

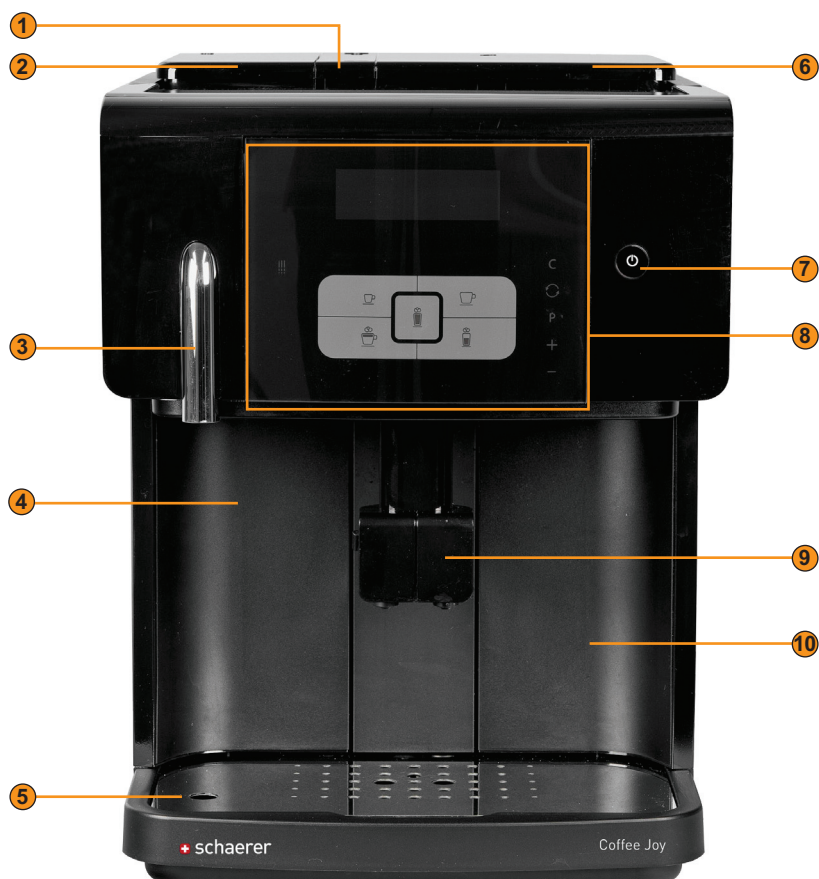
Schaerer Coffee Joy

Operating instructions

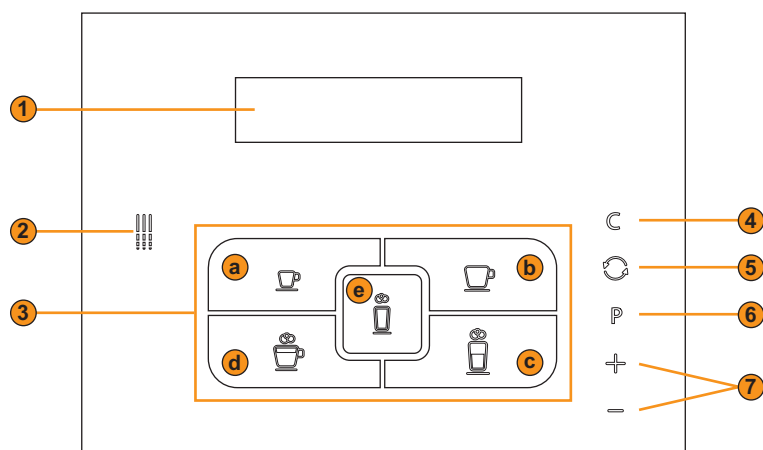
V03 / 07.2015



- 1 Inlet for ground coffee
- 2 Bean hopper
- 3 Hot water dispensing
- 4 Grounds container
- 5 Drip tray with drip grid
- 6 Brewing unit shaft cover
- 7 On/off
- 8 User panel
- 9 Beverage outlet
- 10 Drinking water reservoir



- 1 Display
 - 2 Hot water
- | Beverage buttons | | |
|------------------|-----------------|----------------|
| | Press briefly | Press and hold |
| 3 a | Espresso | 2 espressos |
| b | Café crème | 2 café crème |
| c | Latte Macchiato | Milk coffee |
| d | Cappuccino | 2 cappuccinos |
| e | Hot milk | Milk foam |
- 4 Cancel
 - 5 Cleaning menu
 - 6 Programming menu
 - 7 Change adjustable values/
Navigate through menus



Schaerer Coffee Joy

Operating instructions

V03 / 07.2015

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Introduction

Welcome

This coffee machine is part of the next generation of fully automatic coffee machines. Our company's core competence as well as decades of experience flowed into designing this equipment.

These operating instructions provide information about the product, its operation and how to clean the coffee machine. If the coffee machine is not used according to the instructions, we shall not be held liable for any damages. However, these operating instructions cannot take every conceivable application into account. For further information, please contact our customer service.

The performance of the coffee machine depends on its proper operation and maintenance. Carefully read the operating instructions before using the machine for the first time, and keep the instructions in an easily accessible place.

We hope you enjoy using your new coffee machine!

Signs and symbols



See also "Safety notes"

The following signs and symbols are used in these operating instructions to point out sources of danger and special features:

DANGER!
Risk of electrocution!



An imminently dangerous situation that may result in death or serious injury from electric shock.

The measures described to prevent this danger must be adhered to.

CAUTION!
User at risk!



A generally dangerous situation that may result in injury.

The measures described to prevent this danger must be adhered to.

CAUTION!
Risk of machine damage!



A situation that may result in damage to the machine.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot fluid!



A dangerous situation that may result in scalding injuries. This danger arises at the dispensing areas. It is only indicated by the symbol in the following instructions.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot steam!



A dangerous situation that may result in scalding injuries. This danger arises at the dispensing areas. It is only indicated by the symbol in the following instructions.

The measures described to prevent this danger must be adhered to.

CAUTION!
Hot surface!



A dangerous situation that may result in burn injuries. This danger arises at the dispensing areas and cup warmer locations (option). It is only indicated by the symbol in the following instructions.

The measures described to prevent this danger must be adhered to.

CAUTION!
Risk of trapping fingers!



A dangerous situation that may result in crushing injuries. It is only indicated by the symbol in the following instructions.

The measures described to prevent this danger must be adhered to.

Product description

Intended use

Schaerer Coffee Joy is designed to dispense variations of coffee beverages and/or milk beverages in cups or mugs. The device can also dispense hot water.

This device is designed for private and commercial use. It can be used in businesses, offices, restaurants and cafés, hotels and similar facilities. It can also be used in the home. The device must be cleaned and cared for by specially trained personnel. It may be used in self-service areas if attended to by trained personnel.



Use of this equipment is subject to the "General Terms and Conditions" of Schaerer AG and these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.

CAUTION!
Risk of machine
damage!



Improper handling of the coffee machine can result in damage.

The Schaerer Coffee Joy must not be used to heat or dispense any liquid other than coffee, hot water (beverage, cleaning) or milk (refrigerated, pasteurised, homogenised, UHT) under any circumstances.

Beverage types and output

Depending on the machine version and options, the following beverages can be prepared (specify beverage output? in cups per hour/day):

Beverages dispensed per hour (coffee - espresso)	
Beverage type	
Coffee/espresso	Up to 50 cups

Daily output (coffee - espresso)	
Beverage type	
Coffee/espresso	Up to 70 cups



Beverages that can be dispensed	
Beverage type	
Ristretto	✓
Espresso	✓
Coffee/café crème	✓
Milk coffee/latte	✓
Cappuccino	✓
Latte Macchiato	✓
Hot milk	✓
Hot milk foam	✓
Hot water	✓
Steam wand	–

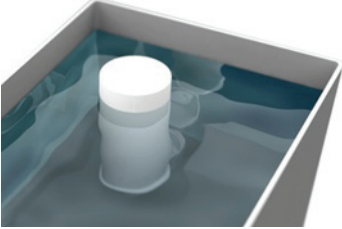

Scope of delivery and accessories

Quantity	Designation	Article number
1	Schaerer Coffee Joy coffee machine	-
Documentation		
1	Operating instructions (EN)	See the document
1	See the installation instructions of the mains water supply*	See the document
1	Weekly Cleaning Reference Card (EN)	See the document
1	Delivery Quality Form	-
General accessories		
1	Milk nozzle, black (diameter: 1.3)	33.2415.1000
1	Milk nozzle, brown (diameter: 1.5)	33.2415.2000
1	Grease for sealing rings (tube)	33.2179.9000
1	Air suction tube	33.2832.0000
1	Steam nozzle	33.2427.7000
1	Multitool	33.2397.7000
Accessory for mains water supply*		
1	FWS connector housing + drinking water tank complete	071930
1	Plug-in power supply 90 – 264 VAC/47 – 63 Hz	071910
1	Input plug, EU plug-in power supply	071911
1	Armoured hose 1.5 m 3/8"	067766
2	Flat seal 10/15x0.8	064249
2	Cable holder	071933
Cleaning/cleaning accessories		
1	"Milkpure" cleaner	071531
1	Cleaning tablets (blister with 10 tablets)	062867
1	Cleaning brushes (set of 2)	33.2408.0000
1	Carbonate hardness test (bag with 2 test strips)	067720

* * Depending on machine version.

Options and optional accessories

Example	Option	Description
	Side cooling unit	External cooling unit for machines with Milk Smart. Capacity: 2 l
	Add-on bean hopper	Additional mountable bean hopper for greater bean capacity. Capacity: 400 g

Example	Option	Description
	Water filter for internal drinking water tank	The water filter can be installed in the internal drinking water tank. Capacity: 200 l
	Mains water supply	The tank is filled via a water inlet outside of the machine. This option can be retrofitted.



For detailed information, please contact your sales partner.

Technical data


Nominal power*	1700 – 2300 W	
Operating temperature	Steam boiler	Hot water boiler
Minimum operating temperature (T min.)	130 °C	86 °C
Maximum operating temperature (T max.)	130 °C	102 °C
Overpressure	Steam boiler	Hot water boiler
Working overpressure	2.5 bar	16 bar
Permissible working overpressure (p max)	16 bar	16 bar
Test overpressure	24 bar	24 bar
Water tank capacity	2.2 l	
Bean hopper capacity	250 g	
Increased bean hopper capacity (optional)	400 g	
Grounds container capacity	20 coffee grounds cakes	
External dimensions		
Width	305 mm	
Height	405 mm	
Depth	445 mm	
Empty weight	16 kg	
Permanent noise level**	<70 dB (A)	

We reserve the right to make technical changes.

* For special equipment, see serial plate. The values specified here apply to the basic equipment.

** The A-weighted noise level (slow) and Lpa (impulse) at the workplace of the operating personnel is below 70 dB (A) for every operating mode.

Serial plate

Type	VAR	Mod.	Serial-No.	Prod. Date
030430	0001	PR	000100	02.2011
1N/PE - 50/60 Hz		220 - 240 V		max. 17 - 23 kW
permissible max. pressure		16 M Pa (16 bar)		
schaerer		Made in Germany 		
produced by WMF AG				

The serial plate is located behind the drip tray on the left side

- In the event of a fault or warranty claim, specify the information on the serial plate.

Declaration of conformity

Manufacturer's address

Manufacturer	Documentation specialist
Schaerer AG P.O.Box 336 Allmendweg 8 CH-4528 Zuchwil, Switzerland T +41 (0)32 681 62 00 F +41 (0)32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Hans-Ulrich Hostettler P.O. Box Allmendweg 8 CH-4528 Zuchwil, Switzerland

Applied standards

The following harmonised standards have been applied:

Low Voltage Directive 2006/95/EC	EMC Directive 2004/108/EC
<ul style="list-style-type: none"> • EN 60335-1:2002 +A1 +A11 +A12 +A13 +A14 +A15 +A2 • EN 60335-2-75: 2004 +A1 +A11 +A2 +A12 • EN 62233:2008 	<ul style="list-style-type: none"> • EN 55014-1:2006 +A1 • EN 55014-2:1997 +A1 +A2 • EN 61000-3-2:2006 +A1 +A2 • EN 61000-3-3:2008

Safety	EMC
<ul style="list-style-type: none"> • IEC 60335-1:2001 +A1 +A2 • IEC 60335-2-14:2006 +A1 • IEC 60335-2-15:2002 +A1 +A2 • IEC 60335-2-75:2002 +A1 +A2 • IEC 62233 Ed1:2005 	<ul style="list-style-type: none"> • CISPR 14-1 Ed 5.1: 2009 • CISPR 14-2 Ed 1.2: 2008 • IEC 61000-3-2 Ed 3.2: 2009 • IEC 61000-3-2 Ed2.1:2001 • IEC 61000-3-3:2008

The stated manufacturer declares herewith that this machine complies with all relevant stipulations of the specified EU directives. In case of any modifications of the units that have not been approved by Schaerer, this declaration is rendered invalid.

Installation and commissioning

Setting up the coffee machine

Location

CAUTION!
Risk of machine
damage!



The location where the coffee machine is set up must meet the conditions specified below. If these conditions are not ensured, the coffee machine may become damaged. Please adhere to the following conditions:

- The installation surface must be stable and level so that it does not become deformed under the weight of the coffee machine.
- Do not set up the coffee machine on hot surfaces or close to ovens.
- Set up the coffee machine in such a way that it can be monitored by trained personnel at all times.
- The required supply terminals must be within 1 m of the machine location according to the on-site installation plans.
- Maintain the following clearances for maintenance work and operation:
 - Allow enough space above the machine to refill beans.
 - Leave a clearance of ± 35 cm on the left side.
 - Leave a clearance of min. 15 cm from the rear of the machine to the wall (air circulation).
 - Leave a clearance of min. 250 mm above the machine (needed to remove the brewing unit for cleaning and maintenance).
- Comply with all applicable local kitchen regulations.

Ambient conditions

CAUTION!
Risk of machine
damage!



The location where the coffee machine is set up must provide the ambient conditions specified below. If these conditions are not ensured, the coffee machine may become damaged.

Please adhere to the following conditions:

- Ambient temperature of +10 °C to +40 °C (50 °F to 104 °F)
- Relative humidity of max. 80% RH
- The coffee machine is designed for indoor use only. Do not use in the open and never expose to the weather (rain, snow, subzero temperatures).

If the coffee machine was exposed to subzero temperatures:

- Contact customer service before commissioning.

Power supply

Conditions

The power supply connection must be made in accordance with the applicable requirements and the regulations of the respective country. The voltage specified on the serial plate must match the supply voltage at the installation location.

DANGER!
Risk of electrocution!



Danger of electric shock!
Please adhere to the following points:

- The phase must be fused at the ampere value specified on the serial plate.
- It must be possible to disconnect the device from the mains power supply at all poles.
- Never operate a device with a damaged power cable. Have a defective power cable or plug replaced immediately by a qualified service technician.
- Schaefer AG recommends against using an extension cable. If an extension cable is used despite this (minimum cross-section: 0.75 mm²), please comply with the manufacturer's specifications for the cable (operating instructions) and with locally applicable regulations.
- Route the power cable in such a way that it does not present a tripping hazard. Do not pull the cable over corners or sharp edges, pinch it between objects or allow it to hang loosely in the open. Do not position the cable over hot objects, and protect the cable from exposure to oil and aggressive cleaning products.
- Never lift or pull the device by the power cable. Never pull the plug out of the socket by its cable. Never touch the power cable or plug with wet hands. Never insert a wet plug into a power socket.

Power requirements

Mains	Power requirements			Fuse protection (site face)	Connecting cable conductor cross-section
1L, N, PE	220 – 240 V ~	50/60 Hz	1700 – 2300 W	10 – 16 A	3 x 0.75 mm ² 3 x 1 mm ²

Water connection/draining

CAUTION!
Risk of machine damage!



The machine can suffer damage due to bad material and wrong water values.
It is imperative that the following points are complied with:

The water must be free of contaminants and the chlorine content must not exceed 100 mg per litre.

Do not connect the machine to pure reverse osmosis water or other aggressive types of water.

The carbonate hardness must not exceed 5 – 6°dKH (German carbonate hardness) or 8 – 10°fKH (French carbonate hardness), and the total hardness value must always be greater than the carbonate hardness.

The minimum carbonate hardness is 4°dKH or 7°fKH. The pH value must be between 6.5 – 7.

Always use the new hose set (fresh water/waste water hose) provided with the machine.

The water supply connection must be made in accordance with the applicable requirements and the regulations of the respective country. If the machine is connected to a newly installed water pipe, the pipe and infeed hose must be rinsed well to ensure that no dirt gets into the machine.

The coffee machine must be connected to an installed drinking water line with a shut-off valve.

Power requirements

Water pressure	Minimum:	0.2 MPa (2 bar)
	Maximum:	0.6 MPa (6 bar)

Water inlet temperature	Minimum:	10°C
	Maximum:	35°C

Installation

Unpacking the machine



Read the "Setting up the coffee machine" and "Power supply" chapters carefully before installing.

- ▶ Unpack the machine.
- ▶ Check the remaining package contents for accessories.
- ▶ Remove the accessories supplied in the grounds container and water tank.



Important: When operating the machine with a mains water supply, it is important that you keep the provided internal drinking water tank. It is needed during the descaling process.

- ▶ Keep the original packaging in case the equipment needs to be sent back.

Installing the mains water supply (Option)



See the supplied installation instructions on the mains water supply.

Connecting the milk system



- ▶ Mounting the milk hose on the beverage outlet (see figure).
- ▶ Select a suitable milk nozzle (brown = for cooled milk; transparent = for uncooled milk) and insert at the lower end of the milk hose.
- ▶ Insert the beverage outlet into the holder.
- ▶ Remove the grounds container out of the coffee machine.
- ▶ Move the beverage outlet to the lowest position.



- ▶ Clamp the milk hose into the guide intended for this purpose.




See "Operation" - "Filling and connecting" - "Milk" for filling milk.

































If an external cooling unit is used: install the cooling unit as described in the operating instructions and route the milk hose from the coffee machine to the external cooling unit.

Commissioning program

When the coffee machine is started for the first time, the commissioning program is executed automatically. It goes through the initial settings step by step. A detailed description of all steps follows.

- ▶  Press the button.
 - ☑ The coffee machine switches on and the commissioning program begins.
- ▶ Follow the instructions on the touch screen.

Display/ display text	Parameter description	Setting range	Notes
language: English	<ul style="list-style-type: none"> ▶ Select the required language with  and . ▶ Confirm by touching . ☑ "Initial setup of your Coffee Joy" appears on the display in the selected language. 	German English French Dutch Swedish Danish Norwegian Russian Italian Spanish Japanese	The presetting is "English".
Time hh:mm	To set the current time: <ul style="list-style-type: none"> ▶ Set the hours with  and . ▶ Confirm by touching . ▶ Set the minutes with  and . ▶ Confirm by touching . ☑ The next commissioning step appears. 	hh = hours mm = minutes	–
Date dd:mm:yyyy	Set the current date: <ul style="list-style-type: none"> ▶ Set the day with  and . ▶ Confirm by touching . ▶ Set the month with  and . ▶ Confirm by touching . ▶ Set the year with  and . ▶ Confirm by touching . ☑ The next commissioning step appears. 	dd = day mm = month mm = year	–
Switching off time: 30 min	The switch-off time is defined in this step. After a beverage is dispensed, if the defined time elapses without another beverage being dispensed, the machine switches off automatically. <ul style="list-style-type: none"> ▶ Set the minutes with  and . ▶ Confirm by touching . ☑ The next commissioning step appears. 	0 min 5 – 180 min	If set to "0 min", the machine does not switch off automatically.
Water hardness: 13 – 16	To set the water hardness: <ul style="list-style-type: none"> ▶ Perform the water hardness test. <i>See "Service and maintenance" - "Determining the water hardness".</i> ▶ Set the water hardness with  and . ▶ Confirm by touching . ☑ The next commissioning step appears. 	0 – 4 5 – 8 9 – 12 13 – 16 > 16	–

Display/ display text	Parameter description	Setting range	Notes
Water filter: No	<p>To set the use of a water filter:</p> <ul style="list-style-type: none"> ► Set the use with  and . ► Confirm by touching . <p>Option 1: Input "no"</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The next commissioning step appears. <p>Option 2: If "yes" is set, the filter rinse is executed automatically.</p> <ul style="list-style-type: none"> ► Place a container with a capacity of ca. 3 l under the hot water outlet. ► Fill the drinking water container completely. <input checked="" type="checkbox"/> After the filter rinse cycle is completed, the next step is displayed. 	Yes/No	If "Yes" is set, a filter rinse is then executed automatically.
The machine heats up	<p>The coffee machine begins heating up.</p> <p>After heating, the coffee system is rinsed.</p> <ul style="list-style-type: none"> ► Place a container under the beverage outlet. <input checked="" type="checkbox"/> The rinse cycle takes ca. 40 sec. 	–	The coffee system rinse cleans and warms up all pipes.
 "Espresso" beverage button	<p>A test brewing is performed at the end of the commissioning program.</p> <p>The  button flashes.</p> <ul style="list-style-type: none"> ► Place a suitable container below the beverage outlet. ► Press the . <input checked="" type="checkbox"/> The test brewing starts. ► Pour away the test beverage; do not drink it. 	–	–
Your selection please	The coffee machine is now ready to use.	–	<p>All settings that were made now can be changed later.</p> <p>See "Programming".</p>

Deinstallation and disposal



The coffee machine must be disposed of correctly in conformity with local and legal regulations.

- Contact your service partner.

Operation

Check before switching on

- ▶ Before switching on the coffee machine, check whether the following conditions are fulfilled.

Conditions for switching on the coffee machine:

- The drinking water tank is filled.
- The bean hopper is filled.
- The coffee grounds container is empty and inserted correctly.
- The coffee machine is correctly connected to the mains power supply.

Filling and connecting

Beans

CAUTION!
User at risk!



Danger of injury from the rotating grinding discs in the grinder.
Never reach into the bean hopper while the coffee machine is switched on.

CAUTION!
Risk of machine damage!



Filling the hopper with foreign objects can lead to clogging or destruction of the grinder.
Never fill the bean hopper with anything other than beans.



- ▶ Open the bean hopper lid (see figure).
- ▶ Pour in coffee beans (max. 250 g).
- ▶ Close the lid again.

Water

Option 1: Standard drinking water tank

- ▶ Remove and empty the drinking water tank.
- ▶ Rinse the drinking water tank thoroughly with fresh water (min. 1x daily).
- ▶ Fill with fresh drinking water and reinsert.

Option 2: Drinking water tank with mains water supply

The machine can suffer damage if the pump runs dry.
Before switching on the machine, make sure that the main water valve is open.

- ▶ Open the stop valve on the main water valve.

For reasons relating to insurance law, it is advisable that the main water valve be closed at the end of the day.



CAUTION!
Risk of machine damage!



CAUTION!
User at risk!



Deposits and bacteria can contaminate the drinking water.
Even if the machine has a mains water connection, rinse the drinking water tank daily with fresh water without using cleaning agent.

- ▶ Remove and empty the drinking water tank.
- ▶ Rinse the drinking water tank thoroughly with fresh water (min. 1x daily).

- ▶ Reinsert the drinking water tank.

Milk

Option 1: Milk Smart



No more than 40 cm should be between the milk package and the beverage outlet.

- ▶ Have fresh, pre-cooled milk (3 – 5°C) ready.
- ▶ Hang the hose or hoses into the milk.
 - ☑ The hose end must be in contact with the container floor.




See also "Safety notes" - "Hygiene" - "Milk".

Option 2: Side cooling unit

- ▶ Open the door.
- ▶ Remove and rinse the milk container.
- ▶ Pour in fresh, pre-cooled milk (3 – 5°C).
- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose or hoses into the container.
 - ☑ The hose end must be in contact with the container floor.
- ▶ Close the door.

Switching on

- ▶  Press the button.
 - ☑ The coffee machine switches on and the greeting message appears on the display.
- ▶ Place a container under the beverage outlet.
 - ☑ The coffee machine begins heating up.
 - ☑ After heating up, the coffee machine performs a coffee system rinse (duration: ca. 40 sec).

Option 1: Mains water unit

- ▶ Connect the mains water unit to the power supply.



Note the voltage specifications on the serial plate of the mains water supply.

Option 2: Side cooling unit

- ▶ Connect the side cooling unit to the mains power supply and switch on by means of the main switch.



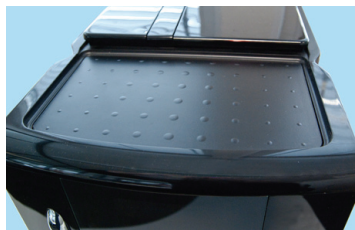
Take heed of the operating instructions of the side cooling unit.



See "Operator control" - "Filling and connecting" - "Milk" - "Option: Additional cooling unit".

Dispensing

Prewarming the cups



A storage area for cups is located on top of the coffee machine. When the machine is switched on, the storage area is heated and the cups are prewarmed.

- ▶ Place the cups on the storage area.
 - ☑ The cups are pre-warmed when the coffee machine is switched on.

Adjusting the outlet height

Hot surfaces can cause burns.

Exercise care when moving the beverage outlet.

CAUTION!
Hot surface!



- ▶ Place a cup under the beverage outlet.
- ▶ Grasp the beverage outlet from the front and slide it into the correct position (see figure).
- ▶ Remove the cup after the beverage has been dispensed.



Adjustable height = 70 – 135 mm.

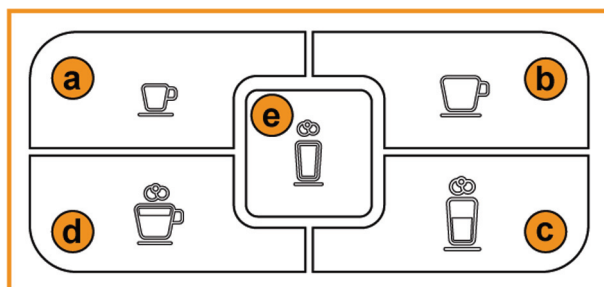
Beverages

The machine is ready to dispense a beverage when the beverage symbol appears.

- ▶ Place a cup under the beverage outlet.
- ▶ Adjust the height of the beverage outlet to the cup size.

The following beverages are available:

- a Press briefly: espresso/press and hold: 2 espressos
- b Press briefly: café creme/press and hold: 2 café cremes
- c Press briefly: latte macchiato/press and hold: Milk coffee
- d Press briefly: cappuccino/press and hold: 2 cappuccinos
- e Outlet at the top, press briefly: hot milk/outlet at the bottom, press and hold: foam



CAUTION!
Hot fluid!



- ▶ Press the desired beverage button.
 - ☑ Only the symbol of the selected beverage appears; dispensing of the beverage begins.
 - ☑ The beverage name appears on the display.
- ▶ Remove the cup after the beverage has been dispensed.



See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Hot water

Three different dosing variants are available for dispensing hot water:




The service technician can deactivate unrequired dosing variants or adjust the dosing quantity of the "dosed" variant.

- ▶ Place a cup under the hot water outlet.
- ▶ Adjust the height of the beverage outlet to the cup size.


CAUTION!
Hot fluid!





Option 1: Portion control

- ▶  Press the button.
- ☑ The set quantity is dispensed.


Option 2: Freeflow

- ▶  Press and hold the button.
- ☑ Dispensing takes place while the button is pressed.

Option 3: Start/stop



- ▶  Press the button.
- ☑ Hot water is dispensed.
- ▶ End the dispensing process by pressing the  button again.



If the dispensing process is not stopped manually by pressing the  button, the dispensing process ends automatically after a defined time period. This can be defined by the service technician.


Hot milk

Hot milk and milk foam are dispensed using the same button.

- ▶ Place a cup under the beverage outlet.
- ▶ Slide the beverage outlet to the highest position.
- ☑ Air is always added to the milk unless the outlet is in the highest position.
- ▶  Press the button (middle button).
- ☑ Hot milk is dispensed.
- ▶ End the dispensing process by pressing the  button again.


CAUTION!
Hot fluid!



If the dispensing process is not stopped manually by pressing the  button, the dispensing process ends automatically after a defined time period. This can be defined by the service technician.

Milk foam

Hot milk and milk foam are dispensed using the same button.

- ▶ Place a cup under the beverage outlet.
- ▶ Adjust the height of the beverage outlet to the cup size.
- ▶  Press and hold the button.
- ☑ Dispensing takes place while the button is pressed.

CAUTION!
Hot fluid!



Double beverages

Two beverages can be dispensed at the same time. This only applies to espresso, café creme and cappuccino.

- ▶ Place two cups under the beverage outlet.
- ▶ Adjust the height of the beverage outlet to the cup size.
- ▶ Press the required beverage button ca. 3 sec.
- ☑ Only the symbol of the selected beverage appears; dispensing of the beverage begins.
- ☑ The display shows "2x beverage name".
- ▶ Remove the cups after the beverage has been dispensed.

CAUTION!
Hot fluid!





See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Beverages with ground coffee

Incorrect use may damage the machine.

Never put anything into the inlet other than ground coffee or cleaning tablets.

CAUTION!
Risk of machine
damage!



- ▶ Open the inlet lid (see figure).
 - ☑ The "insert coff. grounds" instruction appears.
- ▶ Pour in ground coffee (max. 15 g).
- ▶ Close the inlet lid.
 - ☑ The "select beverage" instruction appears.
- ▶ Press the desired beverage button.
 - ☑ Only the symbol of the selected beverage appears; dispensing of the beverage begins.
 - ☑ The beverage name appears on the display.
- ▶ Remove the cup after the beverage has been dispensed.




See "Dispensing options" - "Stop dispensing" to stop dispensing of the beverage.

Dispensing options

Stopping continuous dispensing

The dispensing of beverages and hot water can be stopped at any time.

- ▶  Press the button.
 - ☑ The current dispensing process is stopped.



Selecting the coffee strength

Before dispensing, the coffee strength can be selected. The following strengths are available:

- Strong (ca. 15% stronger than the setting of the particular beverage)
- Normal (presetting of the particular beverage)
- Mild (ca. 15% milder than the setting of the particular beverage)

If "strong" or "mild" is selected, the grinding time of the grinder and thus the quantity of ground coffee is adjusted accordingly.

If no preselection is made, the strength is automatically set to "Normal".


- ▶ Use the  button and the  button to select the beverage strength.
 - ☑ The selection only applies to the beverage that will be dispensed next.
- ▶ Place a cup under the beverage outlet.
- ▶ Adjust the height of the beverage outlet to the cup size.
- ▶ Request the desired beverage.
 - ☑ The beverage is dispensed.
 - ☑ The beverage name and strength are shown in the display.

Emptying

Grounds container

The grounds container must be emptied regularly, at the latest when the instruction to do so appears on the display.

- ▶ Remove and empty the grounds container.

- ☑ Dispensing of beverages is blocked while the grounds container is not in place.
- ▶ Reinsert the grounds container.
- ☑ "grounds. cont. empty?" appears on the display.
- ▶ Confirm with the  button.



If the prompt is accidentally confirmed with "No" after the grounds container is emptied, the display instruction to empty the container persists. The grounds container must be removed and inserted again, and the prompt then reappears.

Drip tray

The drip tray must be emptied as soon as the floater appears, but at least once daily.

CAUTION!
Risk of trapping
fingers!



- ▶ Carefully pull out the drip tray.
- ▶ Empty the drip tray and reinsert it.
- ▶ Check that it is correctly positioned; an incorrectly inserted drip tray can cause water to leak or the machine to block.

Transport conditions

CAUTION!
User at risk!



Improper transporting of the coffee machine can result in injuries. Observe the general regulations for health and safety.

- ▶ Before moving the coffee machine, it is essential that you detach the drinking water supply, power supply and waste water outlet.
- ▶ Before moving the coffee machine, check the floor for obstacles and uneven areas.

CAUTION!
Risk of machine
damage!



Improper transport of the machine could damage the machine. Adhere to the following instructions when moving machines on a cart:

- For safety reasons, the cart must be pulled and not pushed when moving the coffee machine.
- Only pull on the cart and never on the machine.
- The cart is not intended for transporting cargo.



The manufacturer cannot be held liable for any damage resulting from unintended use of the cart or from failure to follow the operating instructions.

Display messages/instructions

The machine displays messages if intervention by a user or service technician is needed to ensure operating readiness of the machine. There are two different causes for display messages:

- Note
- Fault





Messages are usually instructions, such as the instruction to fill the drinking water tank.

- ▶ Perform the task as described in the following table.

If the display message persists, a malfunction may exist.




See "Troubleshooting" - "Fault with display message".

Display message	Cause	What to do
Empty grounds container	The grounds container is full.	<ul style="list-style-type: none"> ▶ Remove and empty the grounds container. <ul style="list-style-type: none"> ☑ Dispensing of beverages is blocked while the grounds container is not in place. ▶ Reinsert the grounds container. <ul style="list-style-type: none"> ☑ "grounds. cont. empty?" appears on the display. ▶ Confirm with the  button.
beverage sel. locked refill water tank	The drinking water tank is empty. Beverages cannot be dispensed.	<ul style="list-style-type: none"> ▶ Remove the drinking water tank and fill it with fresh drinking water. ▶ Reinsert the drinking water tank.
refill beans confirm beverage	There are not enough beans in the grinder. The grinder stops and beverage dispensing is interrupted.	<ul style="list-style-type: none"> ▶ Open the bean hopper lid (see figure). ▶ Pour in coffee beans (max. 250 g). ▶ Close the lid again. ▶ Press the beverage button again. <ul style="list-style-type: none"> ☑ Dispensing of the previously selected beverage is completed.
insert coff. grounds select beverage	The lid of the ground coffee inlet is open. Beverages cannot be dispensed.	<p>Option 1: Requesting a beverage with ground coffee</p> <ul style="list-style-type: none"> ▶ Pour in ground coffee (max. 15 g). ▶ Close the inlet lid. <ul style="list-style-type: none"> ☑ The "select beverage" instruction appears. ▶ Press the desired beverage button. <ul style="list-style-type: none"> ☑ Dispensing begins. <p>Option 2: Stopping dispensing of the beverage</p> <ul style="list-style-type: none"> ▶ Close the inlet lid. ▶ Stop dispensing with the  button.
Change water filter	The water filter in the drinking water tank must be changed.	<ul style="list-style-type: none"> ▶ Change the water filter. <p>See "Service and maintenance" - "Changing the water filter".</p>
tank lid missing?	The lid of the drinking water tank is not in place. Beverages cannot be dispensed.	<ul style="list-style-type: none"> ▶ Correctly place the lid on the drinking water tank. ▶ Slide the drinking water tank into the machine.
beverage sel. locked lid open	The brewing unit lid is open or was not closed correctly. Beverages cannot be dispensed.	<ul style="list-style-type: none"> ▶ Correctly close the brewing unit lid.
Clean display	The operating panel is dirty. The buttons no longer react.	<ul style="list-style-type: none"> ▶  Press the button for 5 sec. <ul style="list-style-type: none"> ☑ The machine switches off. ▶ Clean the display with a moist cloth. ▶  Press the button. <ul style="list-style-type: none"> ☑ The machine switches back on.

Switching off

End of operation

Only perform the following steps if the machine is not operated with automatic switching off time:

- ▶  Press the button for 5 sec.
 - ☑ If beverages with milk were prepared, an instruction to rinse the milk system appears on the display.
- ▶ Follow the instructions on the display.
 - ☑ After the milk system is rinsed, the coffee system is rinsed automatically.

CAUTION!
User at risk!



If the machine is switched off automatically via the switching off time, a milk system rinse is not performed. If the machine remains switched off for an extended period, the milk residue in the milk hose will produce germs and mould.

Perform the milk system rinse daily during the operating times. If the machine is to be switched off for an extended period, a milk system rinse must be started manually before switching the machine off.



See also "Cleaning".

- ☑ The machine switches off after the milk system is rinsed.
- ▶ Empty the grounds container, clean it and reinstall it.

Only perform the following steps if the machine is not operated with an automatic switching on time:

- ▶ Disconnect the power plug.

Option 1: Mains water supply

- ▶ Close the main water valve of the mains water supply.

Option 2: Drinking water tank

- ▶ Empty the drinking water container, clean it and reinsert it.



If this is not done, warranty claims are not valid in the event of damage.

Lengthy downtimes (more than 1 week)



During extended periods of disuse, such as during company holidays, the coffee machine and the associated accessories must be taken out of service.

- ▶ Carry out all the steps described in the "End of operation" chapter.

If the machine will be exposed to freezing subzero temperatures, the boiler must be drained beforehand:

- ▶ Please contact your service partner.

CAUTION!
Risk of machine damage!



The boilers can be destroyed by freezing water as it expands.

In rooms where the temperature can fall below freezing, the boilers must be emptied.



Perform a daily clean before putting the machine back into operation.

Cleaning

Cleaning intervals

Cleaning intervals						
Daily	Weekly	Once a month	Automatically	As instructed	As needed	
Coffee machine						
x			x	x		Coffee system rinse
x				x		Milk system rinse
	x					Clean the milk system
	x					Machine cleaning (cleaning programme)
		x				Clean the brewing unit
x						Rinse the drinking water tank with fresh water
x				x		Empty and clean the grounds container
x				x		Empty and clean the drip tray
	x					Clean the bean hopper
					x	Clean the steam nozzle
					x	Clean the outer surfaces of the coffee machine
Optional accessories/options						
x						Clean the milk container
x						Clean the interior of the side cooling unit
	x					Clean the outer surfaces of the side cooling unit

Legend

Daily:	At least once a day or more often if necessary.
Weekly:	At least once a week or more often if necessary.
Monthly:	At least once monthly or more often if necessary.
Automatically:	Automatically when switching the machine on or off.
As instructed:	An instruction appears on the display.
As needed:	As needed (if dirty).



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

Mandatory cleaning

If a due cleaning procedure is not performed despite being requested on the display, mandatory cleaning will set in (if programmed) after a certain time. When mandatory cleaning sets in, beverage dispensing is blocked.

Beverages cannot be dispensed again until after the machine has been cleaned.



Mandatory cleaning and the period that elapses before it sets in can only be programmed by the service technician.

Daily cleaning

Automatic coffee system rinsing




The coffee system rinse is automatically performed every time the coffee machine is switched on and off. User actions are not required.

Milk system rinse

If milk was dispensed, the milk system is automatically rinsed every time the coffee machine is switched off. The following steps need to be performed:

- ▶ Place a container under the beverage outlet.
- ▶ Slide the beverage outlet to the highest position.
- ▶ Insert the milk hose with the milk nozzle in the hot water outlet and turn it clockwise all the way.
 - ☑ The milk system rinse begins.
- ▶ After the milk system rinse, wipe off the outside of the milk hose with a moist cloth.

The milk system can also be rinsed as needed:

- ▶  Press the button.
 - ☑ The cleaning menu appears.
- ▶ Navigate to the "milk system rinsing" menu with the  button.
- ▶  Press the button.
- ▶ Perform all steps as described above.

Grounds container

CAUTION!
User at risk!



Coffee grounds in the grounds container can quickly lead to mould formation. The spread of mould spores in the machine results in the danger of contamination of the coffee.

Therefore, clean the grounds container daily.

- ▶ Thoroughly clean the grounds container with water and a household cleaning product.
- ▶ Rinse with clear water and dry with a clean cloth.

Drip tray

CAUTION!
Risk of machine damage!



High temperatures may lead to damage.
Never clean the drip tray in the dishwasher.



- ▶ Thoroughly clean the drip tray and the drip grid with water and a household cleaning product.
- ▶ Rinse with clear water and dry with a clean cloth.

Internal drinking water tank

CAUTION!
User at risk!



There is a contamination danger for the drinking water tank due to deposits and bacteria.
Rinse and clean the drinking water tank and lid every day; do not use cleaning products.



See also "Safety notes" - "Hygienic regulations" - "Water".

- ▶ Thoroughly rinse the drinking water tank with fresh water several times.
- ▶ Thoroughly clean the lid of the drinking water tank with fresh water.

- Dry with a clean cloth.

Milk container

CAUTION!
User at risk!



There is a danger of contamination of the milk and milk container due to milk deposits and bacteria.

Clean the milk container and lid daily and every time before filling.



See also "Safety notes" - "Hygiene rules" - "Milk".

- Mix 5 ml of the cleaning product Milkpure with 500 ml of warm water in a container.
- Clean the milk container and lid with the prepared cleaning solution.
- Rinse with clear water and dry with a clean cloth.

Interior of the side cooling unit

CAUTION!
User at risk!



There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.

Clean the cooling unit daily.

- Take the milk container out of the cooling unit.
- Wipe out the inside of the cooling unit with fresh water and a fresh, unused cloth.
- Place the milk back into the cooling unit.



See also "Safety notes" - "Hygiene rules" - "Milk".

Manual weekly cleaning

Weekly cleaning

Schaerer Coffee Joy



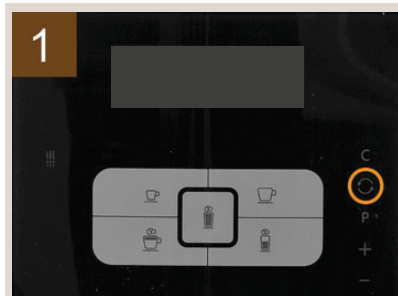
See also "Safety instructions" and "Cleaning" in the operating instructions.

CAUTION!
User at risk!



There is a risk of scalding in the dispensing area of beverages, hot water and steam.
Never reach under the dispensing areas during dispensing or cleaning.

Machine cleaning (cleaning programme)



- ▶ - Press the button.
 - ☑ The "Maintenance program" menu appears.
- ▶ Leaf through the menu to "Machine cleaning" using and .
- ▶ Confirm with .
 - ☑ The cleaning programme starts.



- ▶ Empty the drip tray.
- ▶ Fill the drinking water tank.
- ▶ Place a container (min. 2 l) under the beverage outlet.



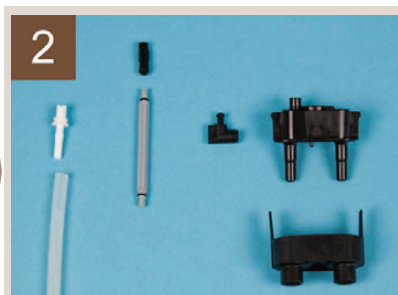
- ▶ Drop the cleaning tablet into the inlet with the little sponge.
- ▶ Close the inlet lid and confirm with .
 - ☑ Cleaning starts.
 - ☑ The remaining cleaning duration appears on the display.

Milk system cleaning (manual)



After the machine cleaning programme is finished, the instruction for manual milk system cleaning appears on the display.

- ▶ Slide the beverage outlet to the highest position.
- ▶ Press the release on the back of the beverage outlet and pull the foamer head down and off.
- ▶ Remove the grounds container and release the milk hose out of the guide.



- ▶ Disassemble all parts.
- ▶ Immerse all parts in a solution of 500 ml of hot water and 25 ml of "Milk-pure" cleaning product for ±30 min.
- ▶ Wash all parts under luke warm, running water.
- ▶ Clean the outlets of the foamer head with the brushes contained in the scope of supply.



- ▶ Let the parts dry fully.
- ▶ Reassemble all parts.
- ▶ Attach the foamer head.
- ▶ Clamp the milk hose into the guide intended for this purpose.
- ▶ Insert the grounds container.

Cleaning the bean hopper



Old bean grease in the bean hopper can have a negative impact on the coffee quality.

- ▶ Wipe the inside of the bean hopper with a moist cloth.
- ▶ Dry with a clean cloth.

CAUTION!
User at risk!



Danger of injury from the rotating grinding discs in the grinder.
Never reach into the bean hopper while the coffee machine is switched on.

CAUTION!
User at risk!



Improper handling of beans, water, milk, powder or other coffee ingredients can lead to health problems!
Comply with the hygiene regulations stipulated in HACCP!



See "Safety instructions" - "HACCP hygiene regulations" in the operating instructions.

Monthly cleaning

CAUTION!
User at risk!



CAUTION!
Risk of machine
damage!



Brewing unit

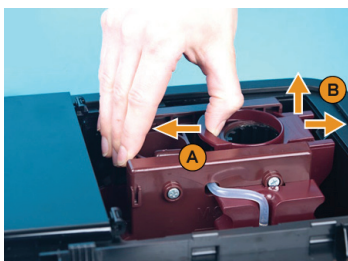
Coffee residue in the brewing unit can quickly lead to the formation of mould. The spread of mould spores in the machine results in the danger of contamination of the coffee.

Clean the brewing unit monthly (depending on the degree of soiling) as described.

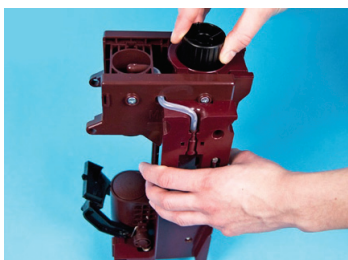
Never wash the brewing unit in a dishwasher as this may damage the unit considerably. Only clean the brewing unit as described below.



- Remove the lid over the brewing unit.



- Pull back the latch of the brewing unit (A).
- Pull the brewing unit out of the machine while pushing it slightly to the right (B).



- Turn the thread on the head of the brewing unit anticlockwise until the ejector is located in the front position.
- Clean the brewing unit under flowing water.
- Let the brewing unit dry fully before reinstalling it in the machine.
- Turn the thread on the head of the brewing unit back into the original position (rear scraper).
- Place the lid on the brewing chamber.

As needed

Outer surfaces of the coffee machine

- Switch off the machine before cleaning the outer surfaces.
- Spray a commercially available glass cleaner onto a paper towel.
- Use it to clean the user panel of the coffee machine.
- Clean the remaining outer surfaces of the coffee machine with a moist cloth.

Clean the steam nozzle

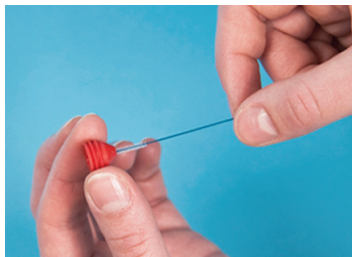
The steam nozzle is located at the top in the beverage outlet. If needed, a second steam nozzle is contained in the scope of supply.



- Slide the beverage outlet to the highest position.
- Press the release on the back of the beverage outlet and pull the foamer head down and off.



- ▶ Take out the steam nozzle located in the beverage outlet at the top.



- ▶ Clean the steam nozzle with the brush.
- ▶ Insert the steam nozzle back into the beverage outlet.
- ▶ Attach the foamer head.

Optional accessories (Option)

CAUTION!
User at risk!



There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.

Clean the cooling unit daily.

- ▶ Take the milk container out of the cooling unit.
- ▶ Wipe out the inside of the cooling unit with fresh water and a fresh, unused cloth.
- ▶ Place the milk back into the cooling unit.



See also "Safety notes" - "Hygiene rules" - "Milk".

Warm-up rinsing

The warm-up rinse rinses and warms the coffee machine pipes. If a beverage has not been dispensed for some time, a warm-up rinse can be performed before the next beverage is dispensed. This guarantees that the beverage has an optimal temperature.

- ▶ Press the button.
 - ☑ The cleaning menu appears.
- ▶ Navigate to the "warm-up rinsing" menu with the button.
- ▶ Press the button.
 - ☑ Warm-up rinsing is performed.

HACCP cleaning concept

Cleaning regulations

When installation, maintenance, care and cleaning are performed properly, Schaefer AG coffee machines satisfy the conditions of HACCP requirements.

CAUTION!
Risk of machine
damage!



If the coffee machine is not cared for and cleaned properly, the dispensing of milk beverages will become a health hazard in terms of food hygiene.

Note and adhere to the following instructions:

- Wear safety gloves during cleaning.
- Wash your hands thoroughly before and after cleaning.
- Clean the coffee machine daily after beverage dispensing has ended.
- Clean the milk container every time before filling and after you have finished dispensing beverages for the day.
- Never put cleaning products in the milk container.
- Never put cleaning products in the drinking water tank (internal/external).
- Never mix cleaning products.
- Store cleaning products separately from coffee, milk and coffee machine powder.
- Do not use any abrasive products, brushes or cleaning tools made of metal.
- Do not touch parts that come into contact with beverages after cleaning.
- Read and follow the dosing and safety instructions specified on the cleaning product.
- For daily and weekly cleaning, proceed as described in the operating instructions and on the cleaning cards.



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

Cleaning schedule

- Copy the HACCP cleaning concept and store/post it in the vicinity of the machine.
- Record each cleaning with the time and a signature.

Year: _____

☐ January☐ February☐ March☐ April☐ May☐ June☐ July☐ August☐ September☐ October☐ November☐ December

Date	Machine cleanings (time and signature):					Signature
	Perform daily!			Perform weekly!		
	Daily machine cleaning	Milk container (option)	Cleaning of cooler (option)	Weekly machine cleaning	Defrosting of cooler (option)	
1.						
2.						
3.						
4.						
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7.						
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31.						

Cleaning products

CAUTION!
Risk of machine damage!



Use of the wrong cleaning products may damage the machine.
Use only cleaning products for daily and weekly cleaning that are recommended by Schaerer AG.



Before using a cleaning product, read the information on the package label and the HEALTH & SAFETY DATA SHEET carefully. If a HEALTH & SAFETY DATA SHEET is not present, please request it from the sales partner.

Cleaning tablets

Information	
Application	Weekly cleaning, coffee system
Purpose of cleaning	Removal of grease residue in the coffee system
Application interval	Once a week

Milkpure

Information	
Application	Weekly cleaning of the milk system
Purpose of cleaning	Removal of lime scale deposits and milk stone from the milk system and steam nozzle
Application interval	Once a week

Descalers

Information	
Application	Descaling the boiler and line system
Purpose of cleaning	Removal of lime scale deposits in the coffee machine
Application interval	As instructed by the coffee machine

Service and maintenance

Descaling

When the machine needs to be descaled, a corresponding prompt appears on the display.

The interval between descaling procedures depends on the following factors:

- Water hardness
- Water flow rate
- Use of a water filter

CAUTION!
User at risk!



Danger of poisoning from ingesting or inhaling the descaler.

Do not drink or inhale the descaler or the rinse water output during the descaling process.

CAUTION!
Risk of machine damage!







Household descalers can destroy the coffee machine.

Only use Schaerer descaler for descaling. Liability cannot be accepted for damage resulting from the use of other descalers.

The descaling message on the display can be delayed by pressing the button. However, dispensing of beverages will be blocked after another 50 brewings. After that, the descaling process must be carried out.



- ▶ Slide the beverage outlet to the highest position.
- ▶ Press the release on the back of the beverage outlet and pull the foamer head down and off.
- ▶ Detach the milk hose from the foamer head.
- ▶  Press the button.
 - ☑ The cleaning menu appears on the display.
- ▶ Use the  button and the  button to navigate to the "machine descaling" menu item.
- ▶ Confirm selection using  button.
- ▶ Empty the drip tray.
- ▶ Take the drinking water tank out of the machine.

Option 1: With filter in the water tank

- ▶ Remove the water filter, including the outlet connector.



Option 2: With mains water supply/with no filter in the water tank

- ▶ Disconnect the mains water supply if present.
- ▶ Remove the water outlet screen from the water tank.



CAUTION!
User at risk!



Danger of poisoning from ingesting or inhaling the descaler.

Do not drink or inhale the descaler or the rinse water output during the descaling process.

- ▶ Pour a full bottle of Schaerer descaler (750 ml) into the drinking water tank.
- ▶ Fill the drinking water tank all the way with water.

CAUTION!
Hot fluid!



- ▶ Slide the drinking water tank back into the machine.
- ▶ Place a large container (min. 3 l) under the beverage and hot water outlet.
- ▶ Start descaling with the button.
 - ☑ The descaling process begins.
 - ☑ The remaining descaling time is shown on the display.

After approx. 30 min, the request to empty the drinking water tank appears on the display.

- ▶ Empty the drinking water tank and rinse it thoroughly.
- ▶ Confirm display instruction with the button.
- ▶ Fill the drinking water tank with fresh water and slide it back into the machine.
- ▶ Confirm display instruction with the button.
 - ☑ The descaling process is continued.
 - ☑ The remaining descaling time is shown on the display.



Recommendation: After the descaling process is completed, dispense a test beverage and pour it away.

Option 1: With filter in the water tank

- ▶ Reinstall the water filter, including the outlet connector.

Option 2: With mains water supply/with no filter in the water tank

- ▶ Reinsert the water outlet screen.
- ▶ Reconnect the mains water supply if present.

Setting the grind level

The grinding level is influenced by wear on the grinding discs. The grinding level needs to be adjusted as necessary to achieve constant grinding quality.

CAUTION!
User at risk!



Danger of injury from the rotating grinding discs in the grinder.
Never reach into the bean hopper while the coffee machine is switched on.

CAUTION!
Risk of machine damage!



If the grind level is set while the grinder is idle, the grinder can be set too firmly and may not start as a result.
The grinder must always be running while it is being adjusted.



- ▶ Open the bean hopper lid.
- ▶ Place the multitool onto the grind level adjuster (see figure).
- ▶ Press the beverage button (e.g. espresso) and wait for the grinder to start running.

Option 1: Finer setting of grind level

- ▶ Press the multitool down and turn anticlockwise.

Option 2: Coarser setting of grind level

- ▶ Press the multitool down and turn clockwise.

Water filter (Option)

Installing the water filter for the internal drinking water tank (Option)



Read the previous chapter entitled "Water quality".

The "Filter for the internal drinking water tank" initial installation set can be obtained from Schaerer AG if the water quality is insufficient (order number: 071398).



The water filter is only suitable for installation in the internal drinking water tank of the machine.



- ▶ Remove the water outlet screen installed in the water tank.
- ▶ Open the water filter box.
 - ☑ The water filter adapter is located on top, and the filter cartridge is packaged separately underneath it.



- ▶ Pull up the locking mechanism on the adapter.



- ▶ Attach the adapter to the water outlet connector from above and push down the locking mechanism.



- ▶ Unpack the filter cartridge and place it in water.
 - ☑ Tiny bubbles will rise from the cartridge.
- ▶ When there are no more bubbles, remove the filter cartridge from the water.



- ▶ Attach the filter cartridge to the adapter.



For correct calculation of the descaling time, the hardness of the water (determined by the water hardness test) and the use of a filter must be entered in the coffee machine programming.



See "Programming" - "Basis settings".

Changing the water filter for the internal drinking water tank (Option)

When the filter needs to be changed, a corresponding prompt appears on the display.

- ▶ Remove the drinking water tank from the machine.
- ▶ Take the old filter cartridge out of the adapter.



- ▶ Unpack the new filter cartridge and place it in water.
 - ☑ Tiny bubbles will rise from the cartridge.
- ▶ When there are no more bubbles, remove the filter cartridge from the water and attach it to the adapter.
- ▶ Slide the drinking water tank back into the machine.



Replacement cartridges can be ordered from Schaerer AG. The required article number is contained in the machine-specific spare parts catalogue.

Maintenance

The coffee machine requires regular maintenance. The maintenance schedule depends on multiple factors, especially the degree to which the machine is used.

When maintenance is due, the machine indicates this on the display. The machine can continue to be operated normally.

- ▶ Notify your service partner that maintenance is due.

CAUTION!
Risk of machine
damage!



Failure to perform a required maintenance in due time may lead to wear and reliable operation is no longer assured.
Inform the service partner as soon as possible after the maintenance message appears.

Programming

Navigation

Symbol	Description
⌂	<ul style="list-style-type: none"> Cancel the procedure. Leave the programming. "No" in response to prompts.
🔄	Opens the cleaning menu of the machine.
P	<ul style="list-style-type: none"> Opens the programming of the machine. "OK" to confirm new or existing settings and continue to the next menu item. "Yes" in response to prompts.
➡	<ul style="list-style-type: none"> Navigate forward in the programming. Set parameters.
⬅	<ul style="list-style-type: none"> Navigate back in the programming. Set parameters.

PIN entry

The settings in the menus listed below can be protected by a PIN (Personal Identification Number):

- Cup size
- Beverage settings
- Basic settings
- Counters

The default PIN is: 00002

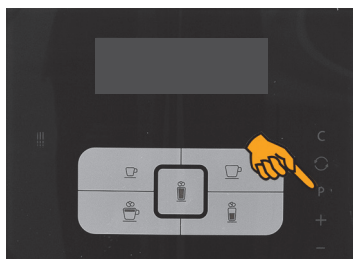


See Go to "Programming" - "Basic settings" - "Enter PIN" to change the PIN.



The functionality of "PIN entry" can be activated by a service technician.

Overview



- ▶ **P** Press the button.
 - ☑ The programming opens.
- ▶ Navigate with the ➡ button and the ⬅ button.

The programming contains the following menus:

- Cup size
- Beverage settings
- Basic settings
- Counters
- System information




The menus and menu options are described below in this chapter.




Cup size (beverage volume)

The total cup volume of the various beverages can be adjusted in the "cup size" menu.




The individual components of the beverages are adjusted to the new filling quantities without a change in the composition and quality.

- ▶ Navigate to the "cup size" menu in the programming.
- ▶  Press the button.
- ▶ Select the beverage you wish to set.
 - ☑ The "cup volume" menu appears.

Display/ display text	Parameter description	Setting range	Notes
Filling quantity: 100%	<ul style="list-style-type: none"> ▶ Set the cup volume using the  button and  button. <i>A test beverage can be dispensed by pressing the selected beverage button.</i> ▶  Press the button to exit the setting. 	50 – 150 %	–







Beverage settings

Various beverage parameters can be set in the "beverage settings" menu.

- ▶ Navigate to the "beverage settings" menu in the programming.
- ▶  Press the button.
- ▶ Select the beverage you wish to set.
 - ☑ The first menu item appears.

The menu contains:

- water volume
- strength
- milk volume
- rest period (for latte macchiato)
- sequence (dispensing sequence of milk and coffee, e.g. for cappuccino)
- pre-brewing

Menu option (display text)	Description	Setting range	Notes
Water volume: 35 ml	<p>This menu item can be used to adjust the water content of a beverage.</p> <ul style="list-style-type: none"> ▶ Set the water volume using the  button and the  button. <i>A test beverage can be dispensed by pressing the selected beverage button.</i> ▶ Press the  button to complete the setting. 	20 – 300 ml	Factory setting: Espresso: 35 ml Café Creme: 140 ml
Coffee strength: 100%	<p>The coffee strength can be adjusted for every beverage. This setting changes the grinding time in the grinder and thus the quantity of ground coffee.</p> <ul style="list-style-type: none"> ▶ Set the strength of the coffee using the  button and the  button. <i>A test beverage can be dispensed by pressing the selected beverage button.</i> ▶ Press the  button to complete the setting. 	50 – 150 %	<p>The coffee strength can also be adjusted for each individual beverage that is dispensed.</p> <p><i>See "Operation" - "Select coffee strength".</i></p>

Menu option (display text)	Description	Setting range	Notes
Milk volume: 9 sec	<p>This menu item can be used to set the dispensing duration of the milk and thus the milk quantity.</p> <p>► Set the milk quantity using the \oplus button and the \ominus button.</p> <p><i>A test beverage can be dispensed by pressing the selected beverage button.</i></p> <p>► Press the \mathbb{P} button to complete the setting.</p>	2 – 60 sec	<p>Factory setting:</p> <p>Cappuccino: 9 sec</p> <p>Latte Macchiato: 19 sec</p>
Rest period: 15 sec	<p>The rest period is a pause between the milk output and the coffee output.</p> <p>► Set the duration of the rest period with the \oplus button and the \ominus button.</p> <p><i>A test beverage can be dispensed by pressing the selected beverage button.</i></p> <p>► Press the \mathbb{P} button to complete the setting.</p>	2 – 60 sec	<p>When dispensing latte macchiato, the rest period allows time for the milk to settle. This results in the pronounced layering typical of this beverage.</p> <p>Recommendation: 15 sec</p>
Sequence: milk-coffee	<p>This menu item can be used to set the output sequence of the milk and coffee.</p> <p>► Set the sequence using the \oplus button and the \ominus button.</p> <p><i>A test beverage can be dispensed by pressing the selected beverage button.</i></p> <p>► Press the \mathbb{P} button to complete the setting.</p>	<p>milk-coffee</p> <p>milk+coffee</p> <p>coffee-milk</p>	–
Pre-brewing: 9 sec	<p>This menu can be used to switch pre-brewing on or off.</p> <p>During pre-brewing, the ground coffee is moistened with water to let it swell. This enables a uniform and more thorough extraction. The brewing process is lengthened slightly.</p> <p>► Switch pre-brewing on and off using the \oplus button and the \ominus button.</p> <p><i>A test beverage can be dispensed by pressing the selected beverage button.</i></p> <p>► Press the \mathbb{P} button to complete the setting.</p>	2 – 60 sec	<p>Recommendation:</p> <p>Activate pre-brewing for espresso, cappuccino and latte macchiato.</p>

Basic settings


Various machine parameters can be set in the "basic settings" menu.

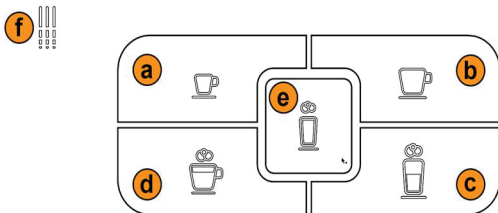
- Navigate to the "basic settings" menu in the programming.
- \mathbb{P} Press the button.
 - ☒ The first menu item appears.

The menu contains:

- language
- time
- date
- date/time (display)
- switch-on/off time
- water hardness
- water filter
- sound
- brewing temperature
- factory setting
- display contrast

Menu option (display text)	Description	Setting range	Notes
Language: German	<ul style="list-style-type: none"> ▶ Set the language using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button to exit the setting. 	German, English, Dutch, Spanish, French, Italian, Danish, Swedish, Norwegian	–
Time: hh/mm/ss	<ul style="list-style-type: none"> ▶ Set the hours using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button. ▶ Set the minutes using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button. ▶ Set the seconds using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button to exit the setting. 	hh: 00 – 23 mm: 00 – 59 ss: 00 – 59	–
Date: dd/mm/yy	<ul style="list-style-type: none"> ▶ Set the day using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button. ▶ Set the month using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button. ▶ Set the year using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button to exit the setting. 	dd: 01 – 31 mm: 01 – 12 dd: 2000 – 2099	If a non-existent date is entered (e.g. 31.06.2011), the date returns to its initial value after the setting is exited.
Date/time: On	<p>This menu item can be used to switch the date and time display on and off.</p> <ul style="list-style-type: none"> ▶ Switch the display on and off using the \oplus button and \Rightarrow button. ▶ \mathbb{P} Press the button to exit the setting. 	On/Off	–

Menu option (display text)	Description	Setting range	Notes
Switching on time: On	<p>This menu item can be used to set the coffee machine to switch on automatically at a certain time.</p> <ul style="list-style-type: none"> ► Switch the switch-on time on or off using the \oplus button and \ominus button. ► \mathbb{P} Press the button. <p>The switch-on time is set to "on":</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The time setting for the switch-on time appears. ► Set the switch-on time using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. 	On/Off	<p>Recommendation:</p> <p>Set the machine to switch on 10 min before it needs to be ready for operation. The machine will then be warm and ready to dispense beverages by the time it needs to be operational.</p> <p>Before beginning with dispensing, ensure that the drinking water tank is full or that the mains water supply is connected.</p>
Switching off time: 30 min	<p>The switch-off time setting is used to switch off the machine after a certain period elapses during which no beverage was dispensed.</p> <ul style="list-style-type: none"> ► Set the switch-off time using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. <p>The machine needs to be switched on again to dispense the next beverage.</p> <div style="background-color: #ffe6e6; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">CAUTION!</p> <p style="text-align: center;">Risk of machine damage! </p> </div> <p>If the machine is switched off automatically via the switching off time, a milk system rinse is not performed. If the machine remains switched off for an extended period, the milk residue in the milk hose will produce germs and mould.</p> <p>Perform the milk system rinse daily during the operating times. If the machine is to be switched off for an extended period, a milk system rinse must be performed before switching the machine off.</p>	0 (= off) 5 – 112 min	Automatic switching off of the machine during extended periods of disuse saves power.
Water hardness: 5-8	<p>This menu item can be used to set the hardness of the water being used in the coffee machine.</p> <ul style="list-style-type: none"> ► Set the water hardness using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. 	0-4 5-8 9-12 13-16 > 16	<p>This parameter is set during the commissioning program.</p> <p>See "Installation and commissioning" - "Commissioning program" for further information.</p>
Water filter: Yes	<p>This menu item can be used to set the use of a water filter.</p> <ul style="list-style-type: none"> ► Set the use of a water filter to "yes" or "no" using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. 	Yes/No	<p>This parameter is set during the commissioning program.</p> <p>See "Installation and commissioning" - "Commissioning program" for further information.</p>
Acoustic signal: On	<p>This menu item can be used to switch the acoustic signal for navigation in the programming and for beverage dispensing on and off.</p> <ul style="list-style-type: none"> ► Switch the acoustic signal on or off using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. 	On/Off	–

Menu option (display text)	Description	Setting range	Notes
Water tank yes/no	Under this menu item, you define whether a normal drinking water tank or the mains water supply option is being used. ► Set the use of a water filter to "yes" or "no" using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting.	Yes = drinking water tank No = mains water supply	This parameter is available as of software version 0.10.
Brewing temperature: 92°C	This menu item can be used to set the brewing water temperature. ► Set the temperature using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting.	60 – 95°C	Recommendation: 92°C
Factory setting	Activating the factory setting resets all programming settings to the factory setting. ► Set the factory setting to "yes" or "no" using the \oplus button and \ominus button. ► \mathbb{P} Press the button to exit the setting. <input checked="" type="checkbox"/> The "yes" setting resets all settings to the factory settings.	Yes/No	–
display contrast	This menu item can be used to set the display contrast. ► Set the contrast using the \oplus button and \ominus button. <input checked="" type="checkbox"/> The contrast changes simultaneously. ► \mathbb{P} Press the button to exit the setting.	Lighter + softer/ darker + sharper	–
Change PIN	The PIN for changing settings and clearing the counters can be changed individually. ► Set the PIN using the beverage buttons.  a = 1 b = 2 c = 3 d = 4 e = 5 f = 0	5-digit PIN The numbers 0 to 5 are available	Default PIN = 00002






Counters

In the "counters" menu, the dispensing counter for all beverages can be viewed and cleared.

- Navigate to the "counters" menu in the programming.
- \mathbb{P} Press the button.
- Select the beverage you wish to set.
 - ☒ The first menu item appears.


The menu contains:

- Counter, Espresso
- Counter, Café Creme
- Counter, Cappuccino
- Counter, Latte Macchiato
- Counter, mug of milk
- Counter, Hot Water
- Counter, 2x espresso
- Counter, 2x café creme
- Counter, 2x cappuccino
- total counter
- reset all counters

Menu option (display text)	Description	Setting range	Notes
Espresso: 23	<p>► All beverage counters are listed in the "counters" menu. Navigate through the counters using the  button and  button.</p>	Espresso Café Creme Cappuccino Latte Macchiato Mug of milk Hot Water 2x Espresso 2x Café Creme 2x Cappuccino	–
Total counter: 50	<p>The total count of all dispensed beverages is displayed after the individual counters.</p> <p>► Navigate further using the  button.</p>	–	–
Reset all counters	<p>The prompt to reset all counters appears at the end.</p> <p>► Press the  button for "Yes" to reset all counter values.</p> <p>or</p> <p>► Press the  button for "No" to retain all counter values.</p>	Yes/No	–

System information

The "system information" menu contains information on the machine.

- Navigate to the "system information" menu in the programming.
-  Press the button.
 - ☒ The first menu item appears.

The menu contains the following information:

- Software version and date
- Machine name and version
- Fabrication number
- Production date

Troubleshooting

General troubleshooting procedure:

- ▶ Switch the coffee machine off and, after several seconds, on again.
 - ☑ In most cases, the fault will be eliminated automatically.
- ▶ Repeat the steps that led to the fault.

If the fault occurs again:

- ▶ Find the fault in the following tables.
- ▶ Perform the described troubleshooting steps.

If the fault persists:

- ▶ Contact your service partner and describe the fault.



If a fault occurs that is not described in this chapter, please contact your service partner immediately.

Faults with display message

Messages are displayed if intervention by a user or service technician is needed to ensure operating readiness of the machine. There are two different causes for display messages:

- Note
- Fault



See "Operation" - "Display messages" for notes.

The following table describes display messages pertaining to faults as well as the steps needed to eliminate these.

Display message	Cause	What to do
place brewer	The brewing unit is not inserted.	▶ Insert the brewing unit.
Brewer position switch	The brewing unit is not correctly inserted.	▶ Check that the brewing unit is correctly seated.
	The brewing unit is stiff.	▶ Remove the brewing unit. <ul style="list-style-type: none"> ☑ There are two nozzles with black sealing rings on the inside of the machine. ▶ Grease the sealing rings with grease from the accessories. ▶ Reinsert the brewing unit.

Display message	Cause	What to do
Flow stopped	There is too much air in the pipes.	► Dispense a cup of hot water. ☑ This bleeds the pipes.
	The water filter or the associated sieve is clogged.	► Clean the sieve of the water filter. If this does not eliminate the problem: ► Change the water filter.
	The non-return valve at the outlet of the drinking water tank is contaminated.	► Clean the outlet and the non-return valve with one of the small brushes in the accessories.
	The brewing unit is clogged.	► Remove and clean the brewing unit. <i>See "Cleaning" - "Weekly cleaning".</i>
	The grind level is too fine. The fine coffee powder contaminates the pipes.	► Set the grind level to a coarser setting. <i>See "Service and maintenance" - "Finer setting of grind level".</i> ► Remove and clean the brewing unit. <i>See "Cleaning" - "Weekly cleaning".</i>
Cleaning halted Clear flow stopped	The brewing screen is clogged.	► Clean the brewing screen. <i>"Cleaning" - "Weekly cleaning".</i>
Motor driver fault	System error	► Switch the machine off and back on.
grinder blocked	The grinder is blocked.	► Switch off the machine and disconnect the power plug. ► Stir the coffee beans in the bean hopper using a spoon. If the error persists: ► Switch off the machine and disconnect the power plug. ► Extract the beans, check the grinder and remove any blockages.
Temperature sensor steam	Overheating	► Switch off the machine and let it cool for some time.
Temperature sensor water	Overheating	► Switch off the machine and let it cool for some time.

Faults without display message

Fault description	Cause	What to do
No milk foam or milk output although there is milk in the container.	The milk hose is kinked at some location, preventing milk from flowing.	► Check the milk hose and reroute if necessary.
	The foamer head is clogged.	► Take the foamer head out of the beverage outlet and clean it. <i>See "Cleaning" - "Weekly cleaning".</i>
No milk foam, only warm milk.	Blockage in milk system.	► Clean the milk system. <i>See "Cleaning" - "Weekly cleaning".</i>
The milk or milk foam is too cold.	Wrong milk nozzle.	The scope of delivery contains two different milk nozzles. ► Change the milk nozzle.

Fault description	Cause	What to do
The milk is too hot, its quantity is too low or the milk foam has bubbles..	The milk in the milk container is too warm.	<ul style="list-style-type: none"> ▶ Only use pre-cooled milk (3 – 5°C). ▶ Cool the milk constantly during use.
	Wrong milk nozzle.	<p>The scope of delivery contains two different milk nozzles.</p> <ul style="list-style-type: none"> ▶ Change the milk nozzle.
The water tank is difficult to slide in place.	The O-ring on the water outlet connector must be greased.	<ul style="list-style-type: none"> ▶ Grease the O-ring with grease from the accessories.
The brewing unit is difficult to pull out and slide back in.	The brewing unit is stiff.	<ul style="list-style-type: none"> ▶ Remove the brewing unit. <ul style="list-style-type: none"> ☑ There are two nozzles with black sealing rings on the inside of the machine. ▶ Grease the sealing rings with grease from the accessories. ▶ Reinsert the brewing unit.
The pump makes loud noises.	There is too much air in the pipes.	<ul style="list-style-type: none"> ▶ Dispense a cup of hot water. <ul style="list-style-type: none"> ☑ This bleeds the pipes.
The coffee has no crema.	The coffee is no longer fresh.	<ul style="list-style-type: none"> ▶ Replace the beans.
	The grind level is too coarse.	<ul style="list-style-type: none"> ▶ Set the grind level to a finer setting. <p>See "Cleaning" - "Weekly cleaning".</p>
The brewing unit cannot be re-inserted.	The brewing unit is in the wrong position.	<ul style="list-style-type: none"> ▶ While inserting the brewing unit, readjust it using the multitool until it can be reinserted.
The brewing unit cannot be pulled out.	The brewing unit is in the wrong position.	<ul style="list-style-type: none"> ▶ Readjust the brewing unit using the multitool until it can be pulled out.
Internal/external cooling unit is not cooling.	The cooling unit is not switched on or is switched on incorrectly.	<ul style="list-style-type: none"> ▶ Set the rocker switch on the rear of the cooling unit to "COLD".

Water quality

A cup of coffee consists of 99 percent water. Therefore, the water has a significant effect on the coffee's taste. To obtain an excellent cup of coffee, you need excellent water.

The water is important not only to the taste of the coffee but also to the coffee machine itself. Poor water quality can lead to permanent machine damage.

Therefore, close attention needs to be paid to the water quality in order to obtain high quality coffee and protect the coffee machine.

Water values

CAUTION!
Risk of machine
damage!



Poor water values can lead to machine damage.

It is imperative that the specified values be complied with. Otherwise, Schaerer AG shall not accept liability.

The following water values are a precondition for the correct operation of the coffee machine:

- 5 – 6°dKH (German carbonate hardness)
- 7 – 8°dGH (German total hardness)
- pH value 6.5 – 7 (pH-neutral)
- Chlorine content max. 100 mg per litre

Water is referred to as hard or soft depending on its composition. The hardness of water is referred to as its total hardness.

The total hardness is differentiated into carbonate hardness (temporary hardness) and non-carbonate hardness (permanent hardness). In terms of the water hardness, the concentration of bicarbonate anions (HCO_3^-) is of special significance. The concentration of hydrogen carbonate ions, or the equivalent quantity of alkaline earth metal ions, is referred to as the carbonate hardness.

International conversion table (factors apply to total hardness and carbonate hardness)						
Unit		° dH	° eH	° fH	ppm	mmol/l
German hardness	1°dH	1	1,253	1.78	17.8	0.1783
English hardness	1°eH	0,798	1	1.43	14.3	0,142
French hardness	1°fH	0,560	0,702	1	10	0.1
Part(s) per million (USA)	1 ppm	0,056	0.07	0.1	1	0.01
Millimole per litre	1 mmol/l	5.6	7.02	10	100	1



acidic

neutral

alkaline

0

7

14

If the water values do not correspond to the values specified above, the water must be prepared accordingly (descaling/enrichment with minerals).



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

Determining the water hardness

A water hardness test must be performed to determine whether a water filter is needed. If the water values are poor, trouble-free operation of the machine cannot be ensured.

The water values must also be entered when the machine is taken into service and can be readily adjusted in the machine menu. On the basis of the entered values, the machine calculates the time to the next filter change (if a filter is in use) and the time to the next descaling routine.

- Check whether a house filter system is already connected upstream from the machine.



In most bodies of water, the carbonate hardness is markedly lower than the total hardness. This is a good indicator for determining whether the water is straight from the mains or if it first passed through a house filter system.



Option 1: Request information from the municipal water utility

- Ask the local drinking water supplier for information on the water hardness (total hardness) of the drinking water.

Option 2: Performing a test

- Measure the water hardness using a test strip.
- Dip the test strip into the tap water for ca. 1 sec.
- Remove the test strip and wait for ca. 1 min.
 - ☑ The test strip changes colour.
- Compare the water analysis result with the "Total hardness" table in the "Water values" chapter.
- Install a water filter if the test result is poor.



See "Filter equipment" in this chapter or, for machines that are operated with drinking water, see the chapter entitled "Service and maintenance" - "Installing a water filter for the internal drinking water tank".

Filter technology

To protect the coffee machines and the coffee quality against hard or soft water, filters are used. Filters are essential for the care and maintenance of the machine, not to mention for hygiene, and for the best quality of coffee.

Even when using a filter, it is still necessary to measure the water values once a year. Water is a living element and therefore changes frequently.



The service partner can provide detailed information on filter options and versions and can install this equipment at your location.

Safety notes

Maximum safety is one of the most important features of Schaefer AG products. The effectiveness of the safety devices is guaranteed only if the following instructions are observed to prevent injuries and health hazards:

- Read the User Manual carefully before using the device.
- Do not touch hot machine parts.
- Do not use the coffee machine if it is not working properly or is damaged.
- Under no circumstances may the installed safety devices be modified.

User at risk

DANGER!
Risk of electrocution!



Improper handling of electrical devices can result in electric shock.
Please adhere to the following points:

- Work on electrical systems may only be performed by skilled electricians.
- The device must be connected to a fused electrical network (we recommend passing the connection through a fault current circuit breaker).
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- The connection must be properly earthed and protected from electric shock.
- The voltage must correspond to the data on the device's serial plate.
- Never touch energised parts.
- Before carrying out service work, always switch off the main switch and/or disconnect the device from the power supply system.
- The power cable may only be replaced by qualified service technicians.

CAUTION!
User at risk!



Improper handling of the coffee machine can lead to light injuries.
Please adhere to the following points:

- This device is not intended to be operated by persons (including children) with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge unless they are supervised by a person responsible for their safety or obtain instructions from this person on how to operate the device.
- Supervise children to ensure that they do not play with the device.
- The coffee machine must be installed so that there are no impediments to care and maintenance.
- Whether the machine is used for self-service or full-service operation, trained personnel must monitor the machine to ensure that the care measures are performed and that personnel is available to answer questions regarding its use.
- Fill the bean hopper with beans only, the powder container with coffee machine powder only and the manual inlet with ground coffee only (or cleaning tablets during cleaning).

CAUTION!
User at risk!



Beverages containing additional products or traces of these products may trigger allergies.

Please adhere to the following points:

- When used in self-service mode, a sign displayed in the vicinity of the machine should provide information about any additional products used which could trigger an allergic reaction.
- When used in operator service mode, trained personnel should provide information about any additional products used which could trigger an allergic reaction.

CAUTION!
Hot fluid!



There is a risk of scalding in the dispensing area of beverages, hot water and steam.
Never reach under the dispensing points while the machine is dispensing or during cleaning.

CAUTION!
Hot surface!



The dispensing areas and the brewing unit may be hot.
Do not touch any part of the dispensing equipment except the grips provided for this purpose. Only clean the brewing unit when the coffee machine has cooled down.

CAUTION!
Risk of trapping
fingers!



There is a risk of trapping fingers or hands when handling moving components. While the coffee machine is switched on, never reach into the bean or powder containers or into the opening of the brewing unit.

Risk from cleaning products

Application

CAUTION!
User at risk!



Danger of poisoning from swallowing cleaning products.
Please adhere to the following points:

- Store cleaning products away from children and unauthorised persons.
- Do not swallow the cleaning products.
- Never mix cleaning products with other chemicals or acids.
- Never put cleaning products in the milk container.
- Never put cleaning products in the drinking water tank (internal/external).
- Only use the cleaning and descaling products for their intended purpose (see label).
- Do not eat or drink while handling cleaning products.
- Ensure that the area is well-ventilated when handling cleaning products.
- Wear safety gloves when handling cleaning products.
- Wash your hands thoroughly after handling cleaning products.



Before using cleaning products, read the information on the package label carefully. If not available, the HEALTH & SAFETY DATA SHEET can be obtained from the sales partner (see the cleaning product packaging).

Storage

Please adhere to the following points:

- Store in a place that is inaccessible to children and unauthorised persons.
- Protect cleaning products from heat, light and moisture.
- Store in a separate location from acids.
- Store in the original packaging only.
- Store cleaning products for daily and weekly use separately.
- Do not store together with foodstuffs or other edibles.
- Local regulations regarding the storage of chemicals (cleaning products) apply.

Disposal

If the cleaning product must be disposed of unused, dispose of it and the packaging according to the local and legal rules and regulations.

Emergency information

Obtain the phone number of the emergency information service (toxicology information centre) from the cleaning product manufacturer (see cleaning product label). If your country does not have this type of institution, note the following table:

Swiss Toxicological Information Centre	
International calls	+41 44 251 51 51
Call from Switzerland	145
Internet	www.toxi.ch

Risk of damage to the machine

CAUTION!
Risk of machine
damage!



Improper handling of the coffee machine can lead to damage or contamination.
Please adhere to the following points:

- For water with a carbonate hardness above 5°dKH, install a water filter, as otherwise the coffee machine can be damaged due to calcification.
- For insurance law reasons, always ensure that after closing for the day, the main water valve (coffee machine with mains water supply) is closed and the electrical main switch is switched off or the power plug is unplugged.
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- Do not operate the device if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- To prevent water damage in case of hose breakage, Schaerer AG recommends routing the water supply connection via a water stop valve (at the installation site).
- After extended downtime (e.g. holiday), the coffee machine must be cleaned before it is put back into operation.
- Protect the coffee machine from the weather (frost, moisture, etc.).
- Faults may be remedied by a qualified service technician only.
- Only use Schaerer AG original spare parts.
- Report any noticeable damage or leaks immediately to an authorised service partner and have any faulty parts replaced and/or repaired.
- Never spray the device with water or clean it with a steam cleaner.
- When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.
- Only fill the bean hopper with coffee beans, the powder container with automatic machine powder and the inlet for ground coffee with ground coffee (or cleaning tablets during cleaning).
- Never use freeze-dried coffee as it clogs the brewing unit.
- If the coffee machine and/or auxiliary equipment is transported at temperatures below 10°C, the coffee machine and/or auxiliary equipment must be stored at room temperature for three hours before connecting the coffee machine and/or auxiliary equipment to the power supply and switching them on. If this instruction is not followed, condensed water may result in short circuits or damage to electrical components.
- Always use the new hose set delivered with the machine (drinking water/waste water hose). Never use old hose sets.

Hygiene regulations

Water

CAUTION!
User at risk!



Improper handling of water can lead to health problems.
Please adhere to the following points:

- The water must be uncontaminated.
- Do not connect the machine to pure reverse osmosis water or other aggressive types of water.
- The carbonate hardness must not exceed 5-6 °dKH(German carbonate hardness) or 8.9-10.7 °fKH(French carbonate hardness).
- The total hardness must always be higher than the carbonate hardness.
- The minimum carbonate hardness is 5 °dKH or 8.9 °fKH.
- Maximum chlorine content of 100 mg per litre.
- pH value between 6.5–7 (pH neutral).

Machines with drinking water tank (internal & external):

- Fill the drinking water tank daily with fresh water.
- Rinse the drinking water tank thoroughly before filling.

Coffee

CAUTION!
User at risk!



Improper handling of coffee can lead to health problems.
Please adhere to the following points:

- Check the packaging for damage before opening.
- Do not add more beans than will be needed for one day.
- Close the bean hopper lid immediately after filling.
- Store coffee in a cool, dry, dark place.
- Store coffee separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Milk

CAUTION!
User at risk!



Improper handling of milk can lead to health problems.
Please adhere to the following points:

- Do not use unpasteurised or raw milk.
- Only use pasteurised milk or milk heated at ultra-high temperatures.
- Only use homogenised milk.
- Use pre-cooled milk at a temperature between 3–5 °C.
- When working with milk, wear protective gloves.
- Use milk directly from the original packaging.
- Never refill milk. Always clean the container thoroughly before filling.
- Check the packaging for damage before opening.
- Do not add more milk than will be needed for one day.
- Close the milk container lid and cooling unit (internal/external) immediately after filling.
- Store milk in a cool, dry (max. 7 °C) and dark place.
- Store milk separately from cleaning products.
- Use the oldest products first ("first-in-first-out" principle).
- Use before the expiry date.
- Always reclose packages after opening to ensure that the contents remain fresh and are protected from contamination.

Liability

Operator responsibilities

The operator must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaefer AG service partner, a representative thereof, or other authorised persons.

Schaefer AG must be notified in writing of any defects within 30 days. For hidden defects, this period is extended to 12 months from the date of installation (work report, handover report), but no longer than 18 months after the product leaves the factory in Zuchwil.

Safety-relevant parts such as safety valves, safety thermostats, boilers etc. must not be repaired in any circumstances. They may only be replaced.

The following intervals apply:

- Safety valves: every 24 months.
- Boilers (steam boilers, flow heaters): every 72 months.

These measures are performed by a Schaefer AG service technician or your service partner as part of the maintenance routine.

When using additional products it is the responsibility of the operator to provide information on any properties which may trigger an allergic reaction.

Warranty and liability

No responsibility will be taken for warranty or liability claims in the event of personal injury or material damage as a result of one or more of the following causes:

- Improper use of the device.
- Improper mounting, commissioning, operation, cleaning and maintenance of the device and the associated optional devices.
- Failure to observe maintenance intervals.
- Operating the unit with defective safety devices or safety and protective equipment that is not properly installed or is not functional.
- Failure to observe the safety notes in the operating instructions pertaining to storage, installation, commissioning, operation and maintenance of the machine.
- Operating the device when it is not in perfect condition.
- Repairs carried out improperly.
- Use of spare parts that are not original Schaefer AG spare parts.
- Use of cleaning products that are not recommended by Schaefer AG.
- Catastrophic incidents due to foreign objects, accidents, vandalism or force majeure.
- Penetrating the device with any type of object or opening the housing.

The manufacturer assumes the warranty with respect to any liability claims only and exclusively if the specified maintenance and service intervals are adhered to and if original spare parts were used that were ordered from the manufacturer or another authorised supplier.



The "General Terms and Conditions" of Schaefer AG apply.