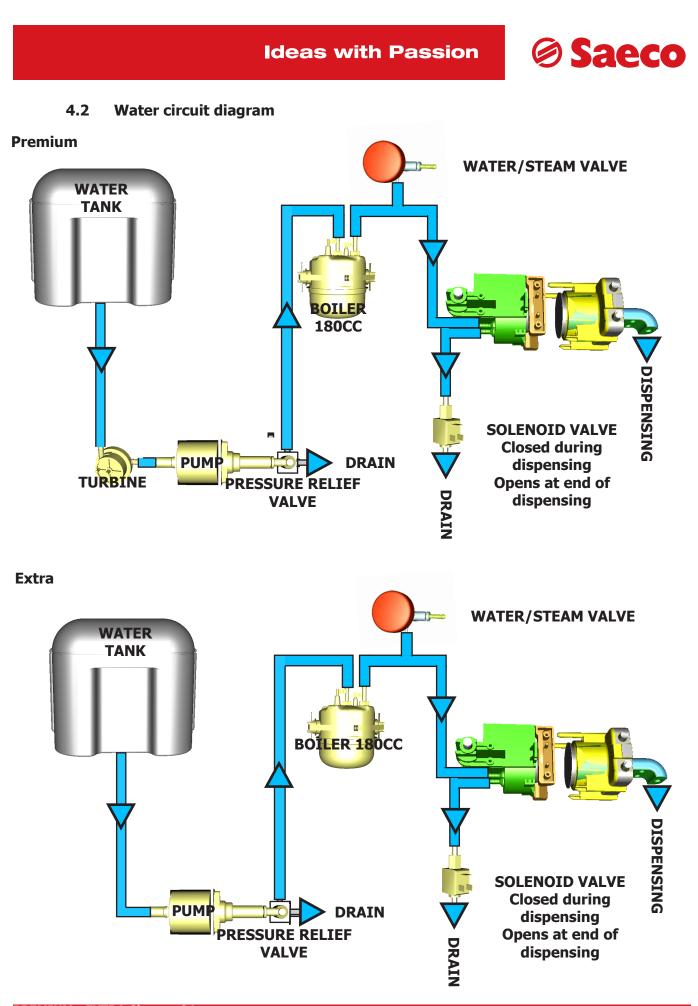


Ideas with Passion

Extra



PREMIUM - EXTRA Chapter 04





CHAPTER 5

TROUBLESHOOTING

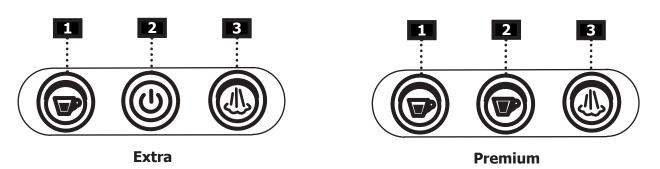
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PREMIUM - EXTRA Chapter 05

Ideas with Passion



5.1 Alarm signalling



Premium

Proceed as follows to fill the water circuit and check its functioning:

Switch on the machine.

Within 6 seconds, press keys 1 and 3 simultaneously and wait for all the keys to light up. Switch the machine off and back on again (the three keys flash). Open the valve and press key 2.

Status	Extra	Premium
Heating up	Indicator 1 off Indicator 2 lit Indicator 3 off	Indicator 1 flashing Indicator 2 flashing Indicator 3 off
Ready to dispense (Extra: may go out if a lot of water is dispensed)	Indicator 1 lit Indicator 2 lit Indicator 3 off	Indicator 1 lit Indicator 2 lit Indicator 3 off
Dispensing coffee (coffee ready) (Extra: may go out if a lot of water is dispensed)	Indicator 1 lit Indicator 2 lit Indicator 3 off	Indicator 1 or 2 flashing Only the selected coffee indicator flashes while the other remains off. Indicator 3 off
Dispensing hot water	Indicator 1 lit Indicator 2 lit Indicator 3 off	Indicator 1 or 2 flashing Only the selected coffee indicator flashes while the other remains off. Indicator 3 off
Heating to dispense steam	Indicator 1 off Indicator 2 lit Indicator 3 off	Indicators 1 and 2 off Indicator 3 flashing
Ready to dispense steam (steam ready)	Indicator 1 off Indicator 2 lit Indicator 3 lit	Indicators 1 and 2 off Indicator 3 lit
Back in coffee ready status after steam dispensing	Indicator 1 lit Indicator 2 lit Indicator 3 lit	Indicators 1, 2 and 3 flashing
Water finished	Not available	Indicators 1, 2 and 3 flashing





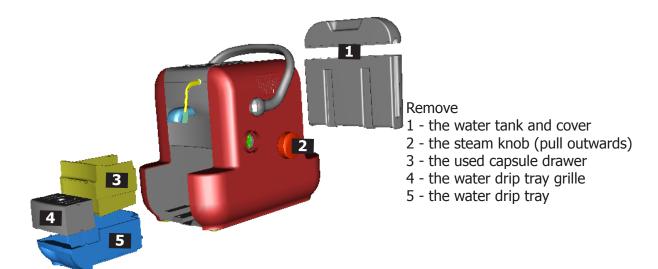
CHAPTER 6 COMPONENT ASSEMBLY AND REMOVAL

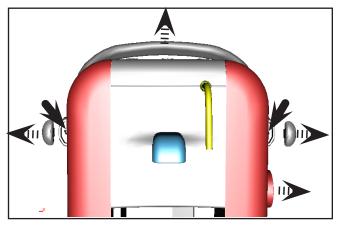
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PREMIUM - EXTRA Chapter 06



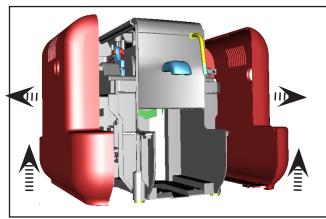
6.1 Removing the RH - LH sides and front and rear covers





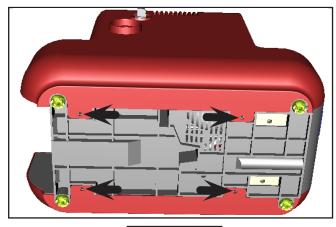
PHASE 1

Remove the steam knob and the two plugs, then unscrew the screws shown and remove the handle

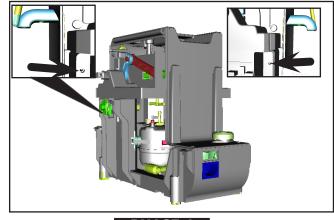


PHASE 3 Remove the RH and LH sides

PREMIUM - EXTRA Chapter 06



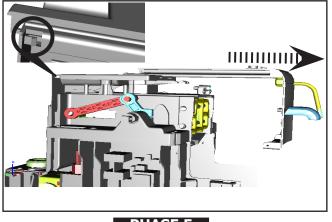
PHASE 2 Remove the screws shown



PHASE 4 Remove the screws shown

Ideas with Passion





PHASE 5

Release the anchor tabs and lift the top front cover off in a forwards direction

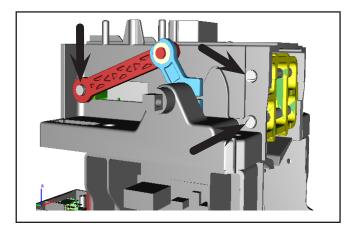
Remove the screws shown and remove the top rear cover

PHASE 6

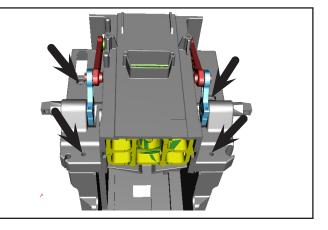
After

PHASE 5 you can access the cards (Premium), keys, and hot water/steam pipe **PHASE 6** you can access the cables, pump, turbine (Premium), boiler, solenoid valve, main switch, and power cable connector

6.2 Removing the infusion chamber cover



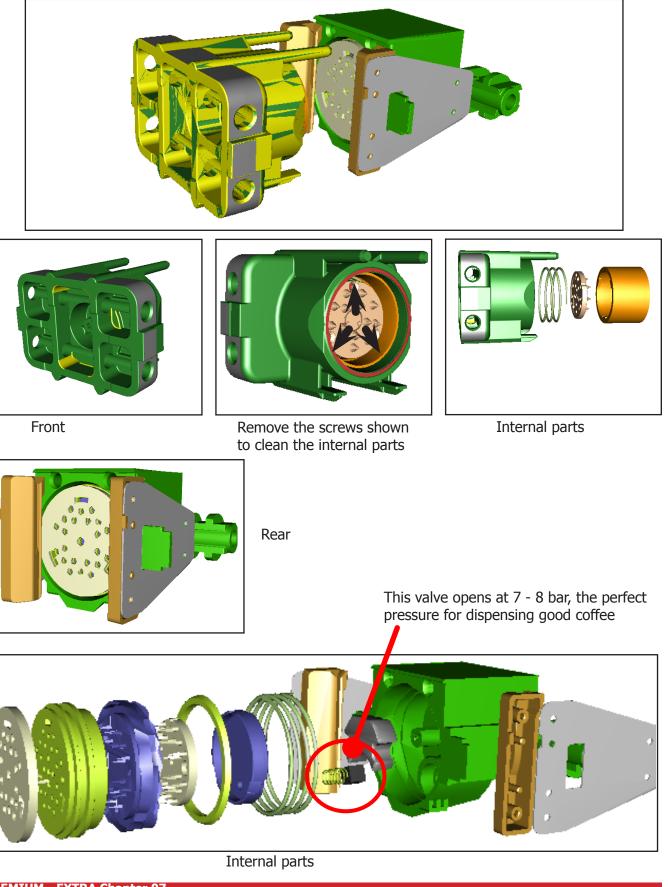
Remove the circlips shown and pull out the pins



Remove the screws shown



6.3 Infusion chamber

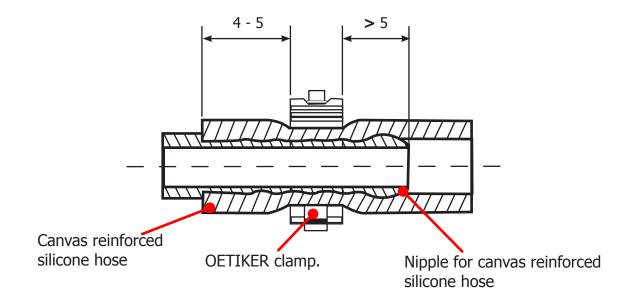


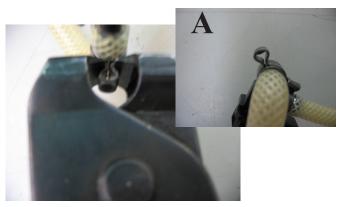
PREMIUM - EXTRA Chapter 07



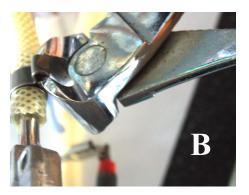
6.4 Fitting and removing OETIKER clamps

The figure shows the assembly position of the clamp.





Use a suitable pliers to tighten the clamp. Ensure correct tightening (A) and positioning as shown in figures (1) / (2).



Use a pincers as shown in (B) to remove the clamp