

TECHNICAL INFORMATION
CVA4070 / CVA4075 Coffee System

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A **Warning and Safety Instructions**

General

All repairs should be performed by a trained technician in strict accordance with national, state and local codes. Any repairs or maintenance performed by unqualified personnel could be dangerous.

When servicing, modifying, testing or maintaining appliances, all applicable laws, regulations and accident prevention guidelines must be observed.

Before any service work is started, the machine must be safely disconnected from its power source.

Even with the machine switched off, voltage may exist on some components.

After work has been completed, as a matter of standard practice, a visual as well as an operational check should be performed.

A touch current measurement has to be performed on all components that are not connected to ground.

Note

Prior to starting service or repair work, remove all containers and the drip tray with the spill guard grid from the appliance.

Risk of burning or scalding

Components maybe hot.

Pressurized steam maybe present.

To protect from burns

1. switch the appliance off about 1 hour before starting service or repair work, so the flow-thru heaters can cool down, or
2. in the service mode, pump water through the flow-thru heaters for about 1 minute, so they can cool down.

Touch current measurement

Note

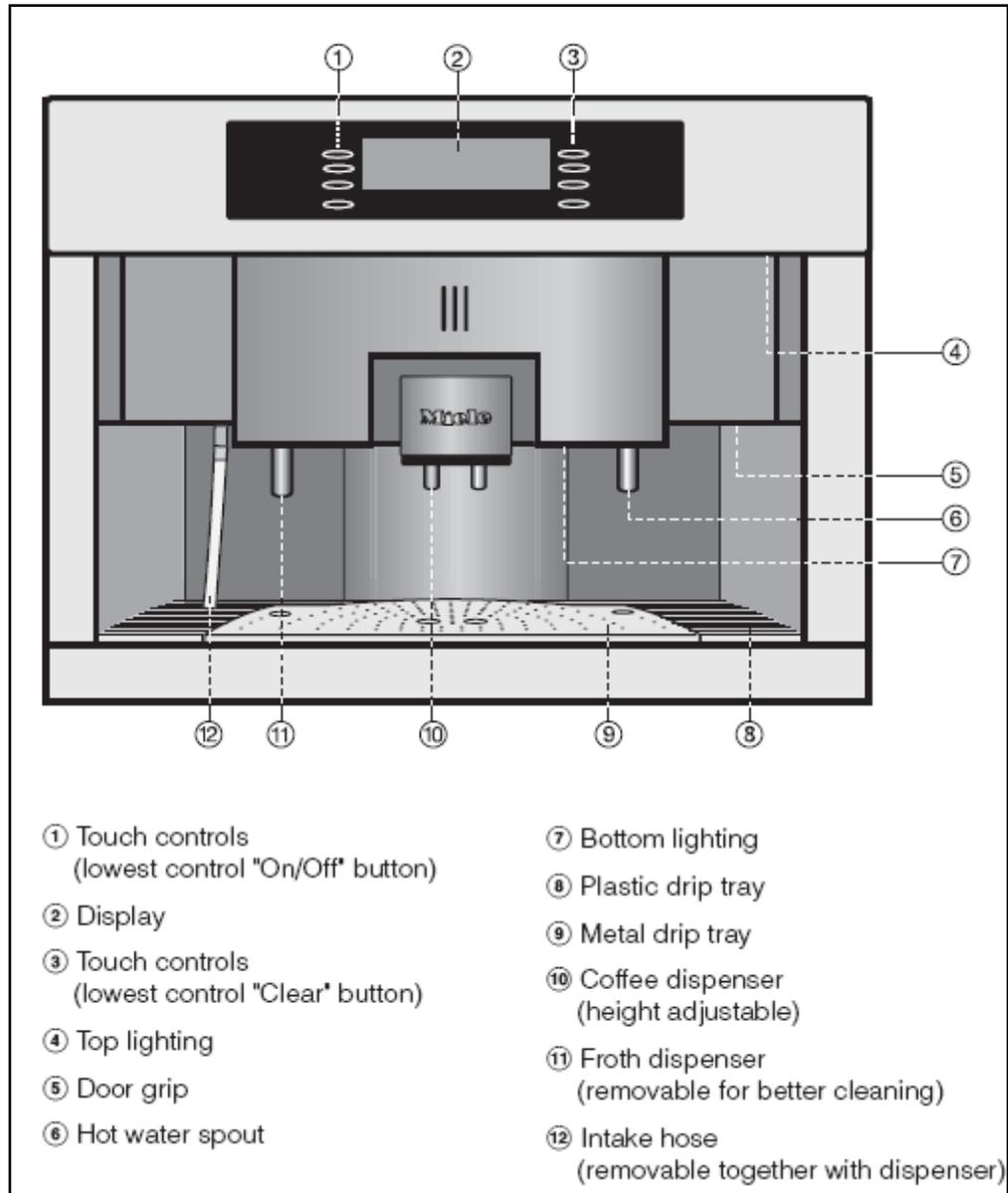
Touch current measurement should be carried out on all accessible conductive parts that are not connected to ground.

Warning!

Touch current measurement may only be performed after the ground connection of the unit being tested has been checked and found to be satisfactory!

A defective appliance, as well as accessible conductive parts that are not connected to ground, may carry dangerous voltages!

Technical Information

1.0 Construction and Design**1.1 Appliance Overview****1.1.1 Front View****Figure 1-1: CVA4070 - Front Overview**

1.1.2 Interior (Front of Appliance Opened)

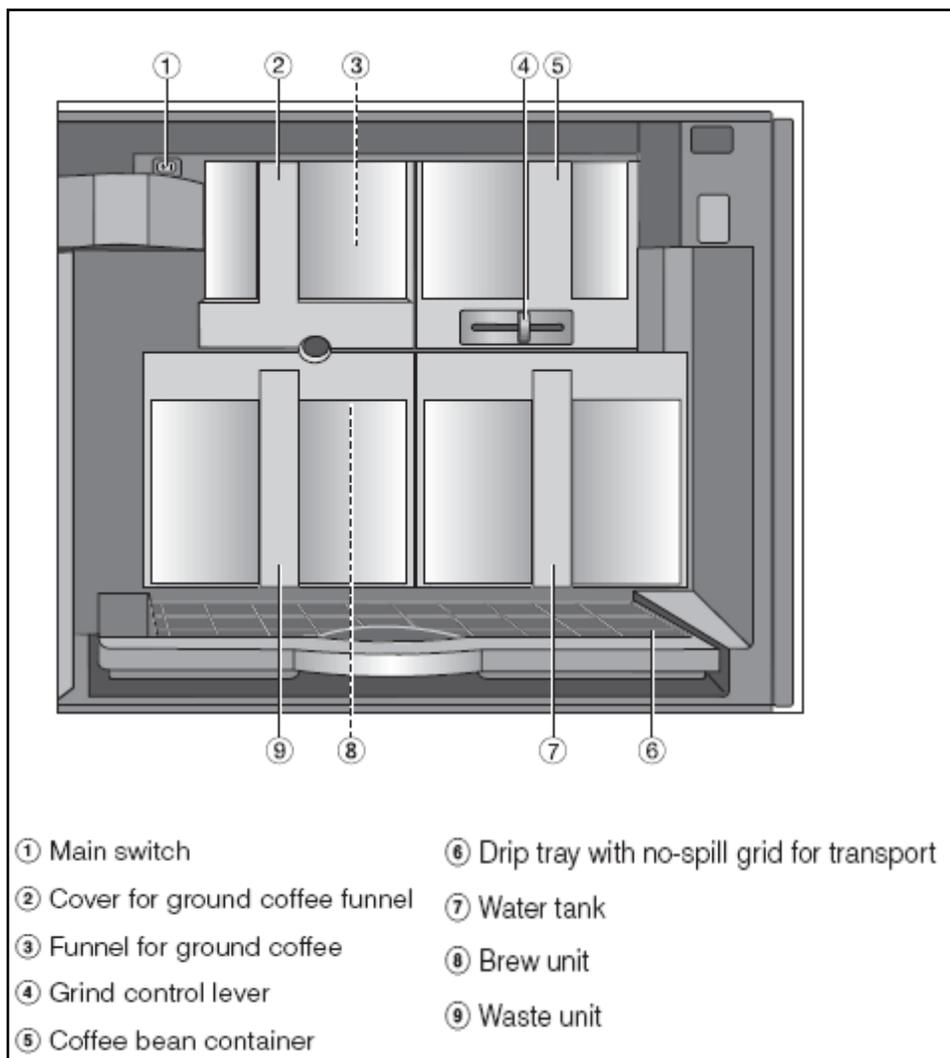


Figure 1-2: CVA4070 - Inside Overview

Technical Information

1.2 Technical Data

- The CVA4070 is designed to be built into cabinets and must be fully installed before any operation.
- This appliance can be installed above another appliance but, there must be a solid, closed shelf between the base of the coffee machine and the top of the appliance below
- Exercise caution while operating the appliance; coffee, hot water and steam can cause burns.

Model		CVA4070, CVA4075
Weight *1	kg	27.5
Ease of operating		
Intelligent dialog control with large standard text display		X
Languages available		17
Sensor pad controls		X
Electronic control with step-by-step user guide		X
Function		
Portion sizes		2(espresso and coffee)
Brew two cups at the same time		X
Select amount of coffee per cup	g	7– 14
Program the necessary amount of water per cup		X
Select Cappuccino via touchpad and user guide		X
Prepare milk froth separately		X
Heat water		X
Brew a different type of coffee using ground coffee		X
Program individual coffee user profiles		max. 10
Set the start and end times		X
Automatic rinsing and cleaning program		X
Set water hardness		X

Table 1-1: Technical Data (Continued on Table 1-2)

Model			CVA4070, CVA4075
Equipment			
Capacity	Water tank	Liters	2.5
	Removable coffee bean container	g	500
	Waste container	Portions	approx. 25
	Drip tray with spill guard grid for secure transport	1	1.8
Height adjustable coffee spouts, adjustable to cup height		cm	5.5 – 9.5
Hot water jet			X
Flowstable magnetic piston pump			2
Aluminum flow-thru heater			2
Brew unit – removable and easy to clean			X
Additional socket to connect the coffee maker and the dish warming drawer			X
Indicators			
Prompts for coffee bean and fresh water refill			X
Prompts to empty the waste container and the drip tray			X
Indicator for the descale program			X
Electrical connection			
Voltage		VAC	115– 120
Frequency		Hz	60
Connected load		kW	1.2
Fuses		A	12
Breaker cable length		ft	9
Safety			
Set system lock			X

Table 1-2: Technical Data (Cont. from Table 1-1, Cont. on Table 1-3)

Technical Information

Model		CVA4070,CVA4075
Accessories supplied		X
Kettle-type socket		X
Milk container and attachment for preparing cappuccino		X
Descaling and cleaning agents		X
Spoon for ground coffee		X
Optional accessories available		
Combination strip HKL 60: Combination strip for use in any combination of oven (60 cm), compact oven, or steam oven and coffee maker.		X
Mobile built-in cabinets MES 45 and MES 60		X
Miscellaneous		
Consumption in standby mode	W	<1

Table 1-3: Technical Data (Continued from Table 1-2)

*1 Make sure that the cabinet or the wall are stable enough to support the appliance.

1.2.1 Electrical Information

Model Number	Electrical Requirements	Plug Style
CVA4070	120 VAC 15amp	NEMA 5-15

Table 1-4: CVA4070 Electrical**1.2.2 Plumbing Information**

None – not applicable

Technical Information

1.3 Layout of Components

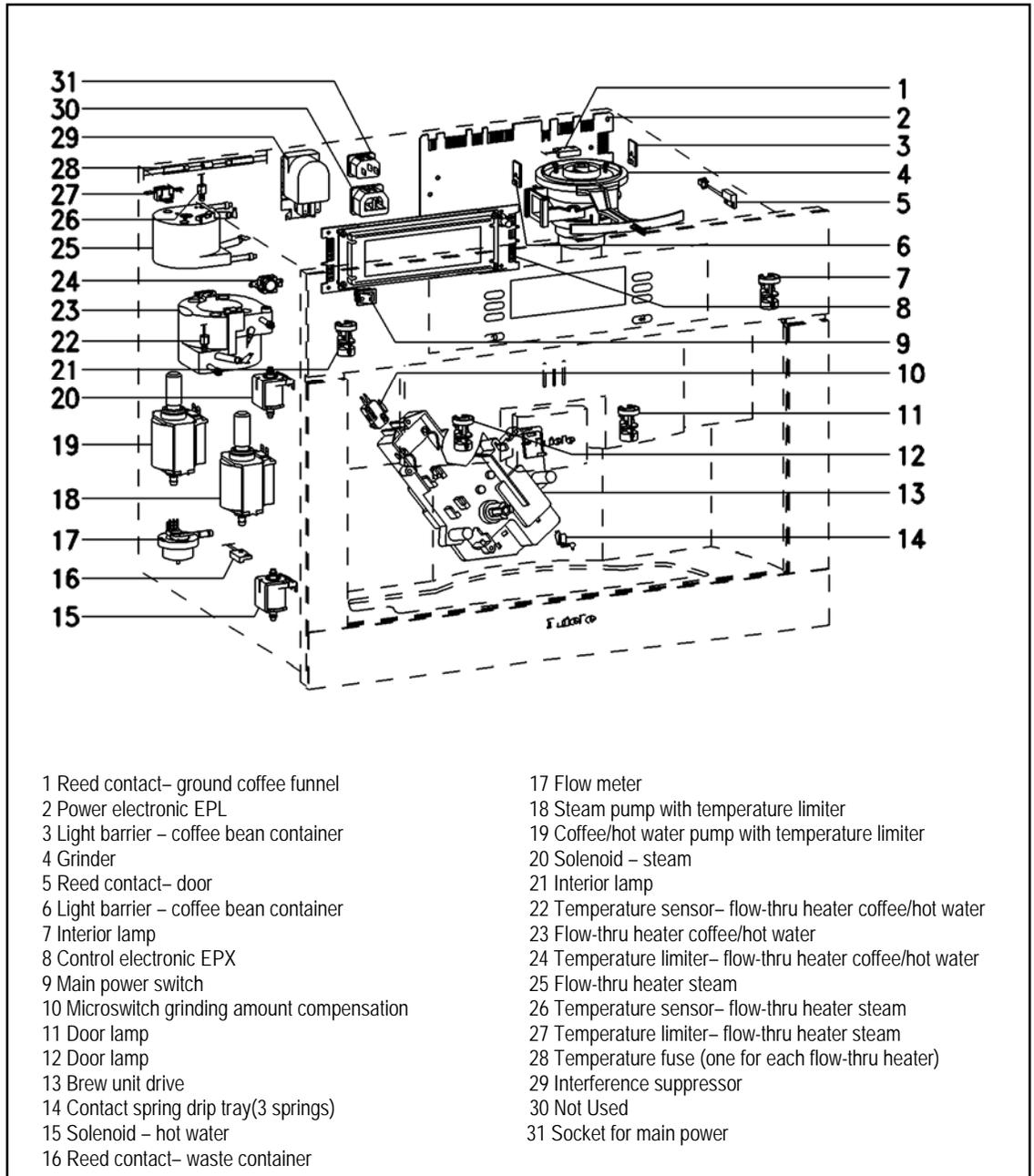


Figure 1-3: CVA4070 Layout Components

2.0 Installation

2.1 Product Dimensions

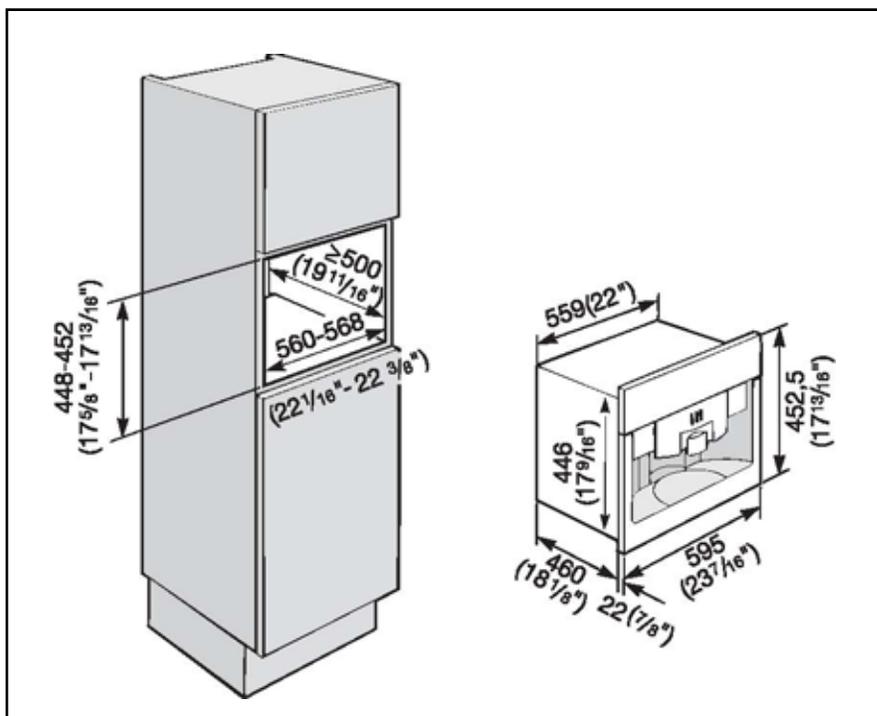


Figure 2-1: CVA4070 - Plumbing

2.2 Installation Procedure

Note:

Make sure power is not supplied to the appliance while installation or maintenance work is performed. Disconnect the power supply to the work area by unplugging the unit, tripping the circuit breaker. The coffee system must be installed into cabinetry before being used.

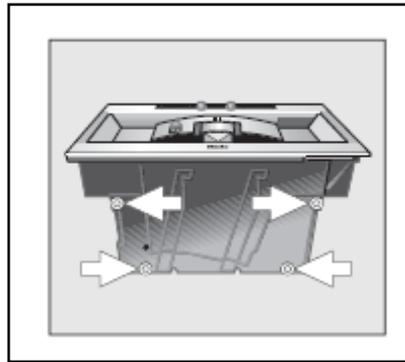


Figure 2-2: CVA4070 - Adjusting Feet

1. Unscrew the height adjustable feet (fig. 2-1) on the underside of the machine about 1/16" (2 mm).
2. Push the appliance all the way back into the cabinet and center it.

Note:

If necessary level the unit with the four height adjustable feet.

Note:

The feet can be turned out up 3/8" (10mm).

If your cabinet has 3/4" (19 mm) side walls, drill four holes for the mounting.

3. Center the unit and Make centers of mounting holes.
4. Take the unit of the niche and drill four holes at the screws markings (1/16" [2 mm], diameter 3/16" [4.5 mm]).
5. Plug the appliance into the electrical outlet.
6. Open the door and partially tighten the screws.

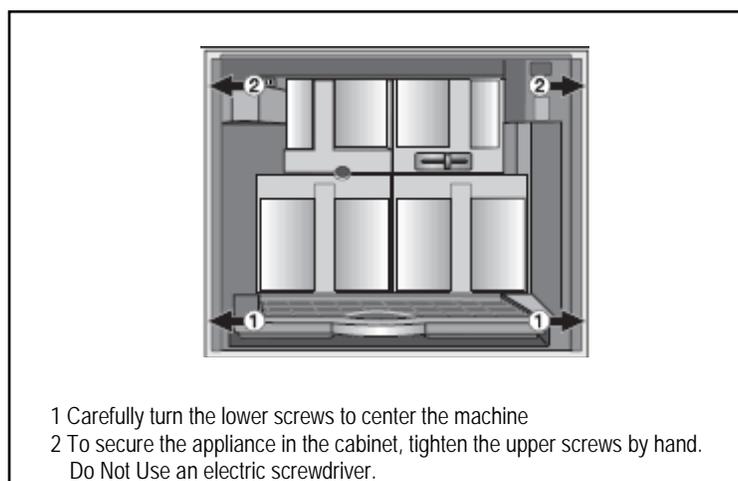


Figure 2-3: CVA4070 - Mounting Locations

2.2.2 Adjusting the Door Hinges

The door hinges can be adjusted if the door cannot be opened easily.

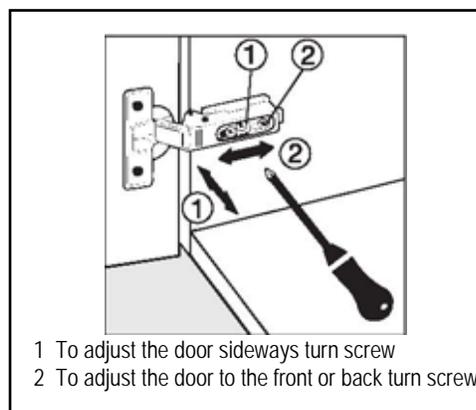


Figure 2-4: CVA4070 Adjusting Door Hinges

3.0 Commission and Operation

3.1 General Operation

3.1.1 Touch Controls

Select a touch control with your fingertip to use the machine

3.1.2 Display

To select a menu, select the touch control next to the respective menu point.

If more features can be selected under one menu point, the menu has three dots (e.g. "settings...")

"more" / "back": if there are more menus which are not immediately shown, select "more" or "back" to see further options.

"Clear": to go back to the previous screen

"Stop": to cancel coffee preparation

"OK": to save the settings.

3.1.3 Before the First Use

Note:

The appliance must be correctly installed and connected before the first use.

Note:

Clean the appliance and remove protective foils before the first use

3.1.4 Turning On

1. Select "On/Off" to turn the coffee system on.
 - The display shows the clock. See "Settings - Clock - Setting the time of day" to set the time.
 - During the very first use, you will be prompted to select a language.
2. Select the desired language touch control and then "OK".
 - The  symbol indicates the "Language" setting. If you accidentally select an unfamiliar language, simply look for the  symbol. Touch the control next to the flag symbol and select your language of choice.
3. Customize the coffee system to your desired settings.

Note:

Prepare two cups of coffee and dispose of them, this will clean any coffee residues from the brew unit left from the quality control tests at the factory.

3.1.5 Turning Off

1. Select "On/Off".
 - The display shows the time of day. After 60 seconds the display turns off (depending on the setting). See: "Settings - Clock".

Note:

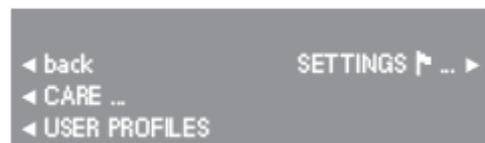
If the rinse automatic feature is turned on the same machine will begin rinsing if a coffee was prepared that day.

3.2 Language Settings

To show the displays in the desired language, select the language before the first use.



1. Select "Settings" from the main menu during the pre-heating phase or



2. in the main menu.



3. Select "Language"



4. Select the desired language. To see more language options, select "more". Language options: English, German, Espanol, Francais, Italiano, Polski and Portugues.
5. Select "OK" to save the selection. All displays are shown in the selected language.
6. To go back to the main menu, select "Clear".

3.3 Clock Settings



1. Select "Settings".



2. Select "Clock".

3.3.1 Setting the Time of Day

1. Select "Enter Time".
2. Select "+" or "-" with the right touch controls to select the hours.
3. Set the minutes by selecting "Minutes".
4. Select "+" or "-" with the right touch controls to select the minutes.
5. Select "OK".

3.3.2 Clock Display Size

The size of the clock display can be adjusted. The options are "normal" or "large".

1. Select the "Size" touch control.
 - The selected size is highlighted in the display.
2. Select the "Size" touch control until the desired size is highlighted.
3. Select "ok" to save the selection.

3.3.3 12 or 24 Hour Clock

The clock display can be set to the 12 or 24 hour clock.

1. Select the respective touch control. The selected display is highlighted.
2. Select "OK" to save the selection.

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3.3.4 Clock Display On/Off

The clock can be displayed or turned off.

- If the display is turned on, the time of day is displayed when the machine is turned off.
 - If the option is set off, the display turns off after 60 seconds.
1. Select "Clock display". The selected display is highlighted.
 2. Select "OK" to save the selection.

3.4 Filling the Water Tank

The beans and the water quality is important for a good espresso or coffee. The water tank must be washed and filled with fresh cold drinking water before each day of use. The unit displays a reminder when turned on.

Note:

Never add hot water or any other liquids except cold water to the water tank.

Note:

Do not use mineral water. Mineral water leads to heavy calcium built-up in the machine that can damage the unit.

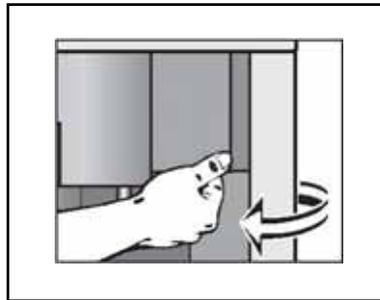


Figure 3-1: CVA4070 Pull Door Open.

1. Open the appliance door by holding the grip next to the hot water spout and pulling the door towards you.

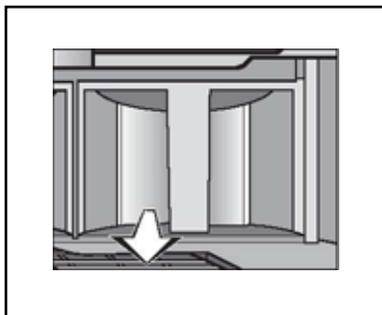


Figure 3-2: CVA4070 Pull Water Tank Out.

2. Pull the water tank out.
3. Fill the container with fresh, cold tap water to the "Max." mark.
4. Close the lid and push the water tank into the unit until it clicks into place.

Note:

The water tank must be positioned correctly or the valve will leak. If the water tank has not clicked into place, pull the tank out, check and clean the niche.

3.5 Filling the Beans Container

Note:

Only fill espresso or coffee beans in the beans container. Anything else - including ground coffee - will damage the grinding unit. Caramelized or otherwise pre-treated beans or sugar containing beverages must not be filled into the appliance. It will damage the coffee system.

1. Pull the bean container out.

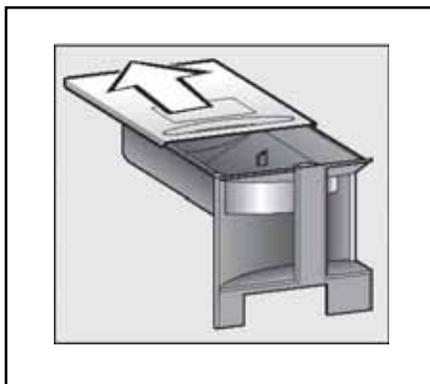


Figure 3-3: CVA4070 Beans Container

2. Push the lid back and fill the container with roasted coffee beans.

Technical Information

3. Push the lid back into place and put the beans container back into the appliance.
4. Close the door.

3.6 Filling Ground Coffee

A funnel for ground coffee is provided in case you would like to prepare a different coffee type, e.g. decaffeinated coffee.

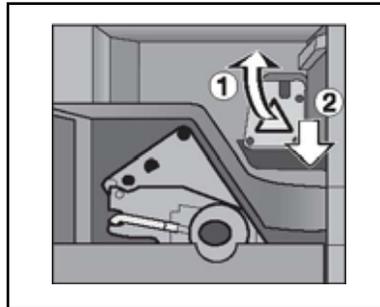


Figure 3-4: CVA4070 Ground Coffee Funnel Lid

1. Pull the container for the ground coffee out of the appliance and lift the funnel lid.
2. Place one spoonful of ground coffee into the funnel,(using the supplied spoon) and close the lid.
3. Push the container into the appliance and close the door.

See "Making Coffee - Espresso and coffee made from ground coffee". The lines must be rinsed daily before the first use. This will happen automatically if "Rinse automatic" is set to "On" (see "Settings - Rinse Automatic") and the machine is cold. After heating, hot water runs out of the two spouts into the drip tray.

3.7 Adjusting the Dispenser Height

To prevent the coffee or espresso from cooling prematurely and to achieve a better crema the coffee dispense can be adjusted to minimize the distance to the cup.

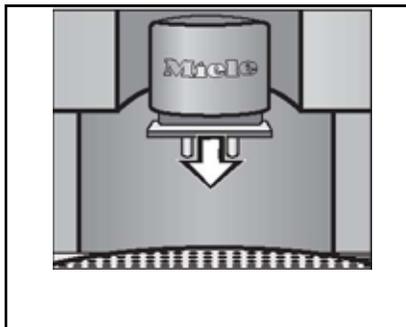


Figure 3-7: CVA4070 Dispenser Height

1. Pull the coffee dispenser slowly up or down.

3.8 Adjust the Grinder Setting

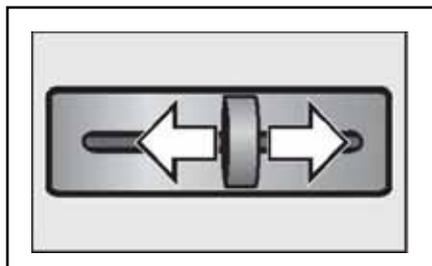


Figure 3-8: CVA4070 Grinder Adjustment

1. Push the slide control to the left for a finer grind or to the right for a coarser grind.
- You should be able to feel the notches when moving the slide control.
 - If the slide control will not move:
 1. Close the machine and dispense a cup of coffee.
 2. Then try to move the slide control again

Technical Information

3.9 Steam System

The appliance has two heating systems. That allow for independent preparation of froth/cappuccino or espresso/coffee. The second heating system can be turned off to save energy during the heating phase e.g. if froth is not prepared very often.

When the steam system is turned off and froth or cappuccino is selected, the unit must heat up first to produce steam. As long as the coffee system was not completely turned off, the steam system is on.

The steam system is turned on by default.

3.10 Froth Dispenser/Intake Hose

Clean the froth dispenser after each use, otherwise they may become blocked with dried milk and hard to clean.

Rinsing does not replace cleaning in the dishwasher.

1. Select "Care".
2. Select "Rinse system".
3. Set a glass with water under the intake hose and select "OK".

The intake hose takes in the water and rinses it.

3.11 Cleaning in the Dishwasher

To clean the froth dispenser in the dishwasher, take the parts from the machine. Regular cleaning in the dishwasher is important, so that the froth dispenser does not clog over time, when milk is not removed during rinsing. To avoid dispenser clogging. Regular cleaning is recommended. All dispenser parts are D/W safe.

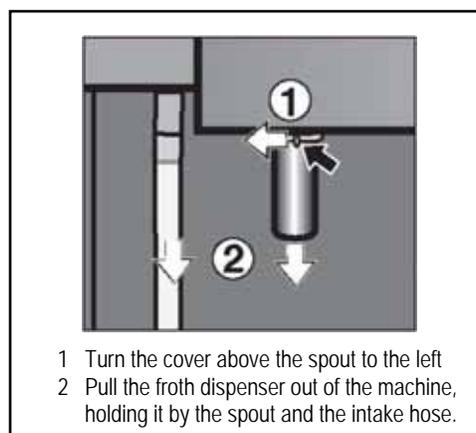


Figure 3-9: CVA4070 Frother Spout Removal

4.0 Function

4.1 Optical Interface

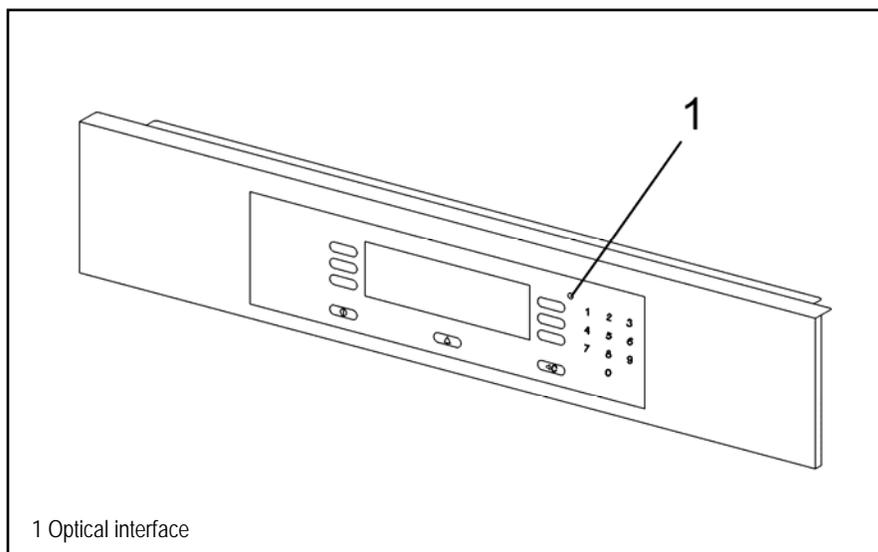


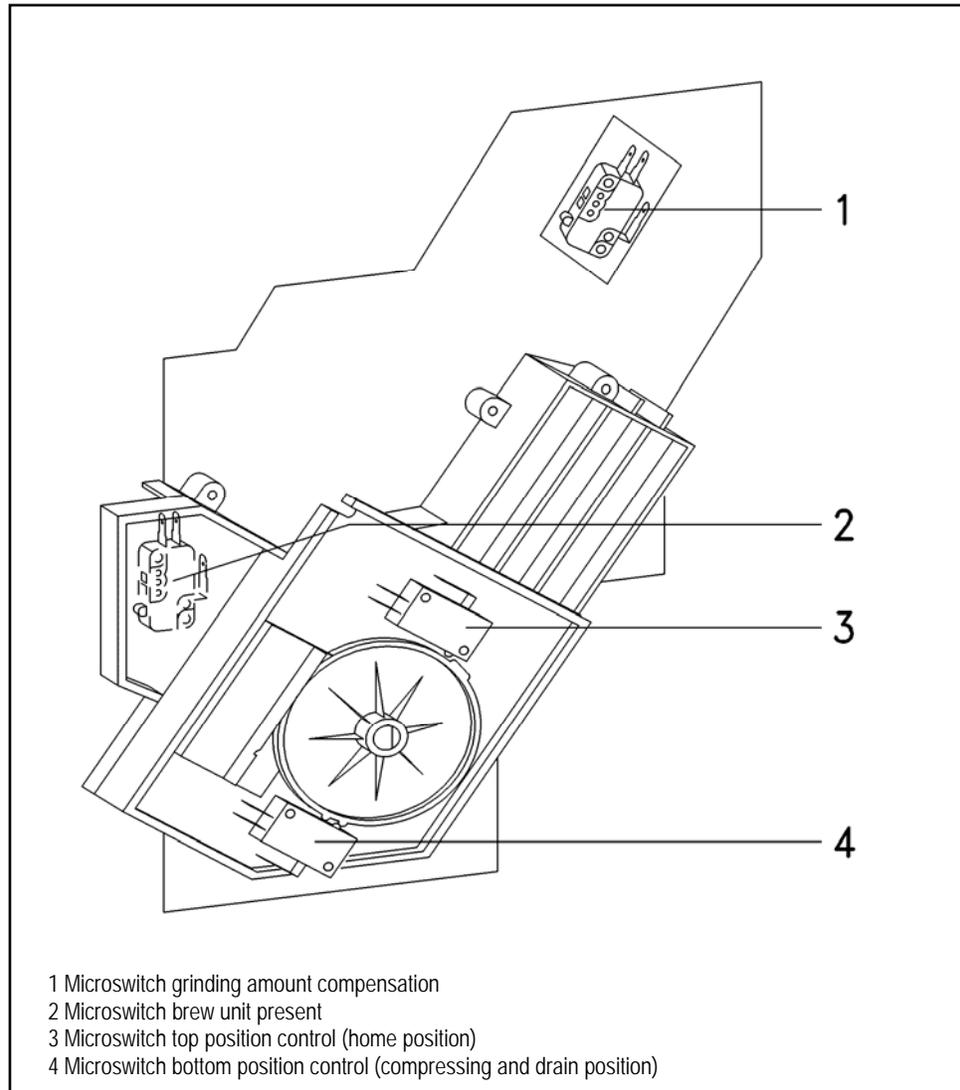
Figure 4-1: CVA4070 Control Panel

The appliance is equipped with an optical interface for diagnostic support and program updates (Figure 4-1, item 1). It can be located with the function “Find optical interface” of the Miele Diagnostic Support.

4.2 Control Electronic EPX

The control electronic is located in the door (Figure 1-2, Item 8). It is connected to the power electronic via a communication cable and controls the messages in the display.

Technical Information

4.3 Brew Unit Controls**4.3.1 Position of the Microswitches****Figure 4-2:** CVA4070 Brew Unit

The brew unit is controlled by 4 microswitches (Figure 4-2).

After the brew unit is activated, if one of the two microswitch controls (Figure 4--2, Item 3 & Item 4) is not switched within approx. 10 s, then fault code F73 is registered.

4.3.2 Brew Unit Present Control

If the brew unit is seated, the microswitch brew unit present switches (Figure 4-2, Item 2) will be activated.

4.3.3 Electronic Grinding Amount Compensation

The grinding amount compensation balances out different grinder settings and coffee types.

The grinding amount can be programmed for the various coffee types (coffee, espresso, cappuccino) in the customer programming mode. The available range is Step 0 to 17. This corresponds to a grinding time of 5.5 to 9.5 s (± 1.6 s grinding amount compensation). To prevent an overflow of the brew unit, the grinding time is limited to a maximum of 10 seconds.

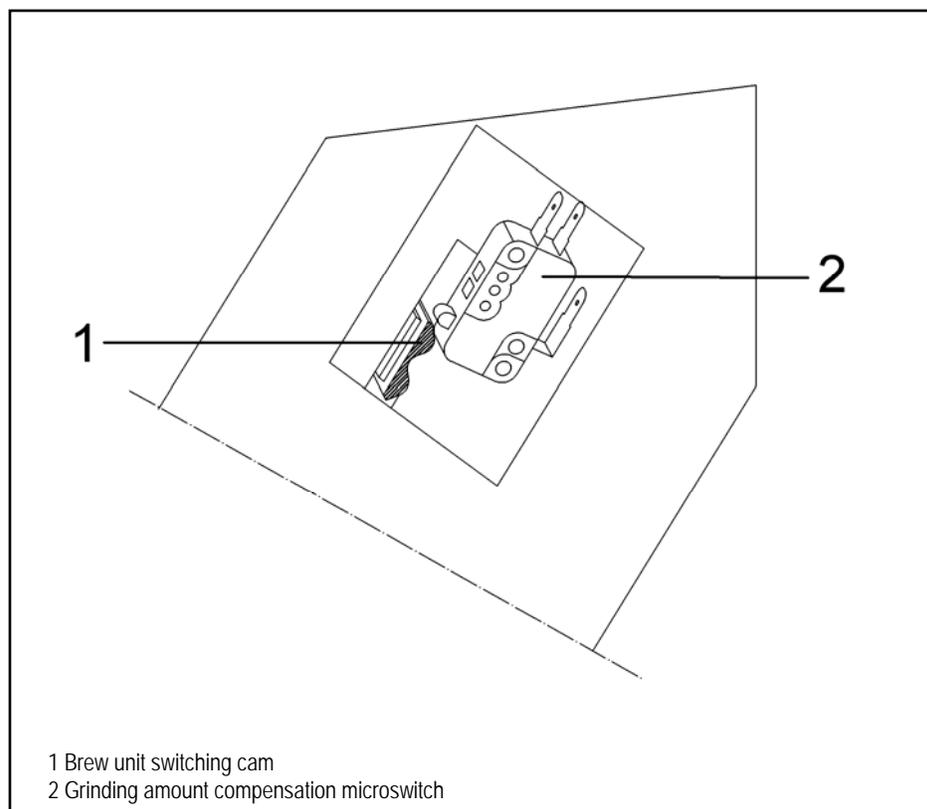


Figure 4-3: CVA4070 Brew Unit Switch

Technical Information

During the brewing process, the cams of the brew unit move past the microswitch. (Figure 4-3, Item 2). The farther the cams move, the more ground coffee is in the brew unit. Five positions can be registered:

GRIND AMOUNT SETTING	POSITION	SWITCHING PATTERN	COFFEE AMOUNT
-	1	OFF (REST)	
Weak	2	ON	
Medium	3	ON - OFF	
Strong	4	ON - OFF - ON	
-	5	ON - OFF - ON - OFF	

Table 4-1: CVA4070 Ground Coffee Setting

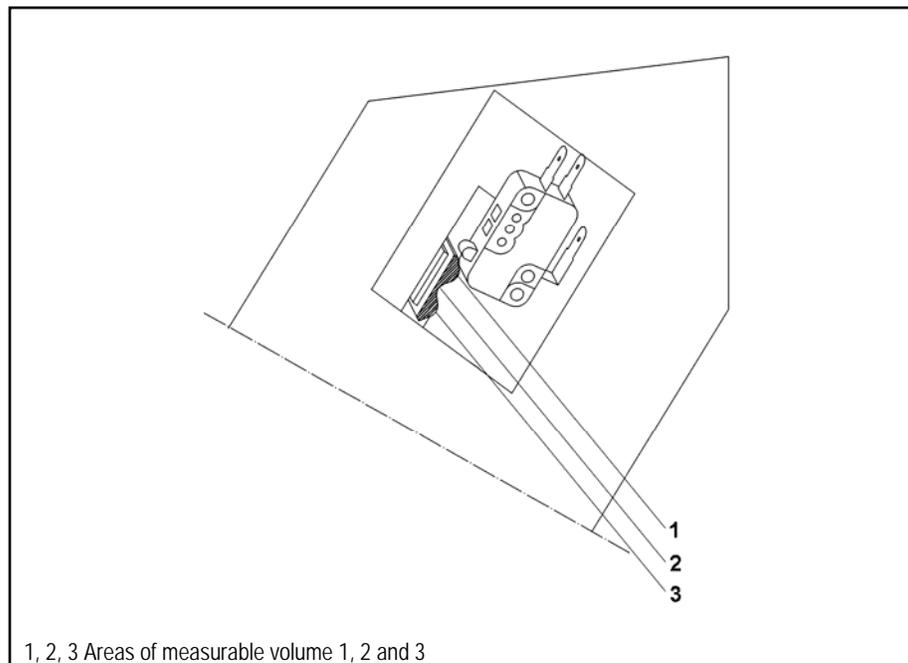


Figure 4-4: CVA4070 Brew Unit Volume

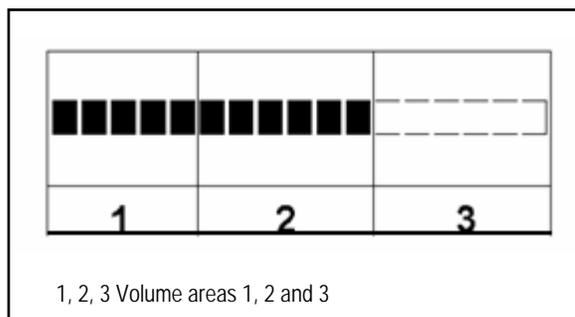


Figure 4-5: CVA4070 Ground Coffee Volume

The ground coffee amount can be measured in three volume areas (Figure 4-4), which correspond to the volume areas at the appliance (Figure 4-5).

If the ground coffee amount deviates from the set amount, then in the next grinding step the grinding time is extended by approx. 0.2 s, or shortened by approx. 0.2 s, as needed. Since the maximum time for compensation is ± 1.6 s, this step can be repeated up to 8 times.

4.3.4 Brew Unit Drive, Home Position

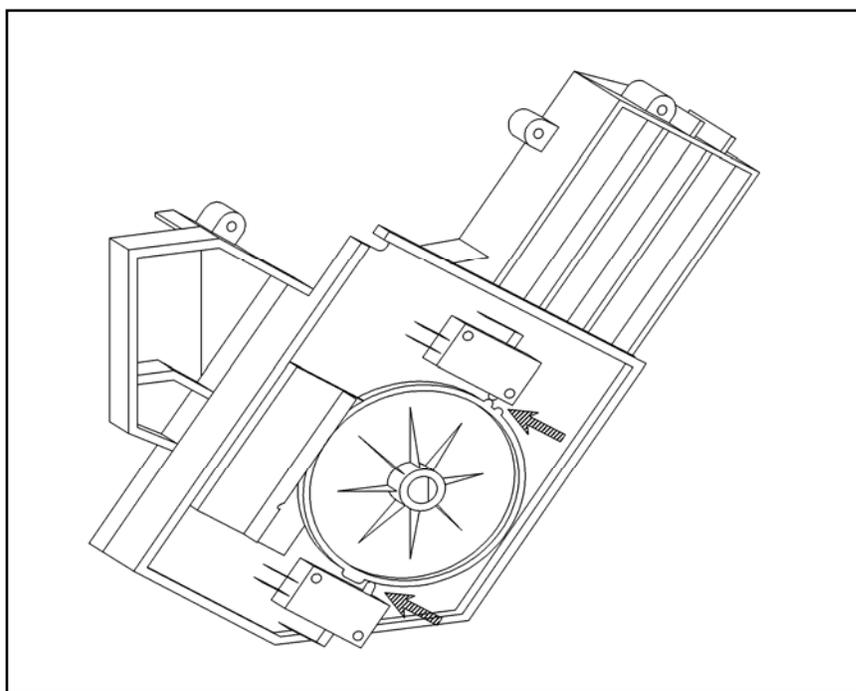


Figure 4-6: CVA4070 Rear View.

Technical Information

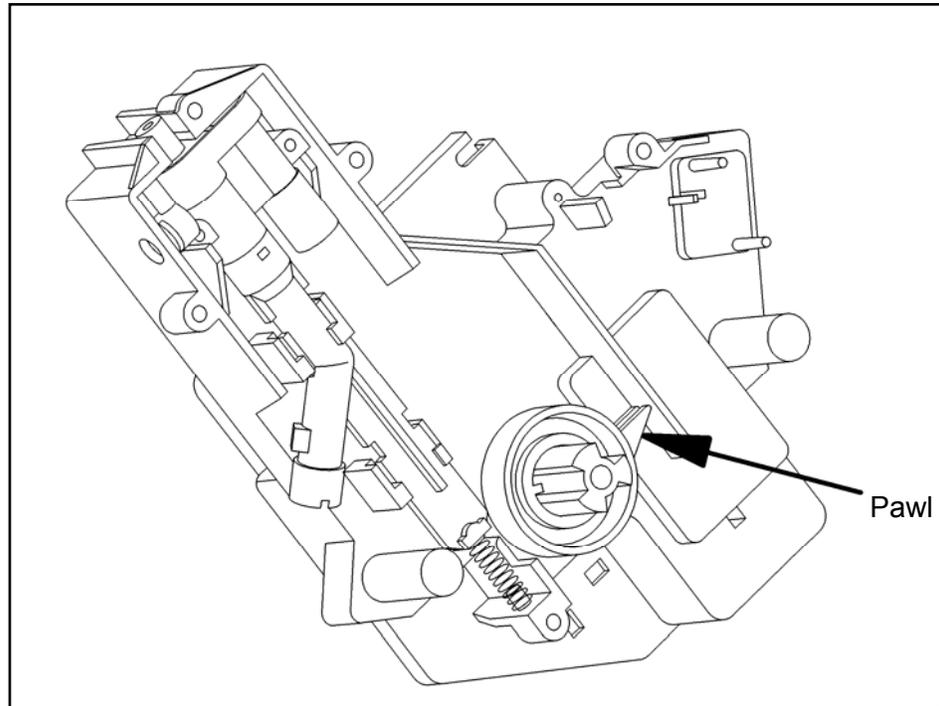


Figure 4-7: CVA4070 Front View.

If the brew unit is in the home position, the left cam of the double cam element activates the top microswitch; the bottom microswitch is not switched (Figure 4-6). The pawl is in the home position (Figure 4-7).

4.3.5 Brew Unit Drive, Compressing Position (Brew Position)

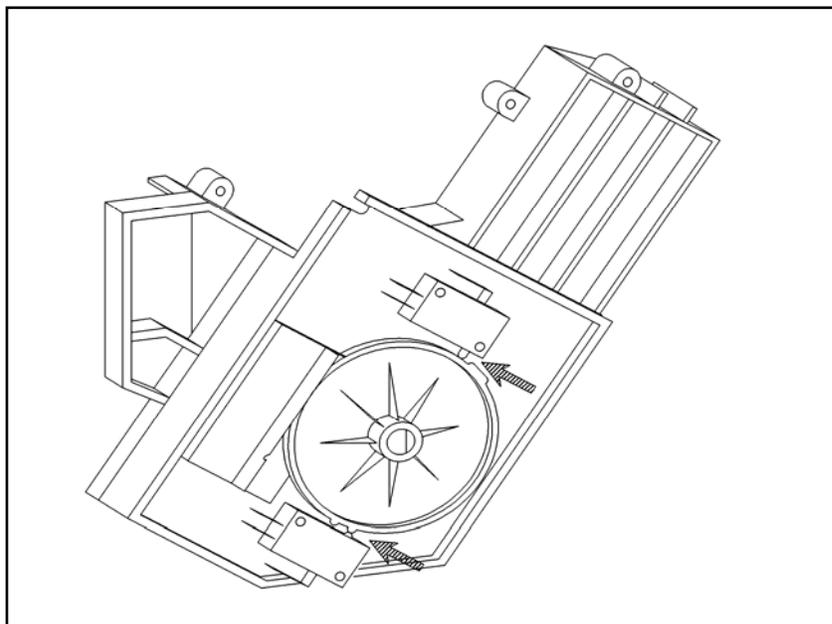


Figure 4-8: CVA4070 Rear View

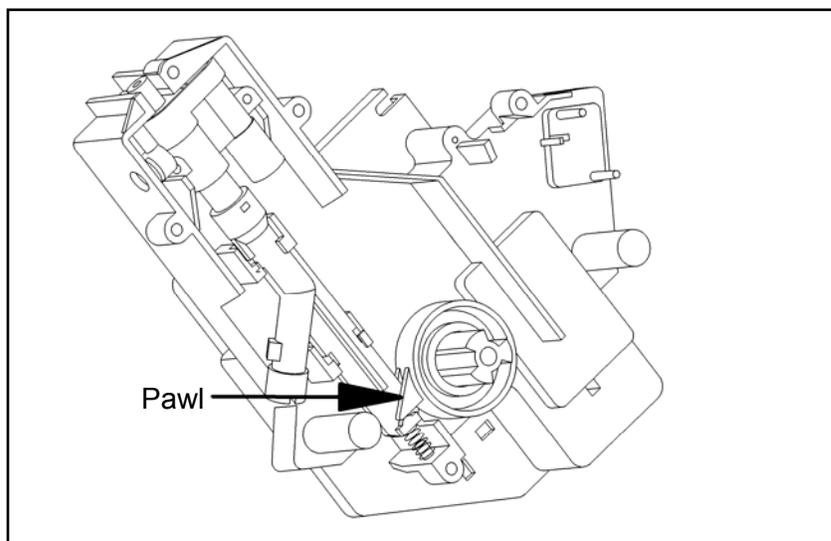
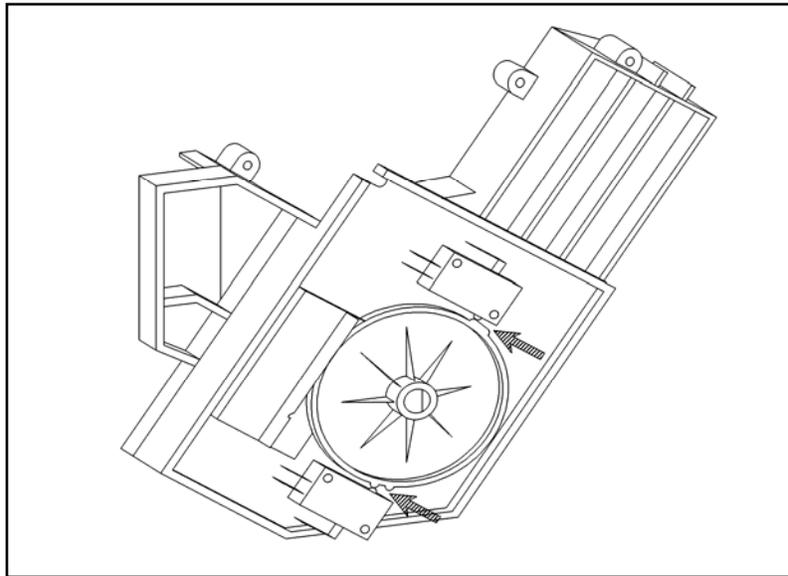
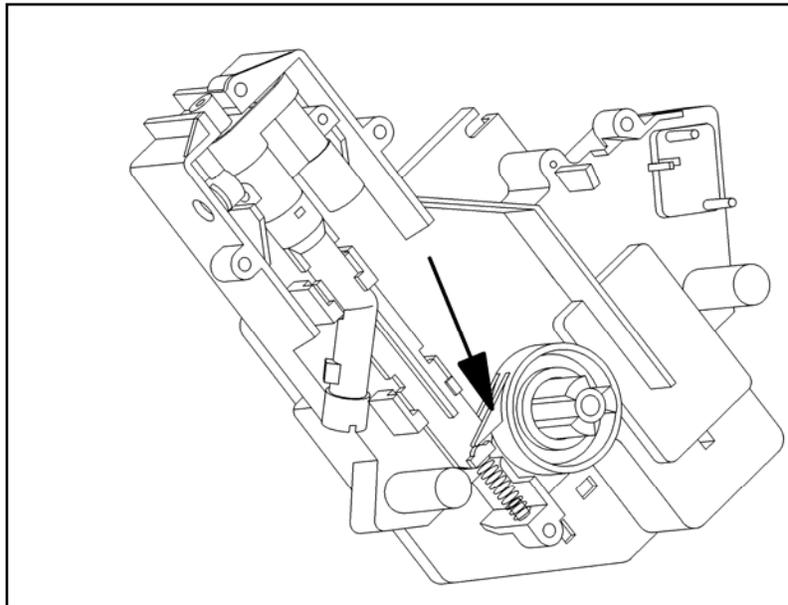


Figure 4-9: CVA4070 Front View

The drive moves until the second cam of the double cam element switches the bottom microswitch, and the top microswitch is no longer switched (Figure 4-8). The pawl presses down on the spring (Figure 4-9) and closes the drain valve. The ground coffee is slightly compressed and brewed.

Technical Information

4.3.6 Brew Unit Drive, Drain Position

**Figure 4-10:** CVA4070 Rear View**Figure 4-11:** CVA4070 Front View

After the coffee is brewed, the drive moves back until the first cam of the double cam element activates the bottom microswitch and the top microswitch is switched (Figure 4-10). The tension of the spring is released, the drain valve is opened, and the residual water runs into the drip tray before the coffee puck is dropped.

4.4 Water Paths

4.4.1 General View

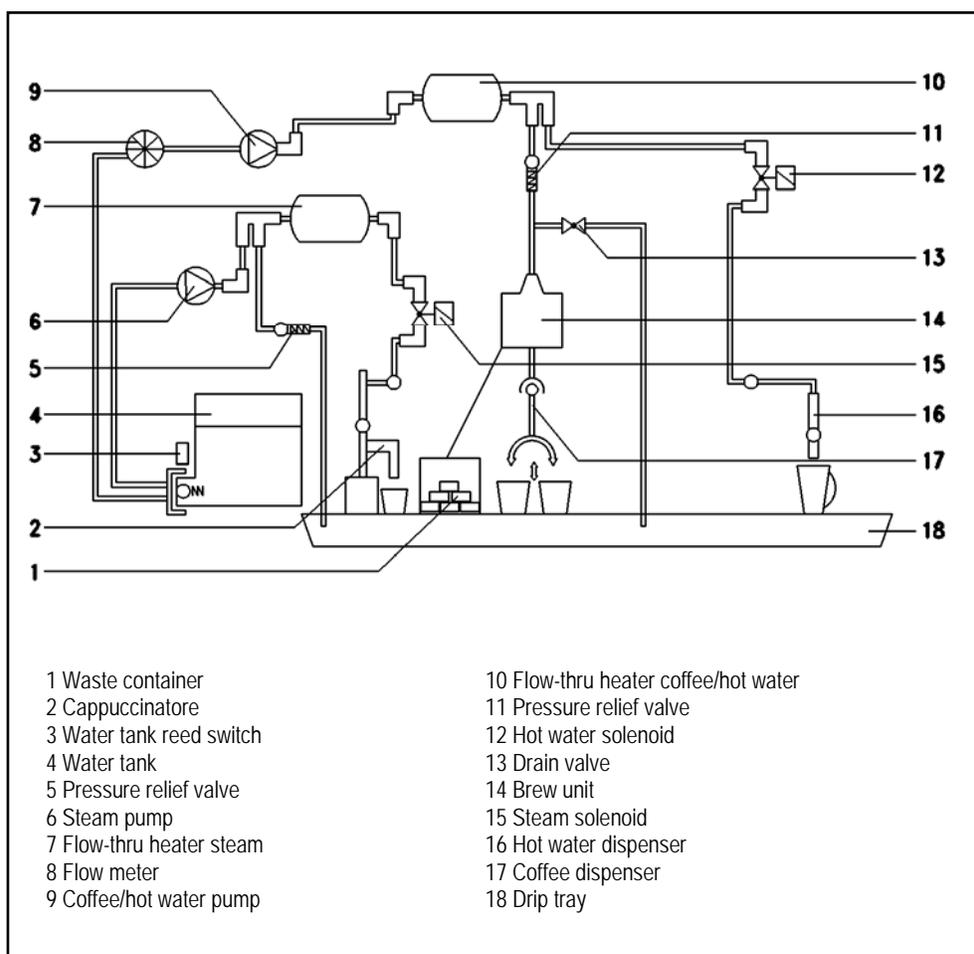


Figure 4-12: CVA4070 General Water Path View

Technical Information

4.4.2 Water Path – Making Coffee

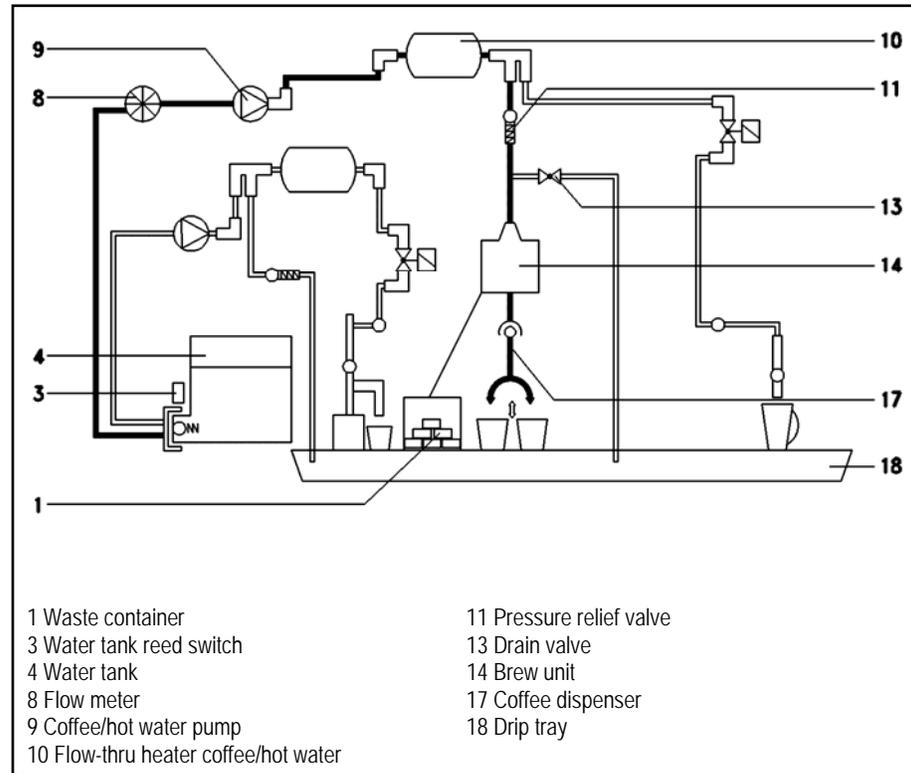


Figure 4-13: CVA4070 Coffee Water Path View

When “coffee”, or “espresso” is selected, the coffee/hot water pumps draws water from the water tank, via the flow meter. Then the pump coffee/hot water pumps the water through the flow-thru heater coffee/hot water. If there is excess pressure, the pressure relief valve opens. The hot water is pushed through the brew chamber of the brew unit, which is filled with coffee, and the coffee runs through the dispenser below the brew unit into the cup. The coffee puck drops into the waste container, and the residual water runs into the drip tray, via the drain valve.

4.4.3 Water Path – Hot Water

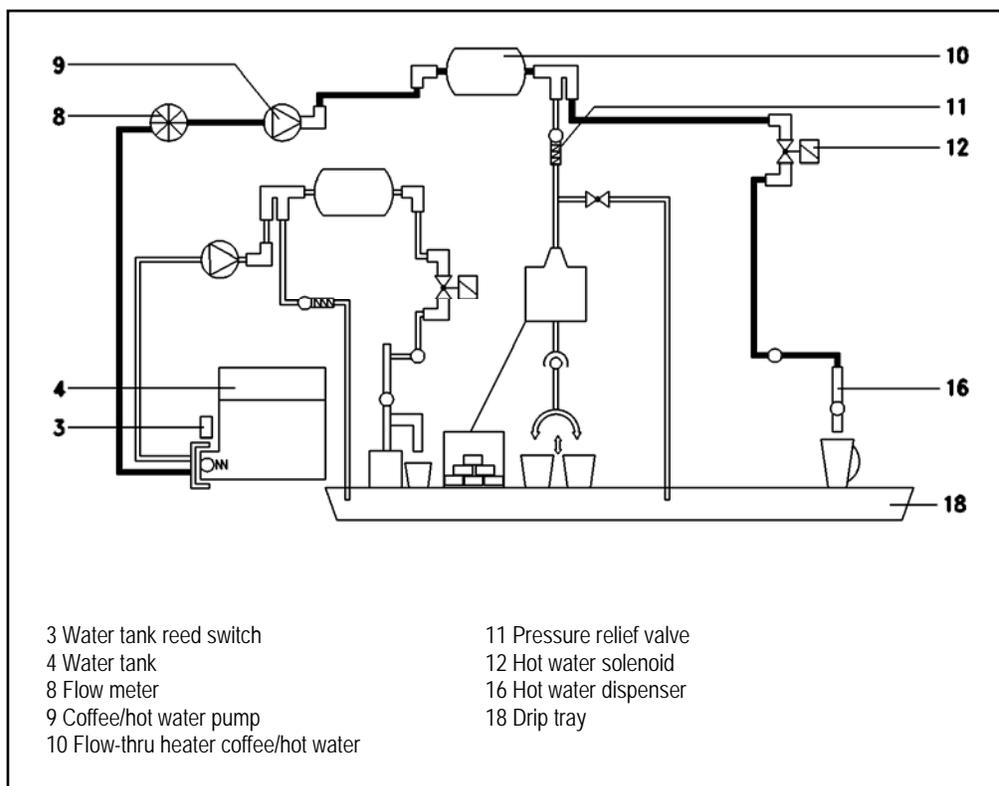
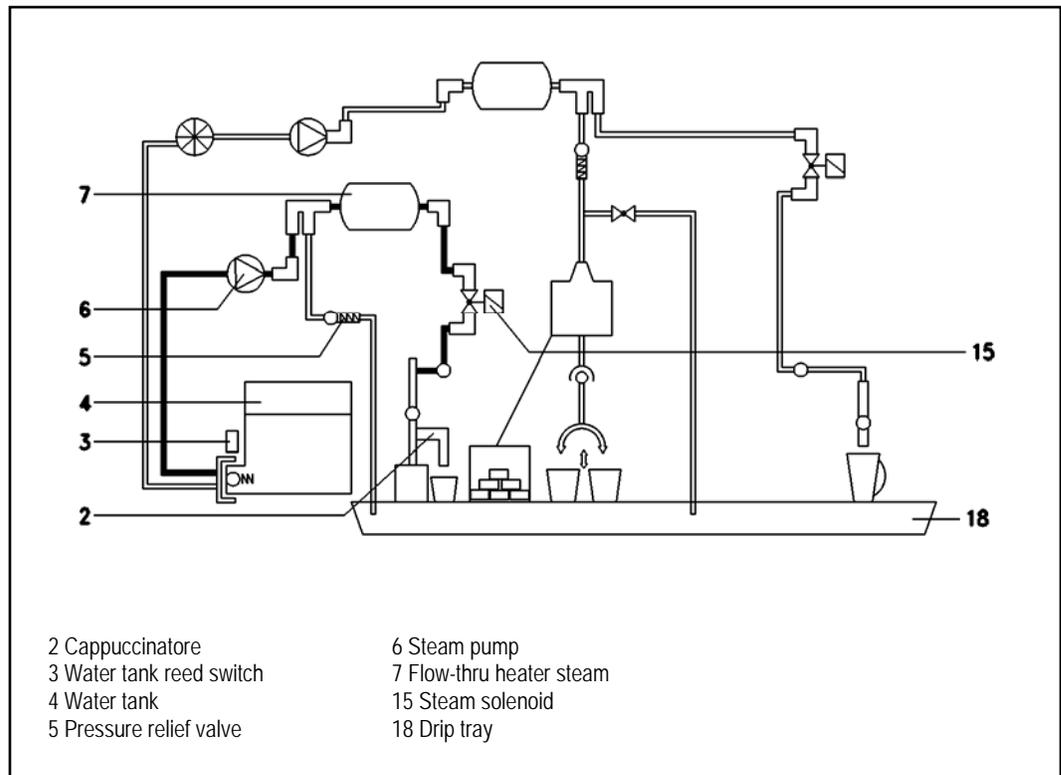


Figure 4-14: CVA4070 Hot Water Path View

When “hot water” is selected, the coffee/hot water pump draws water from the water tank, via the flow meter. The water is then pumped through the flow-thru heater coffee/hot water. If there is excess pressure, the pressure relief valve opens. The hot water solenoid opens the hot water path, and the hot water runs through the hot water dispenser into the cup.

Technical Information

4.4.4 Water Path – Steam

**Figure 4-15:** CVA4070 Steam Water Path View

When “cappuccino” or “milk froth” is selected, the steam pump draws water from the water tank. The water is then pumped through the flow-thru heater steam. If there is excess pressure, the pressure relief valve opens. The steam solenoid opens the path for the steam, and the steam issues from the cappuccinatore.

4.5 Appliance Status After a Power Disruption

After a power disruption, the appliance remains switched off (standby). The fault memory as well as all settings made by the customer remain intact.

5.0 Service

5.1 Appliance – Remove from Cabinet

1. Open the door of the unit.
2. Empty containers and the drip tray.

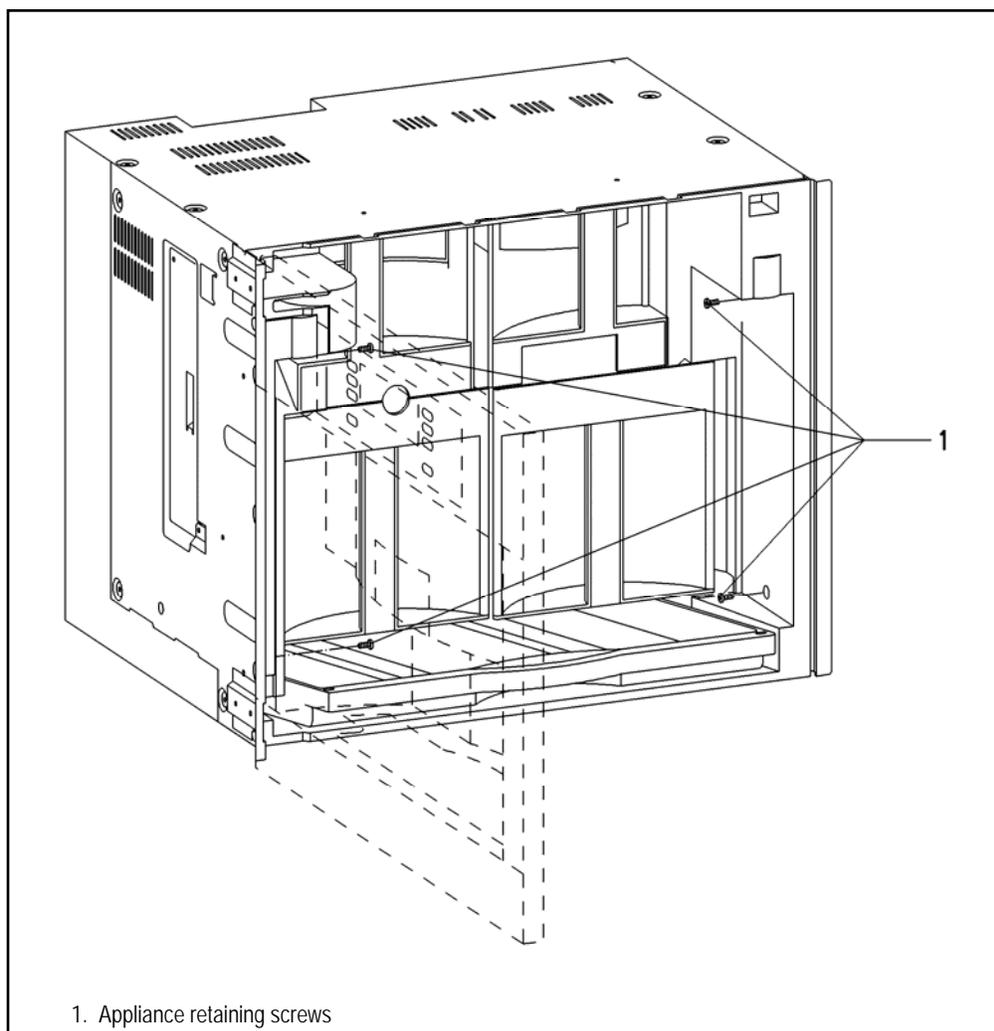


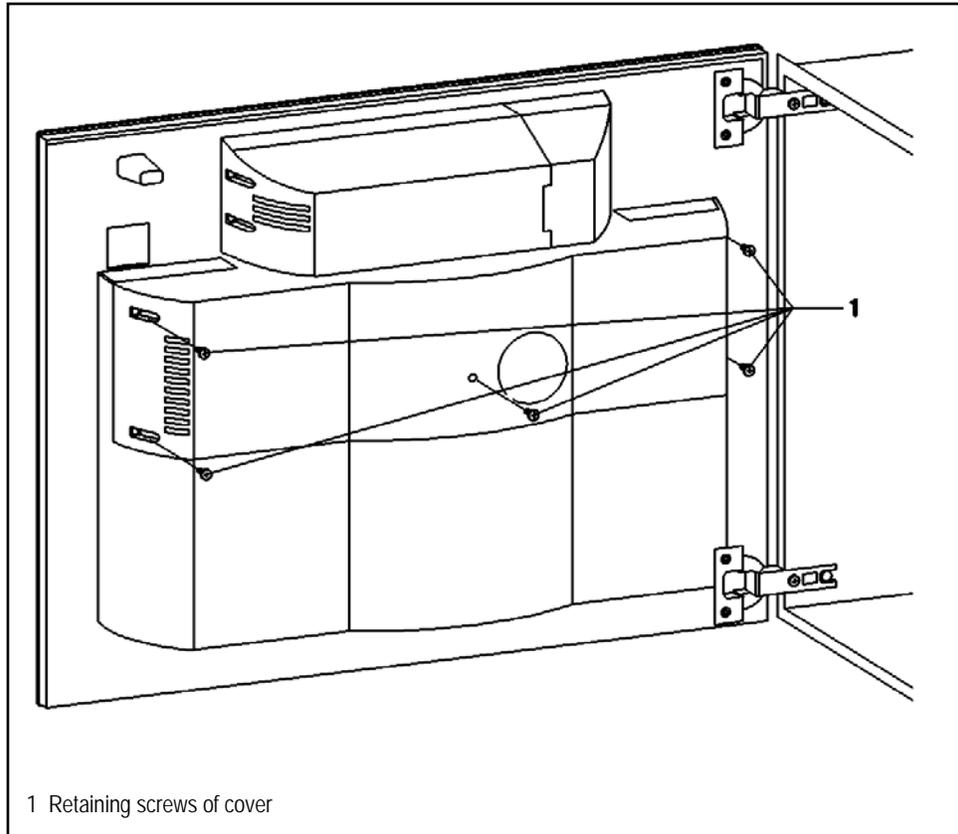
Figure 5-1: CVA4070 Service View

3. Remove the screws (Figure 5-1, Item 1).
4. Pull the appliance out of the cabinet.
5. Disconnect the unit from power.

Technical Information

5.2 Door Lamps – Remove

1. Open the door of the unit.

**Figure 5-2:** CVA4070 Door Lamp Screw Removal

2. Remove the screws (Figure 5-2, Item 1).
3. Remove the cover.

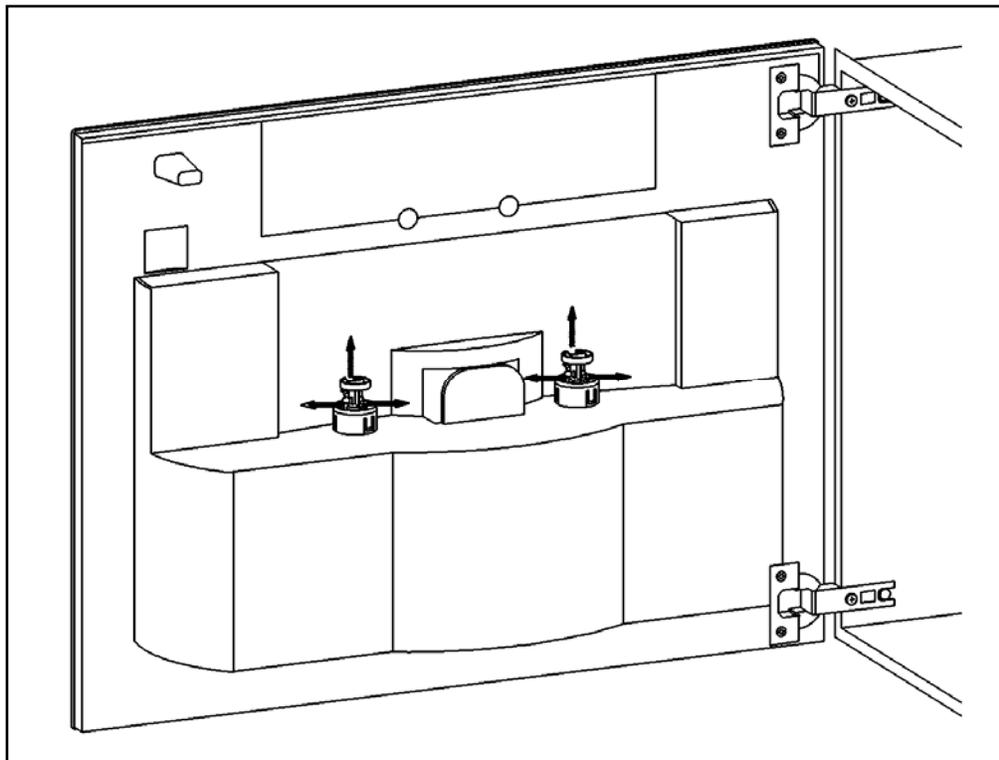


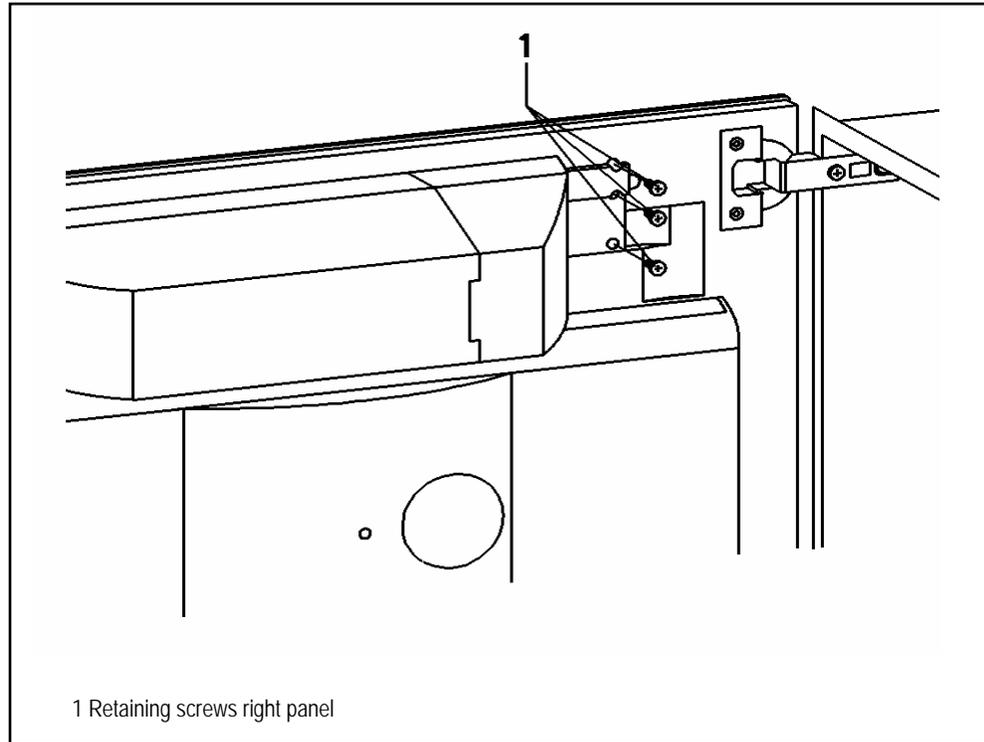
Figure 5-3: CVA4070 Door Lamp Removal

3. Unclip the lamps and remove them (Figure 5-3).

Technical Information

5.3 Door – Remove

1. Open the door of the unit.

**Figure 5-4:** CVA4070 Door Screw Removal

2. Remove the screws on the right panel (Figure 5-4, Item1).
3. Remove the right panel.

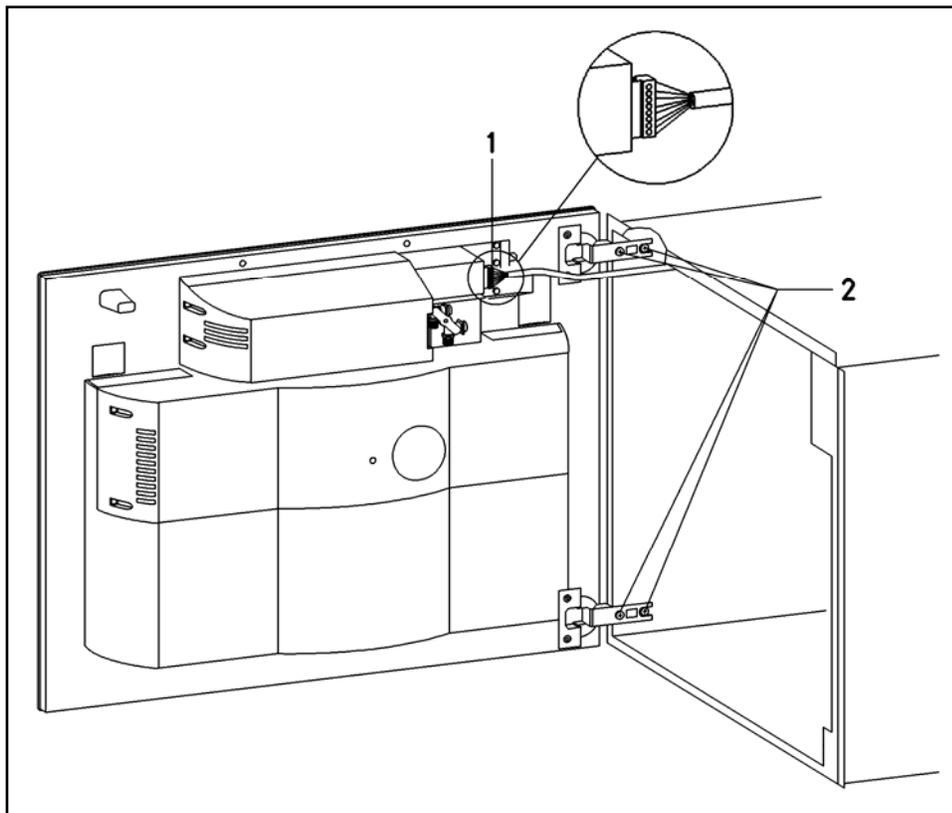


Figure 5-5: CVA4070 Door Retaining Screw Removal

4. Unplug the connecting plug at the power electronic.
5. Remove the door retaining screws:
 - Disconnect the plug to the power electronic (Figure 5-5, Item 1).
 - Release the teflon hoses from their connector and pull out (Figure 5-5, Item 2).

Note

The teflon hoses are colored differently, to prevent crossing the lines during reassembling.

- Remove the screws of the door hinges (Figure 5-5, Item 2).
- Remove the door.

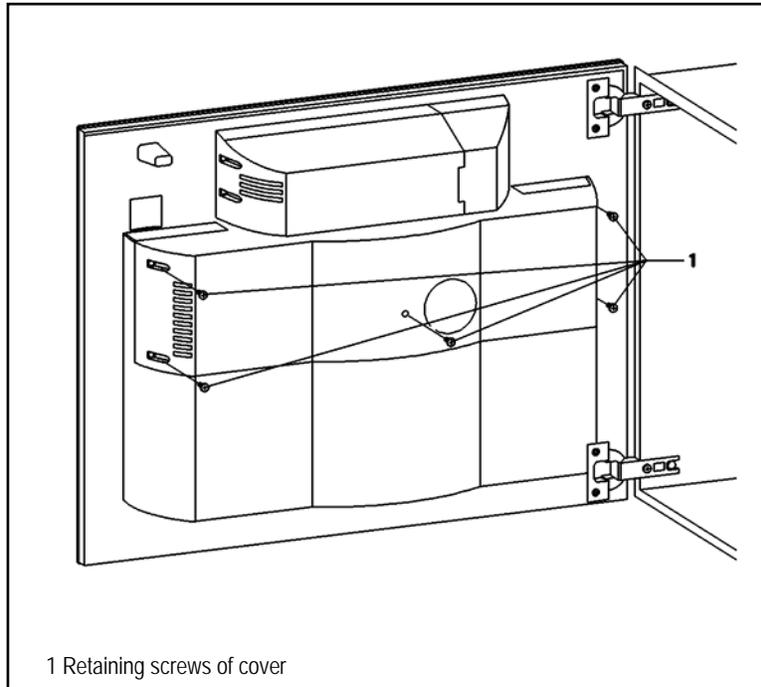
Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

Technical Information

5.4 Hot Water Dispenser – Remove

1. Open the door of the unit.

**Figure 5-6:** CVA4070 Hot Water Removal

2. Remove the screws of the cover (Figure 5-6, Item1).
3. Remove the cover.

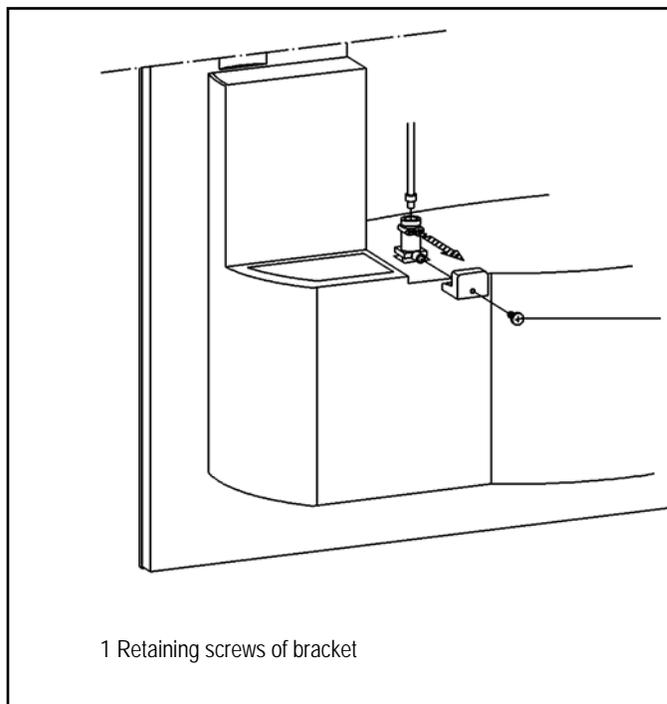


Figure 5-7: CVA4070 Hot Water Retaining Screw Removal

4. Release the teflon hose from its connection and pull it out (Figure 5-7).
5. Remove the screws of the bracket (Figure 5-7, Item1).
6. Remove the bracket (Figure 5-7).
7. Pull the hot water dispenser downward and remove it.

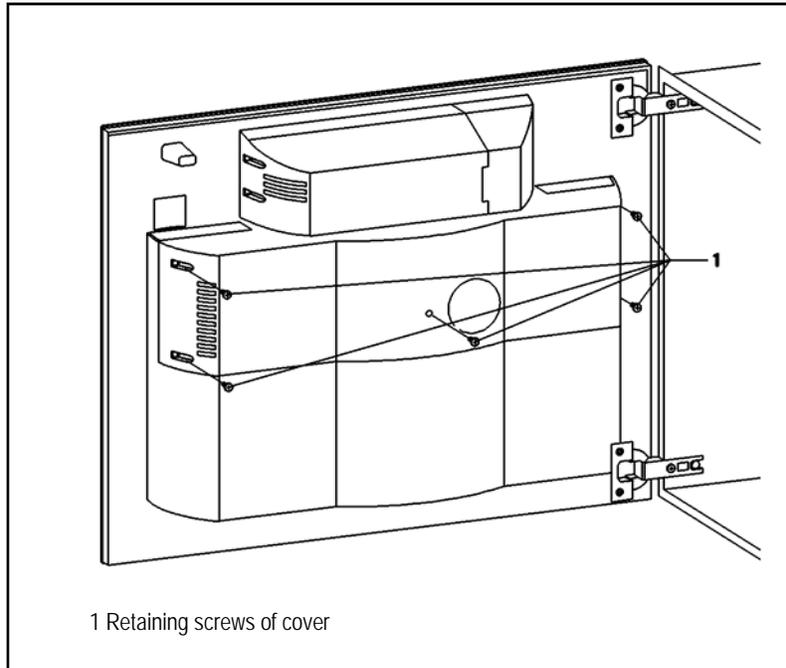
Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

Technical Information

5.5 Cappuccinatore – Remove

1. Open the door of the unit.

**Figure 5-8:** CVA4070 Cappuccinatore Screw Removal

2. Remove the screws of the cover (Figure 5-8).
3. Remove the cover.

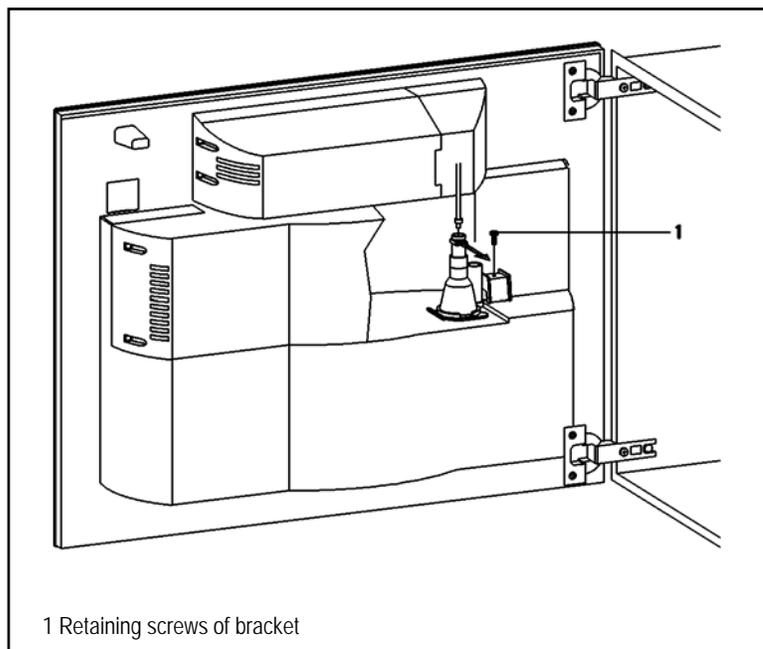


Figure 5-9: CVA4070 Cappuccinatore Retaining Screw Removal

4. Release the teflon hose from its connection and pull it out (020 Fig. 6).
5. Remove the screws of the bracket (Figure 5-9, Item1).
6. Remove the bracket.
7. Pull the Cappuccinatore downward and remove it.

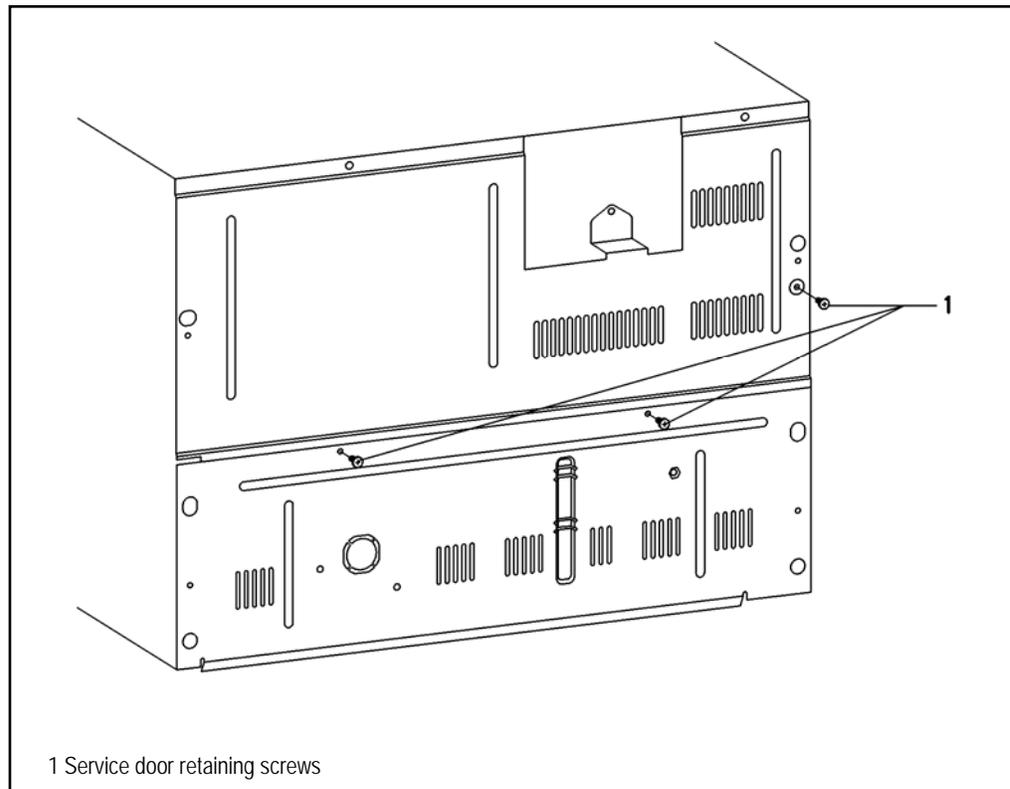
Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

Technical Information

5.6 Brew Unit Drive – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the retaining screws of the appliance lid.
3. Take the lid off.

**Figure 5-10:** CVA4070 Brew Drive Screw Removal

4. Remove the retaining screws of the service door (Figure 10, Item 1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

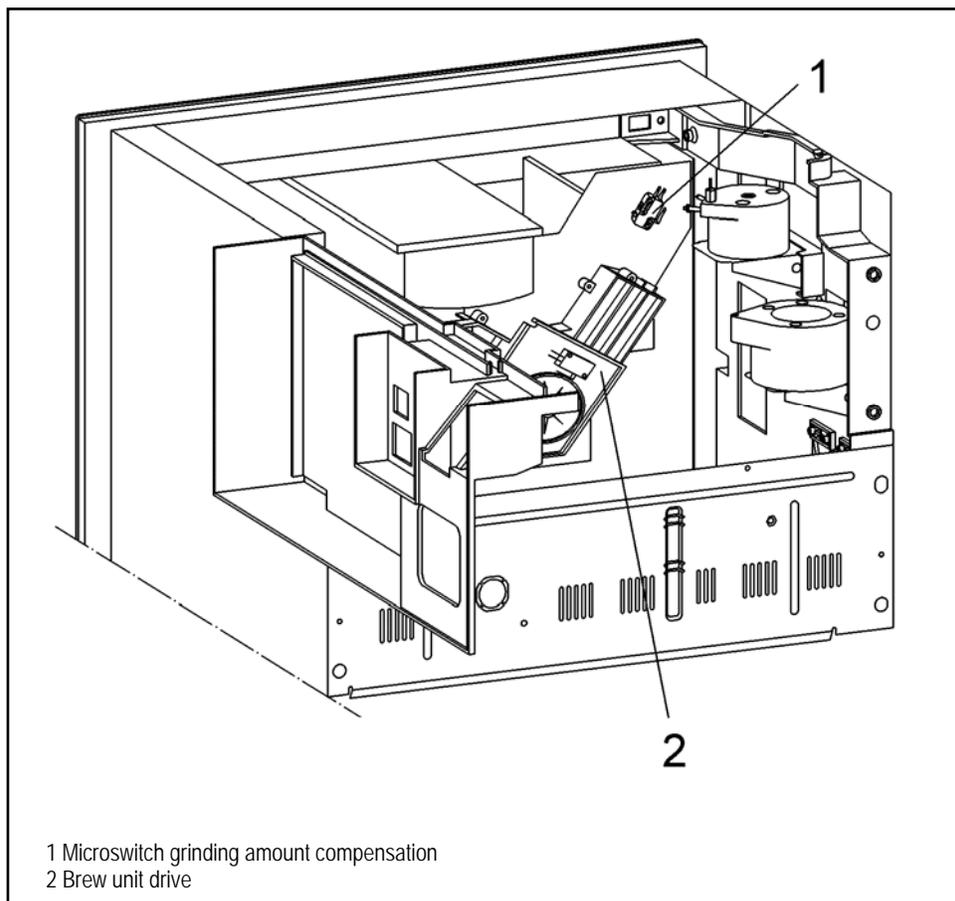


Figure 5-11: CVA4070 Brew Unit Drive Removal

7. Disconnect the plug of the brew unit drive (Figure 5-11, Item 2).
8. Disconnect the plug (ST4) from the power electronic.
9. Open the door of the unit.
10. Take the containers out of the appliance.

Technical Information

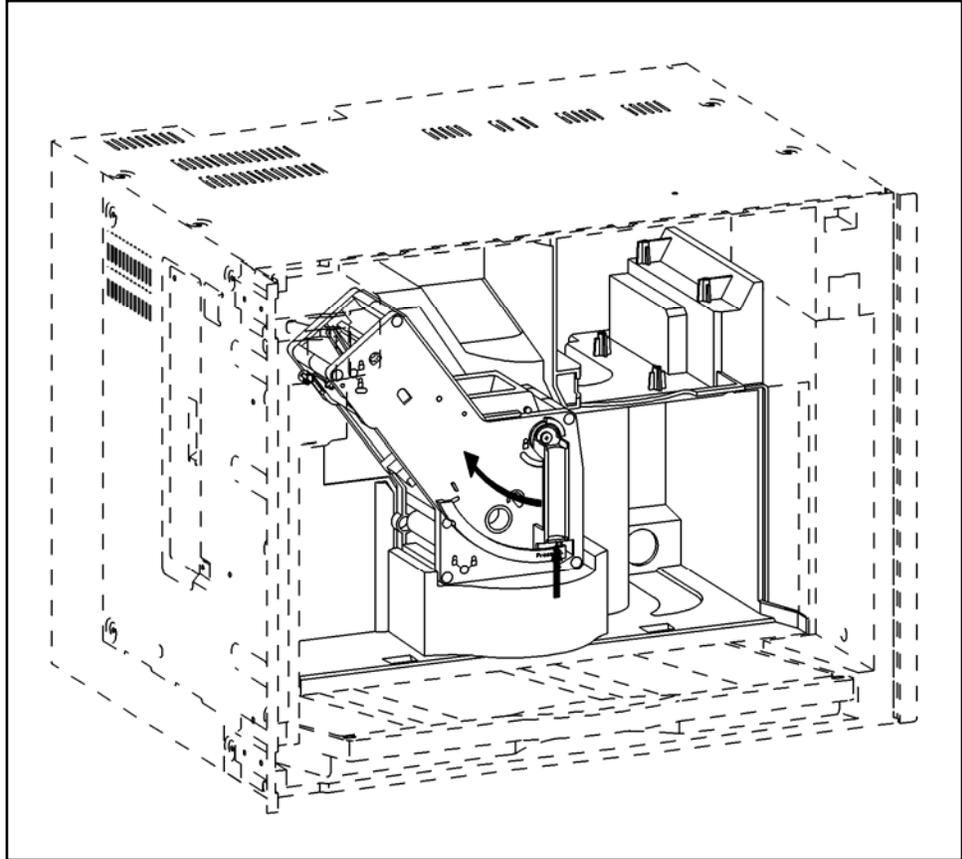


Figure 5-12: CVA4070 Brew Unit Removal

11. Release the brew unit and take it out of the appliance (Figure 5-12).

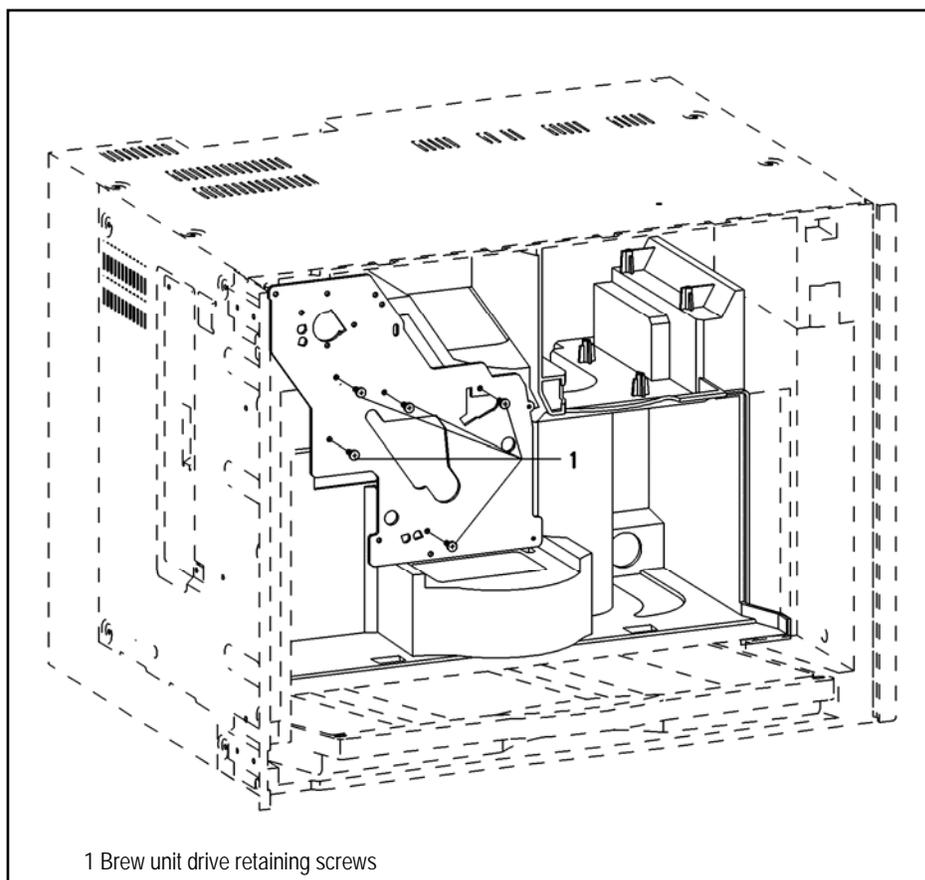


Figure 5-13: CVA4070 Brew Unit Retaining Screw Removal

12. Remove the brew unit drive retaining screws (Figure 5-13, Item 1).
13. Take the brew unit drive out toward the rear.

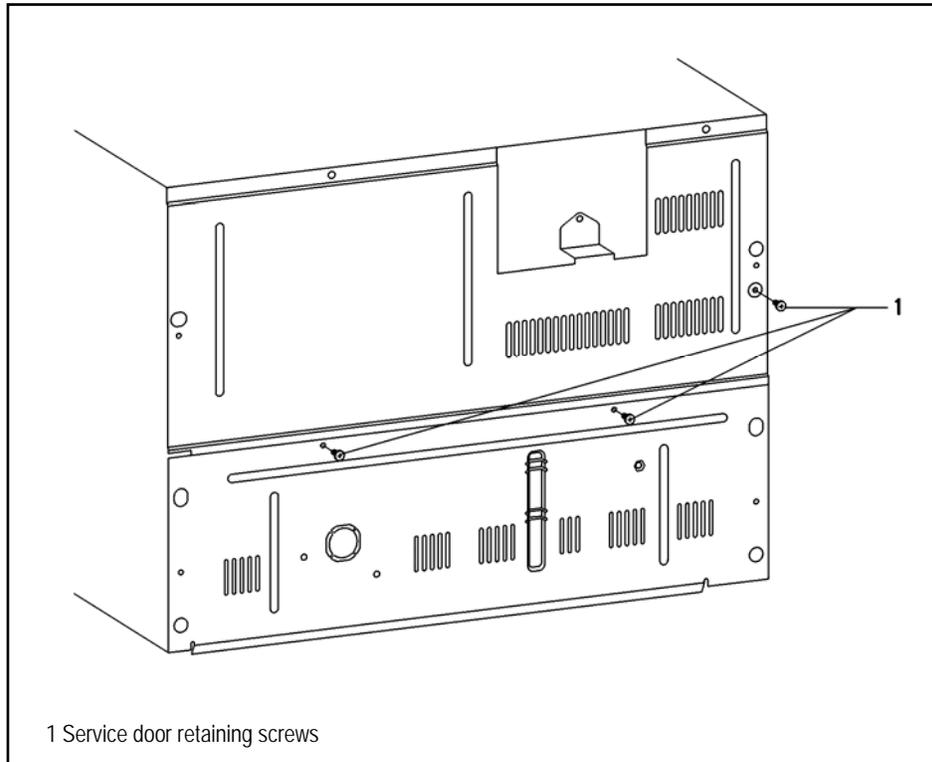
Note

When installing the brew unit drive, make sure that the pawl is set in the home position, refer to Figure 6-1.

Technical Information

5.7 Microswitch Grinding Amount Compensation – Remove

1. Appliance – Remove from cabinet”, (figure 5-1).
2. Remove the retaining screws of the appliance cover.
3. Remove the cover.

**Figure 5-14: CVA4070 Service Door Retaining Screw Removal**

4. Remove the service door screws (Figure 5-14, Item 1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

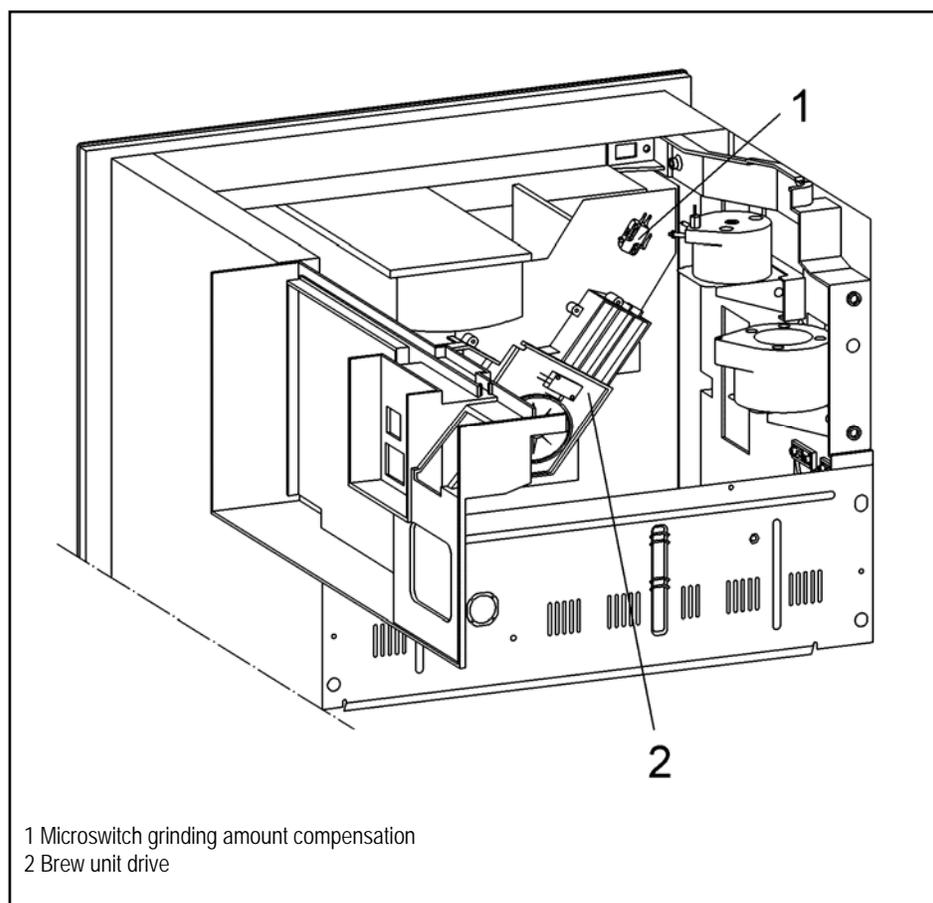


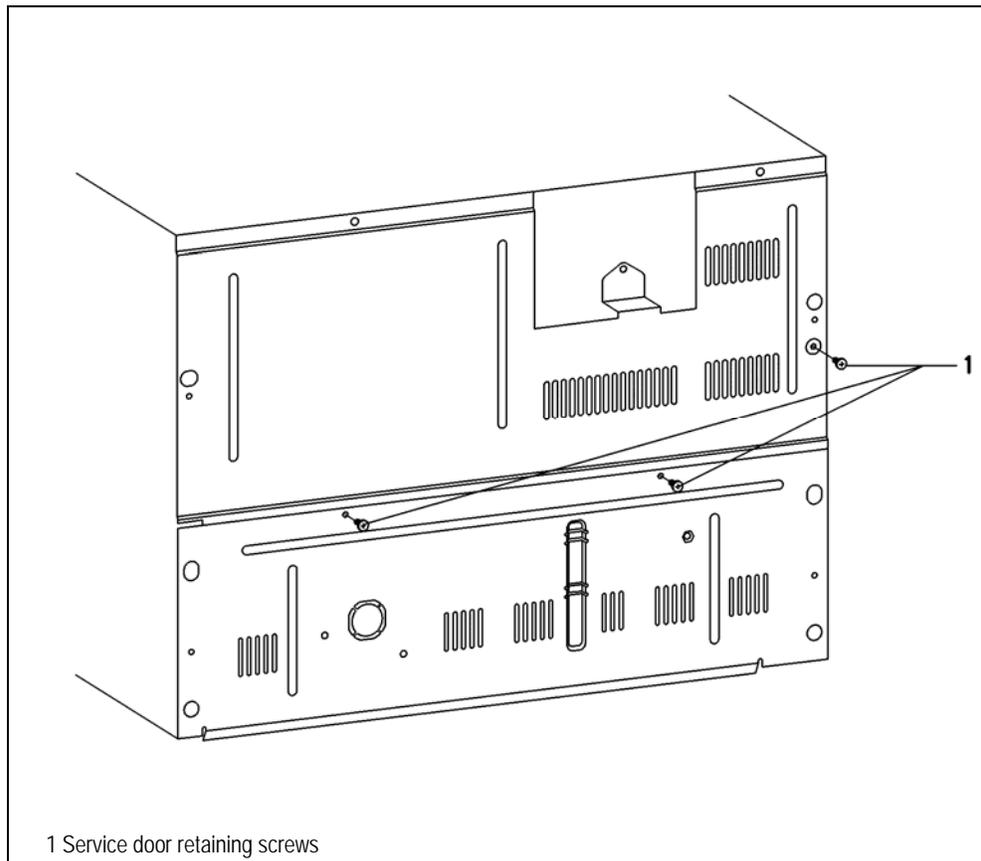
Figure 5-15: CVA4070 Microswitch Removal

7. Disconnect the plug from the microswitch (Figure 5-15, Item 1).
8. Unclip the microswitch and take it out.

Technical Information

5.8 Grinder – Remove

1. Appliance – Remove from cabinet (Figure 5.1).
2. Remove the retaining screws of the appliance lid.
3. Remove the lid.

**Figure 5-16:** CVA4070 Grinder Screw Removal

4. Remove the service door retaining screws (Figure 5-16).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

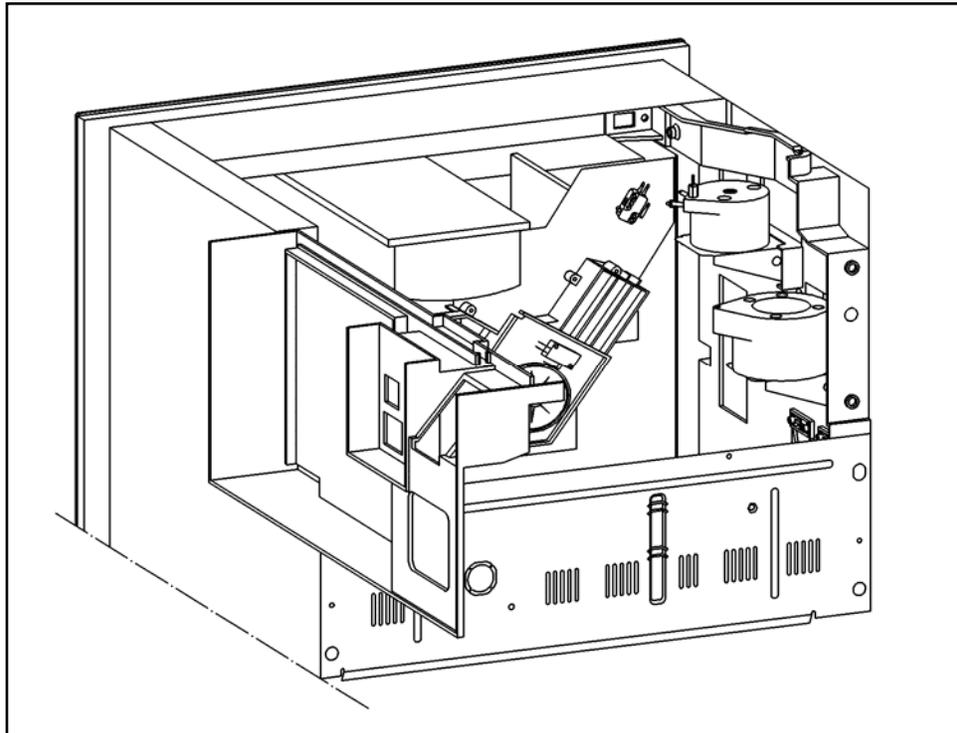
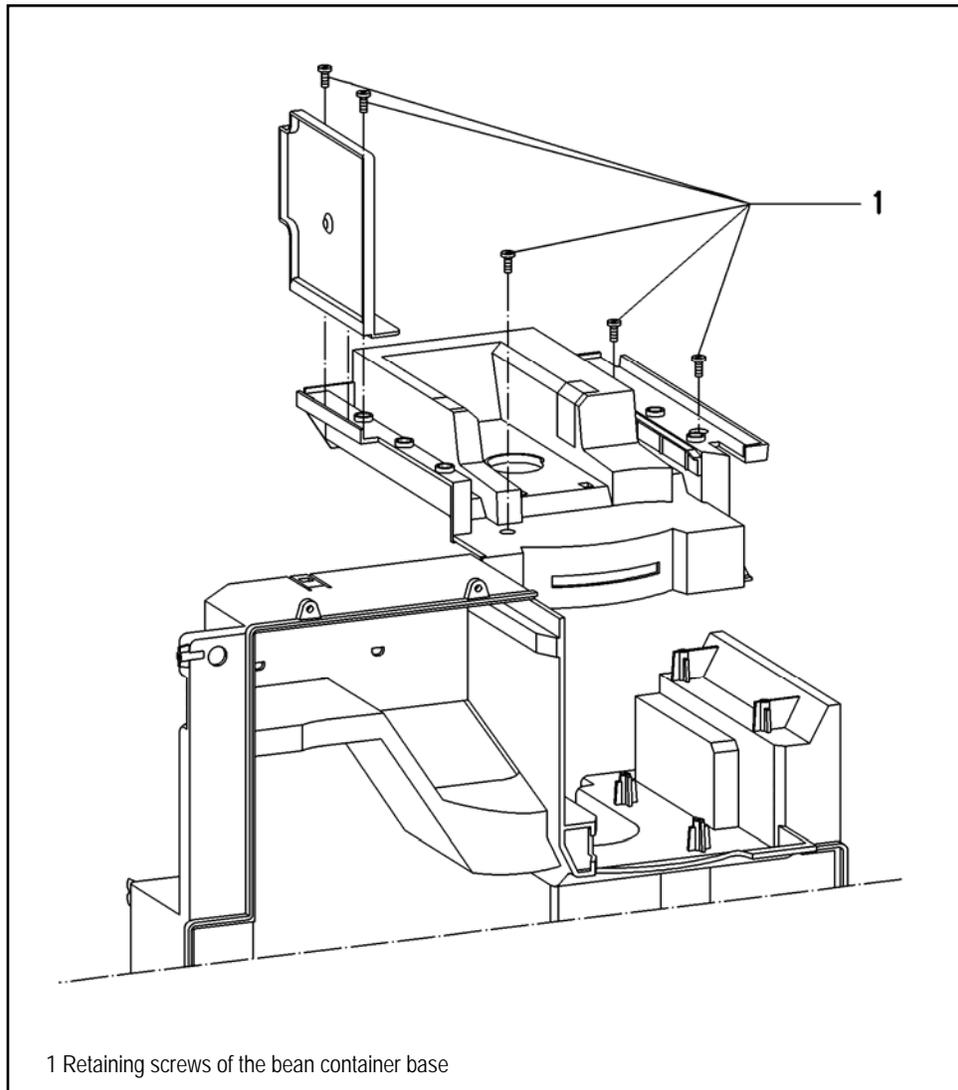


Figure 5-17: CVA4070 Grinder Unit Removal

7. Take the bean container out.

Technical Information

**Figure 5-18:** CVA4070 Bean Container Screw Removal

8. Remove the retaining screws of the base (Figure 5-18, Item1).

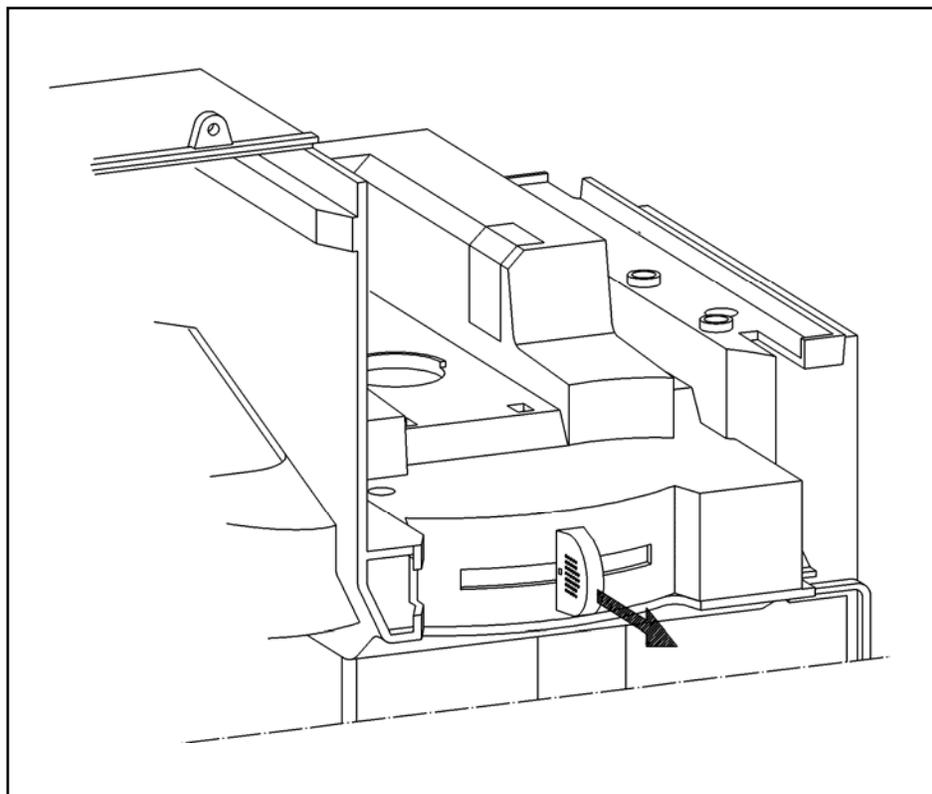
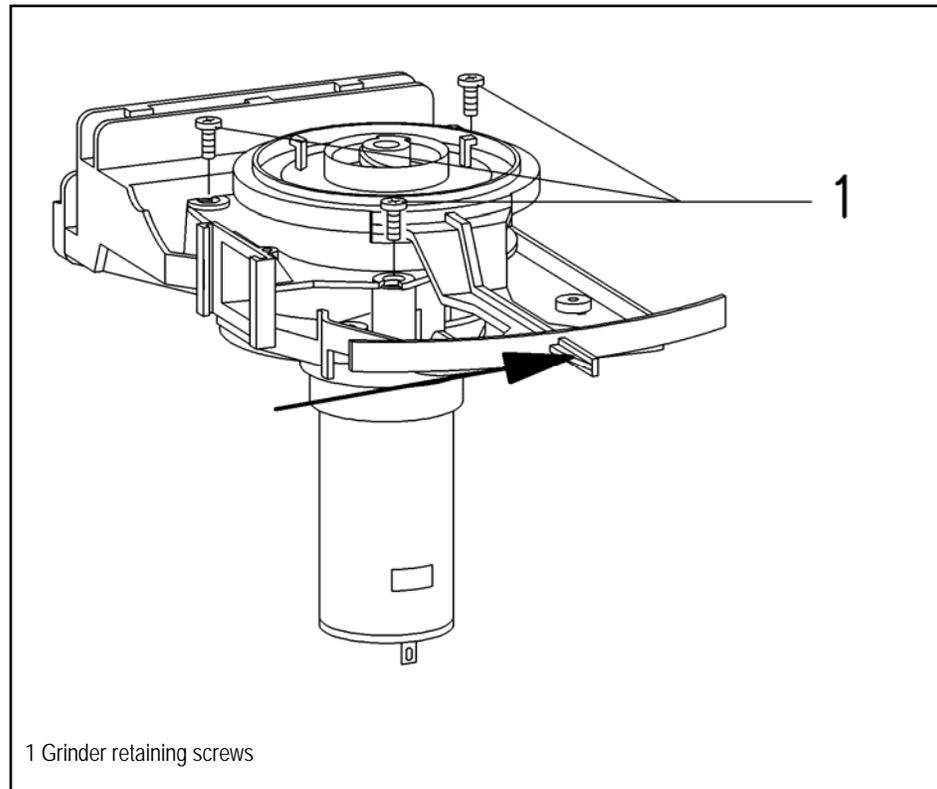


Figure 5-19: CVA4070 Bean Container Removal

9. Pull the handle off the adjustment lever (Figure 5-19).
10. Take the base out.

Technical Information

**Figure 5-20:** CVA4070 Grinder Retaining Screws Removal

11. Slide the adjustment lever aside (Figure 5-20).
12. Remove the grinder retaining screws (Figure 5-20, Item1).
13. Take the grinder out.
14. Pull the connecting plug off the grinder.

5.9 Hot water Solenoid – Remove

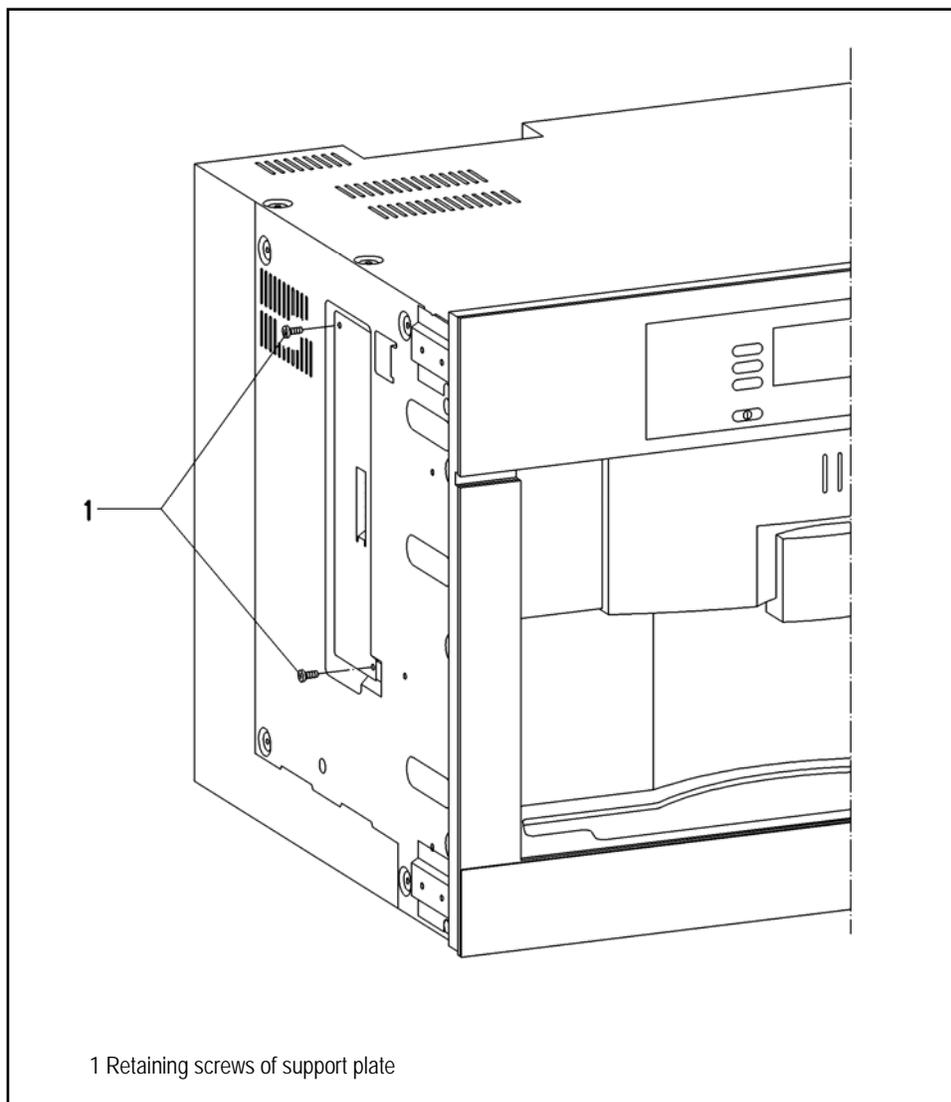
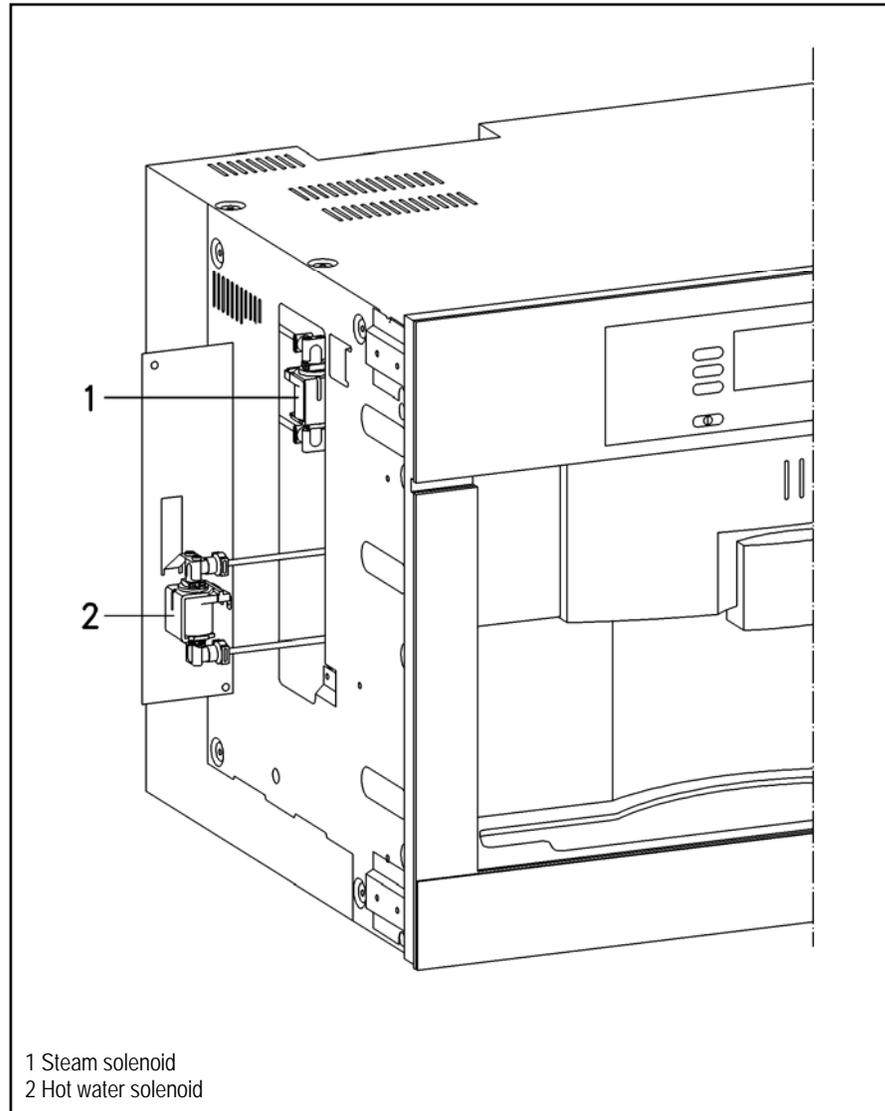


Figure 5-20: CVA4070 Grinder Retaining Screws Removal

1. Remove the screws of the support plate (Figure 5-20, Item 1).
2. Open the support plate.

Technical Information

**Figure 5-21: CVA4070 Solenoid Removal**

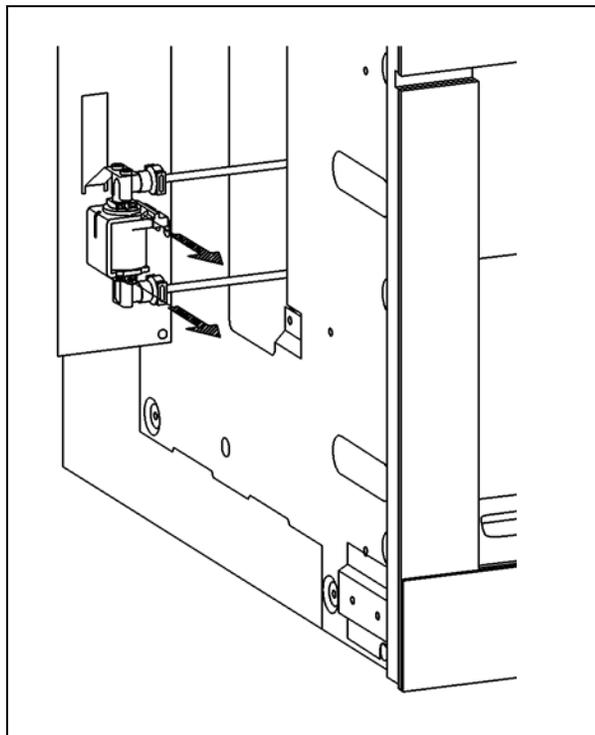


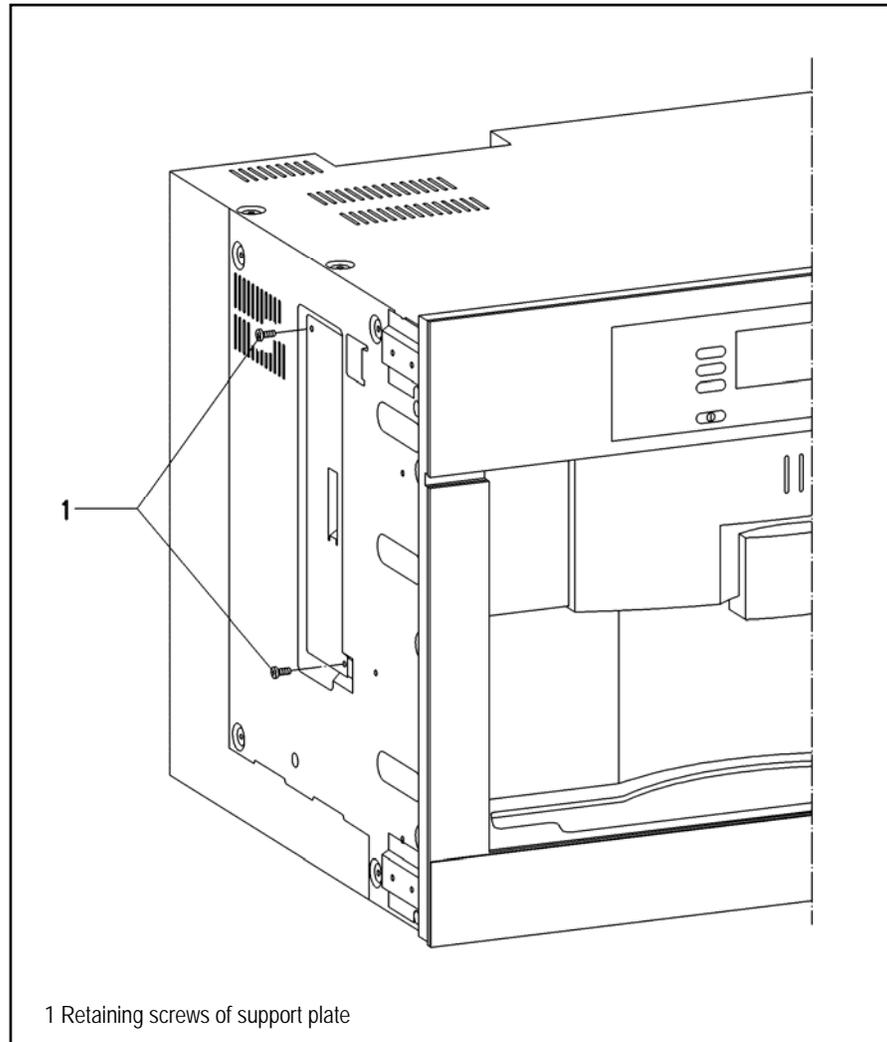
Figure 5-22: CVA4070 Solenoid Removal

3. Pull out the safety springs at the connection of the hot water solenoid (Figure 5-22).
4. Take the solenoid out.
5. Pull the connecting plug off the solenoid.

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

Technical Information

5.10 Steam Solenoid – Remove**Figure 5-23: CVA4070 Solenoid Screw Removal**

1. Remove the screws of the support plate (Figure 5-23, Item1).
2. Open the support plate.

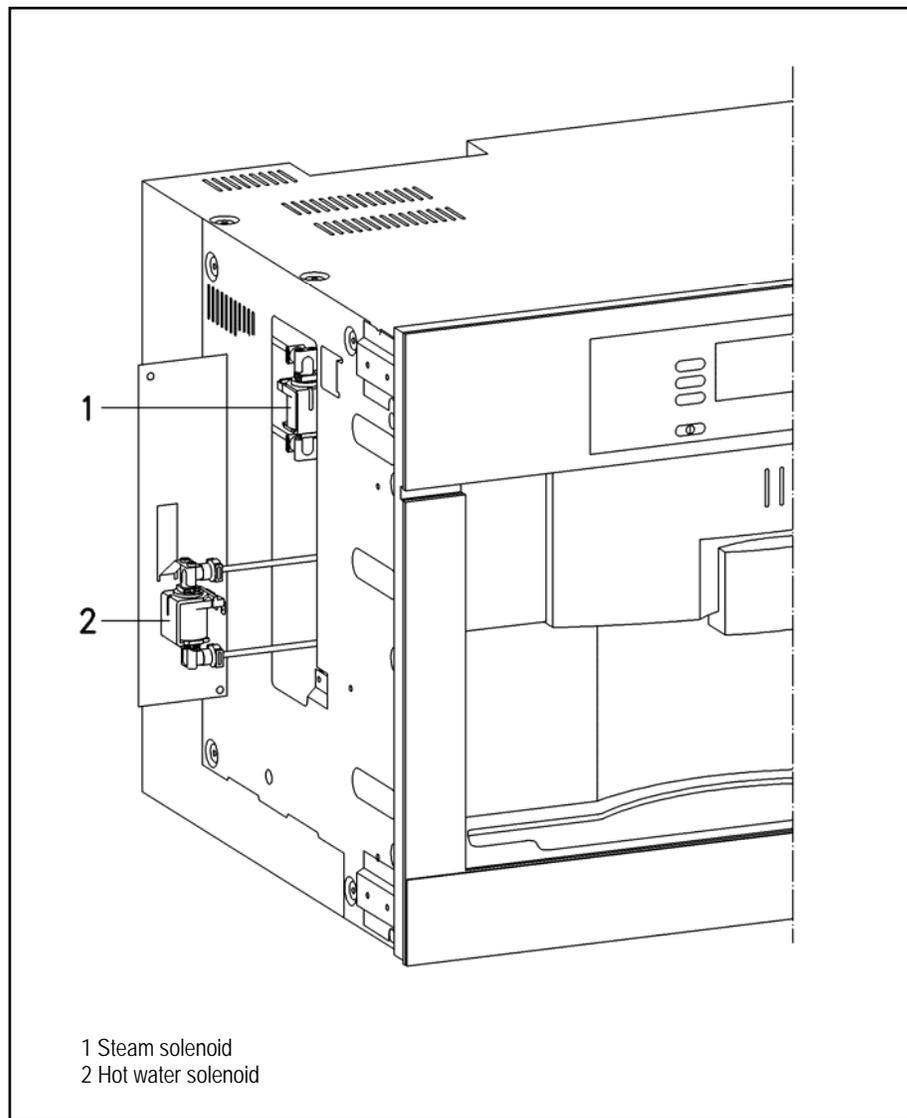


Figure 5-24: CVA4070 Solenoid Removal

Technical Information

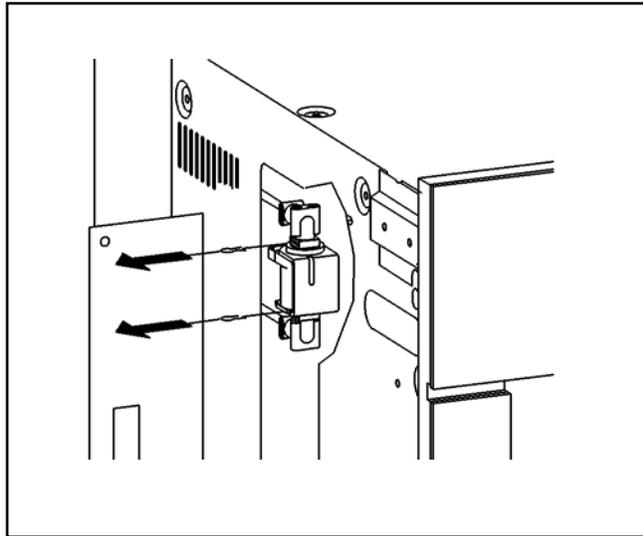


Figure 5-25: CVA4070 Solenoid Removal

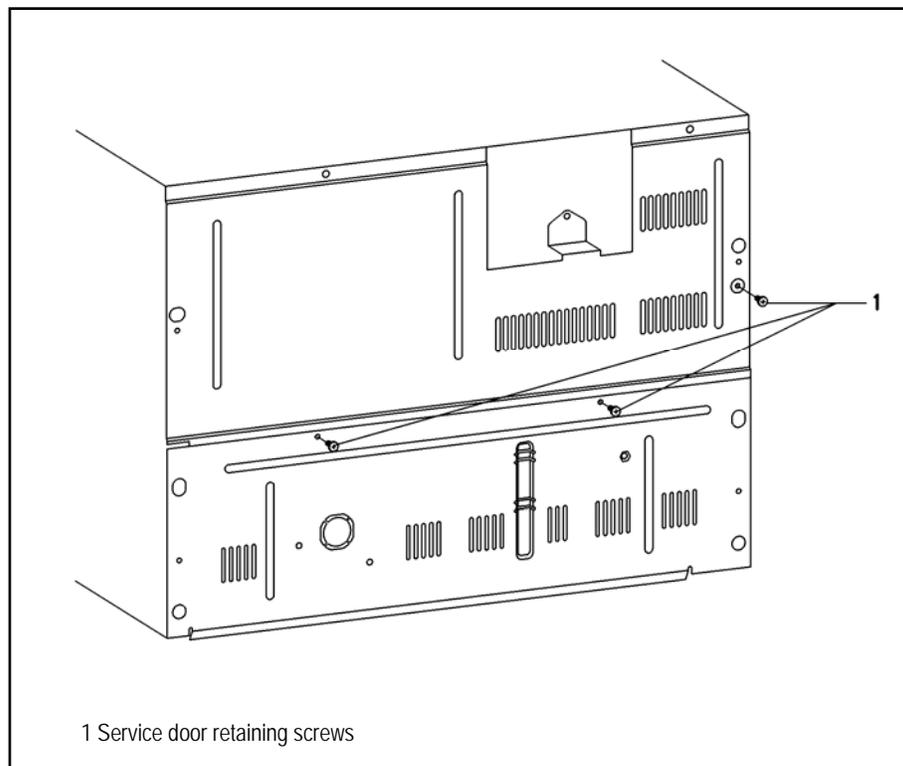
3. Pull out the safety springs at the connection of the steam solenoid (Figure 5-25).
4. Remove the solenoid.
5. Pull the connecting plug off the solenoid.

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

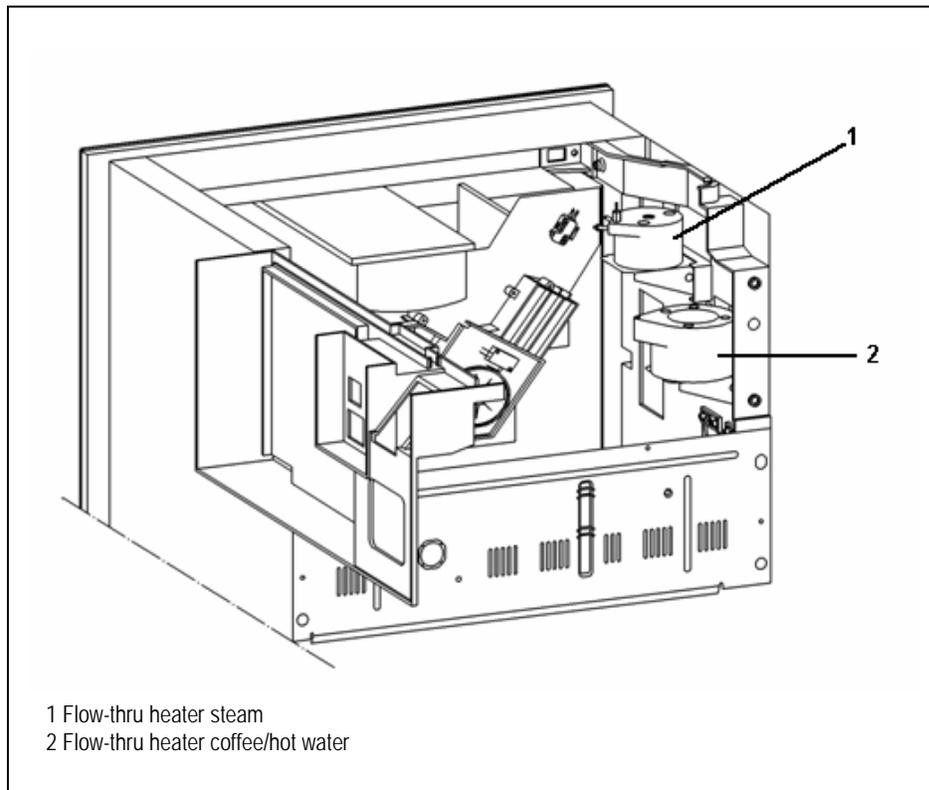
5.11 Flow-thru Heater Coffee/Hot Water – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the cover retaining screws.
3. Remove the cover.

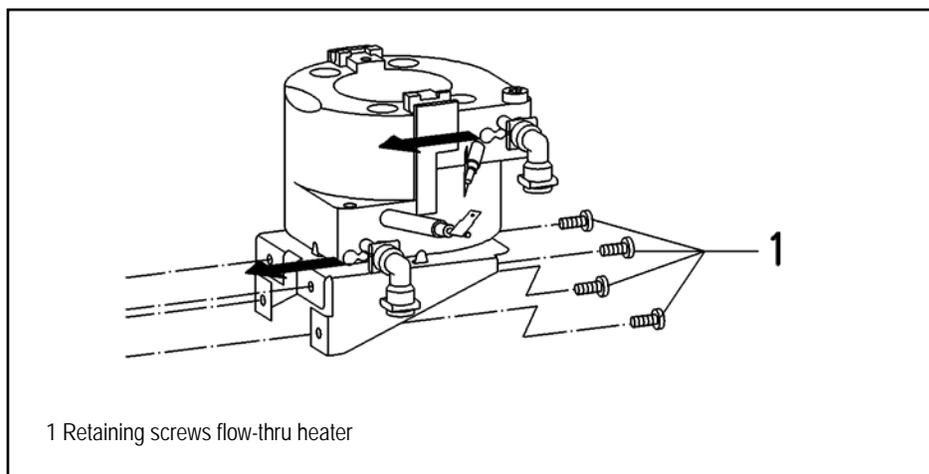
**Figure 5-26:** CVA4070 Rear Screw Removal

4. Remove the service door screws (Figure 5-26, Item1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

Technical Information

**Figure 5-27:** CVA4070 Flow-thru Heater

7. Remove the rear wall retaining screws at the bottom.
8. Take off the lower rear wall.

**Figure 5-28:** CVA4070 Flow-thru Heater Screw Removal

9. Pull out the spring clips at the water connection (Figure 5-28).
10. Remove the mounting platform, shelf screws of the flow-thru heater (Figure 5-28, Item. 1).
11. Remove the flow-thru heater.

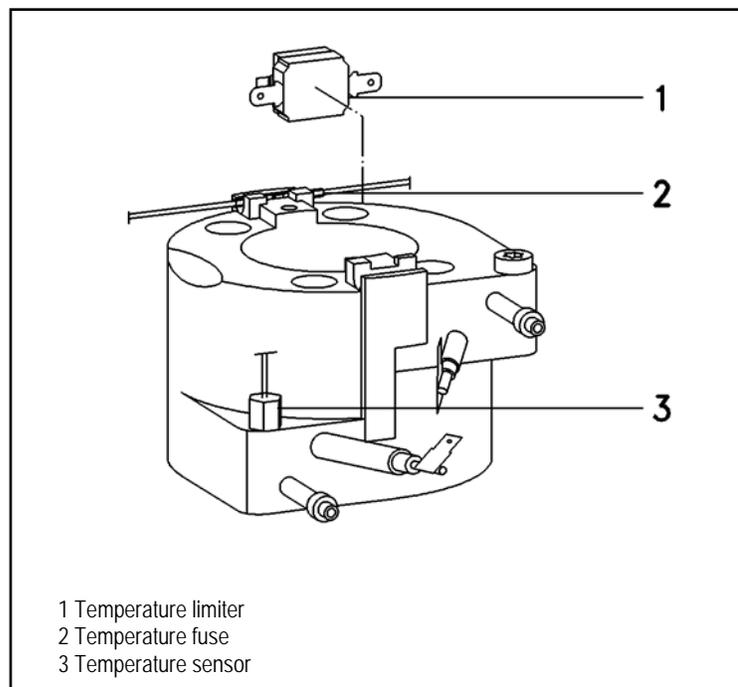


Figure 5-29: CVA4070 Flow-thru Heater Temperature

12. Remove the temperature sensor, temperature limiter and temperature fuse from the flow-thru heater (Figure 5-29, Items 1 – 3).
13. Pull the connectors off the flow-thru heater.

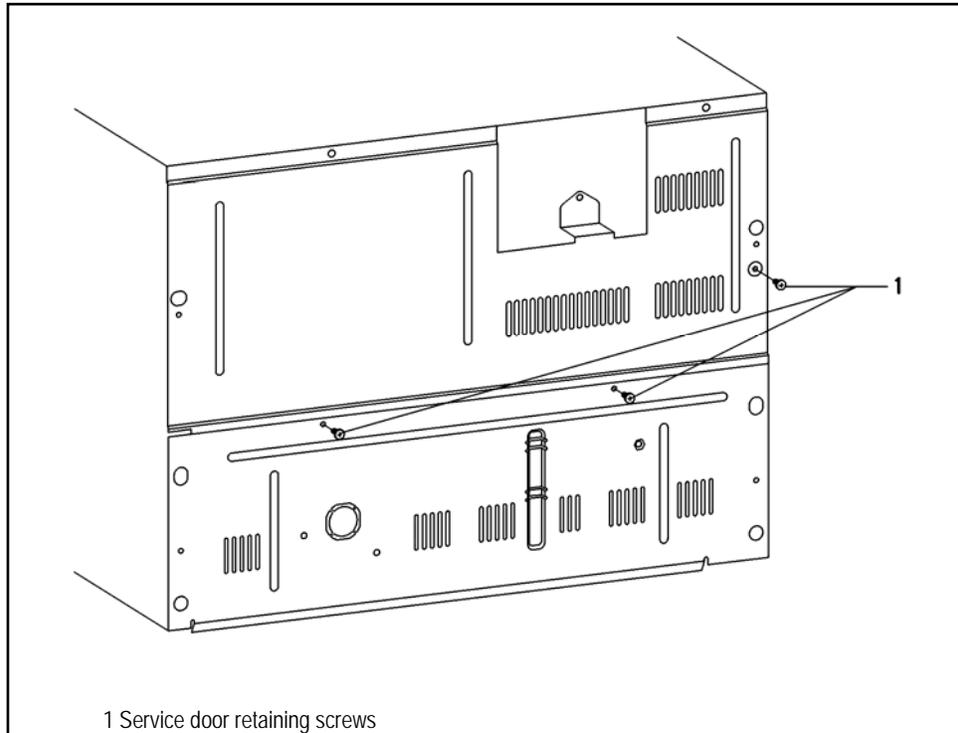
Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

Technical Information

5.12 Flow-thru Heater Steam – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the retaining screws of the appliance cover.
3. Remove the cover.

**Figure 5-30:** CVA4070 Rear Service Door Retaining Screw Removal

4. Remove the service door retaining screws (Figure 30, Item1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

Note:

Both steam and hot water have center screw anchoring it to platform.

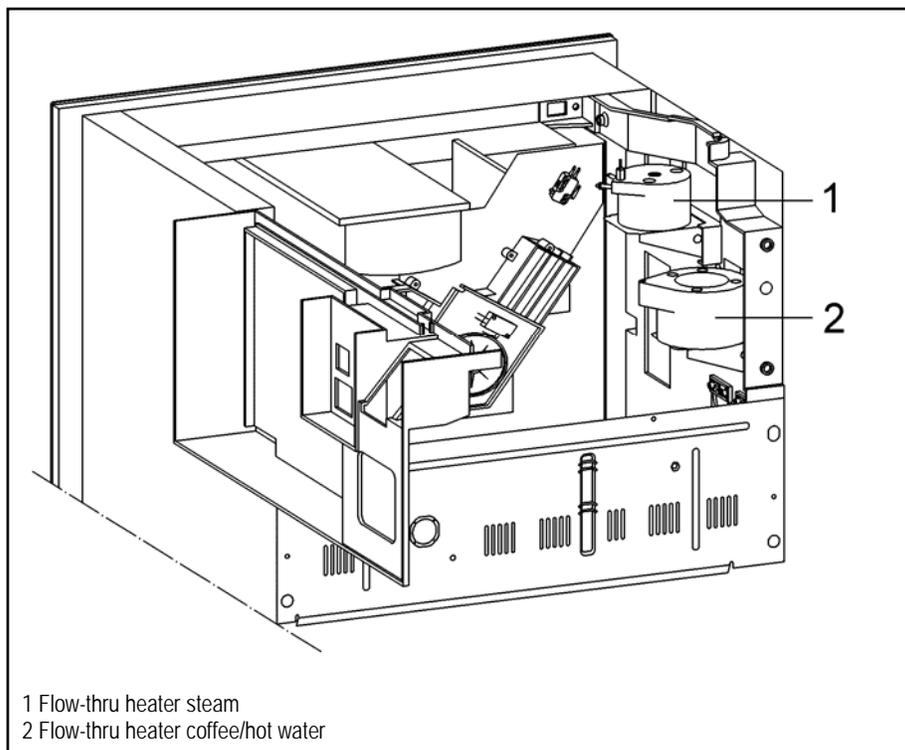


Figure 5-31: CVA4070 Flow-thru Heater Steam

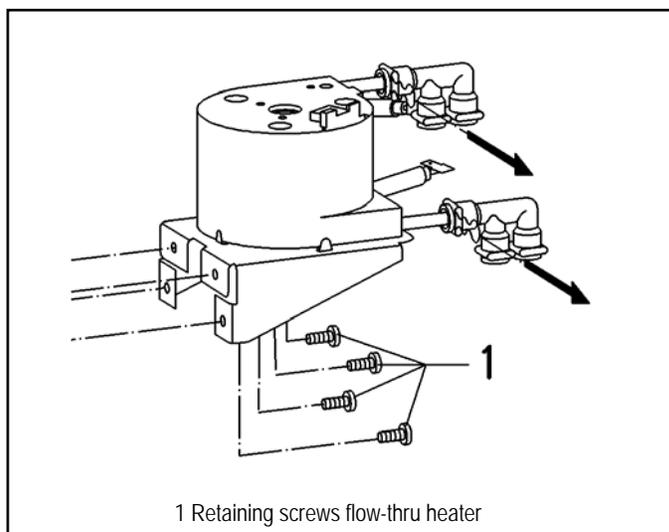
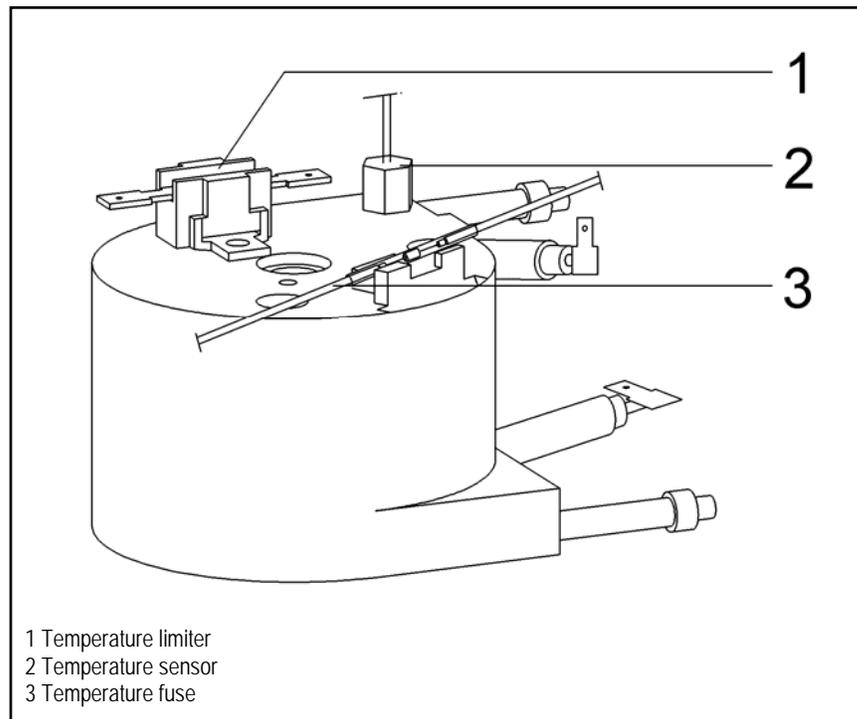


Figure 5-32: CVA4070 Flow-thru Heater Steam

Technical Information

7. Pull out the spring clips at the connection (Figure 32).
8. Remove the flow-thru heater mounting screws (Figure 32, Item 1).
9. S/B Remove center screw.
10. Remove the flow-thru heater.

**Figure 5-33:** CVA4070 Temperature

10. Remove the temperature limiter, temperature sensor and temperature fuse (Figure 5-33, Items 1 – 3).
11. Pull the connectors off the flow-thru heater.

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

5.13 Coffee/Hot Water Pump – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the cover retaining screws.
3. Remove the cover.

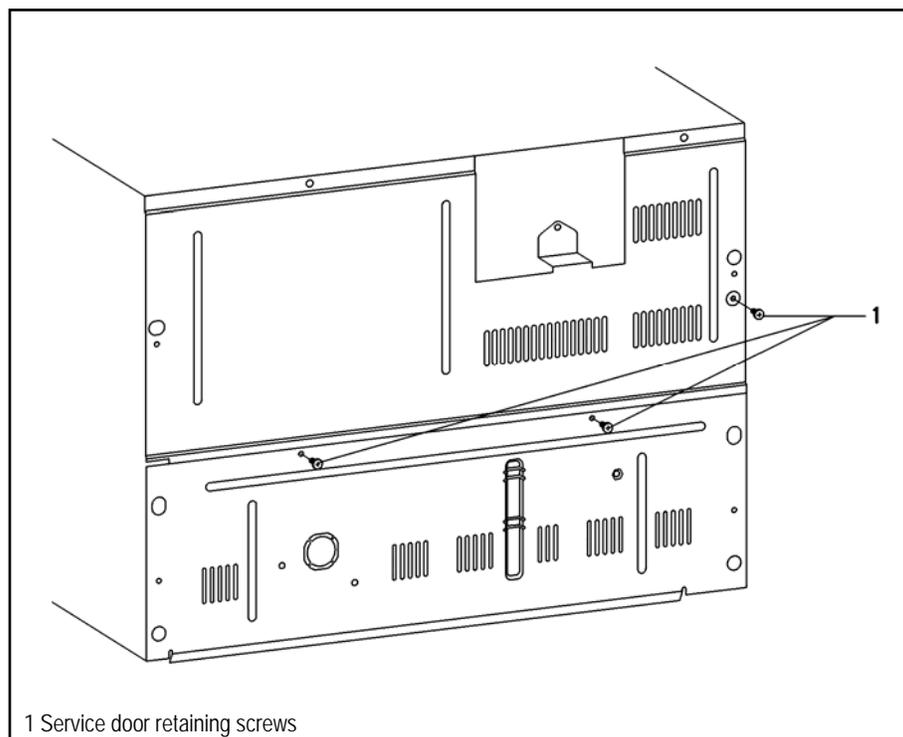


Figure 5-34: CVA4070 Rear Service Door Screw Removal

4. Remove the service door retaining screws (Figure 5-34, Item 1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

Technical Information

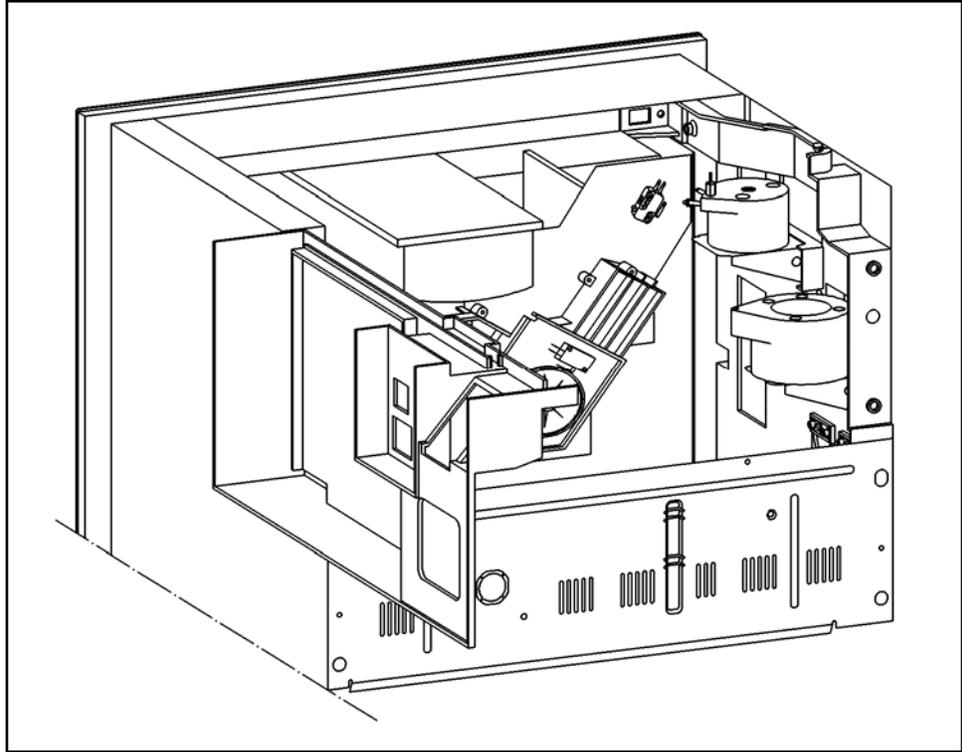


Figure 5-35: CVA4070 With Service Door Open

7. Remove the rear wall retaining screws at the bottom.
8. Remove the lower wall.

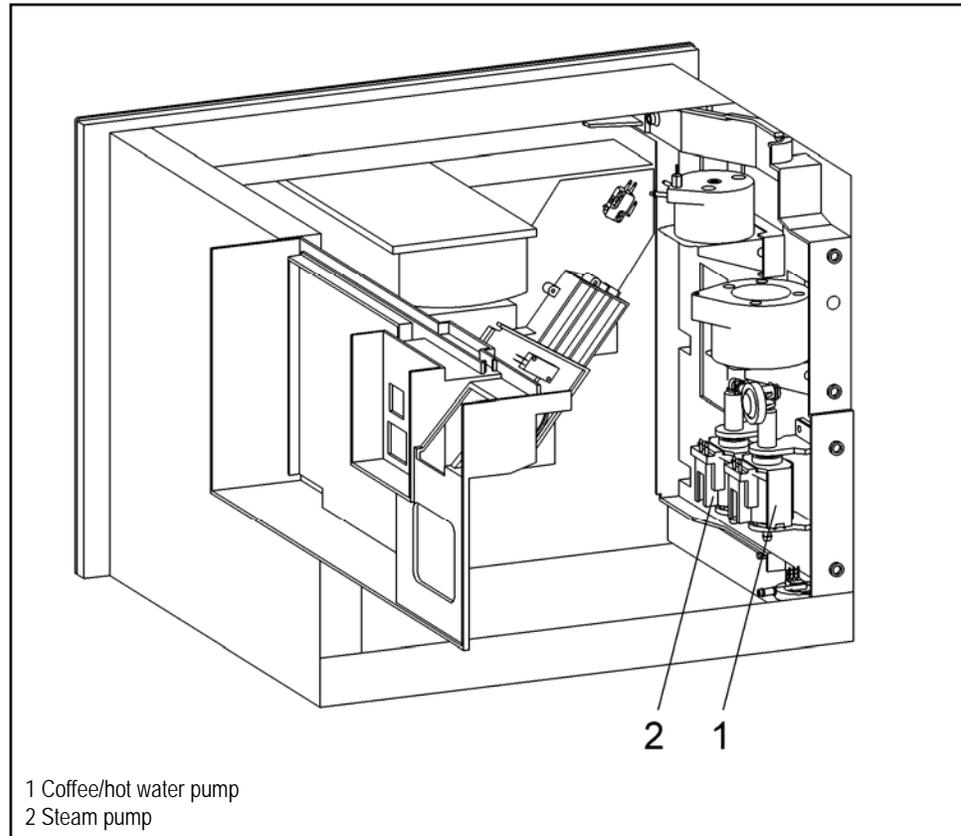
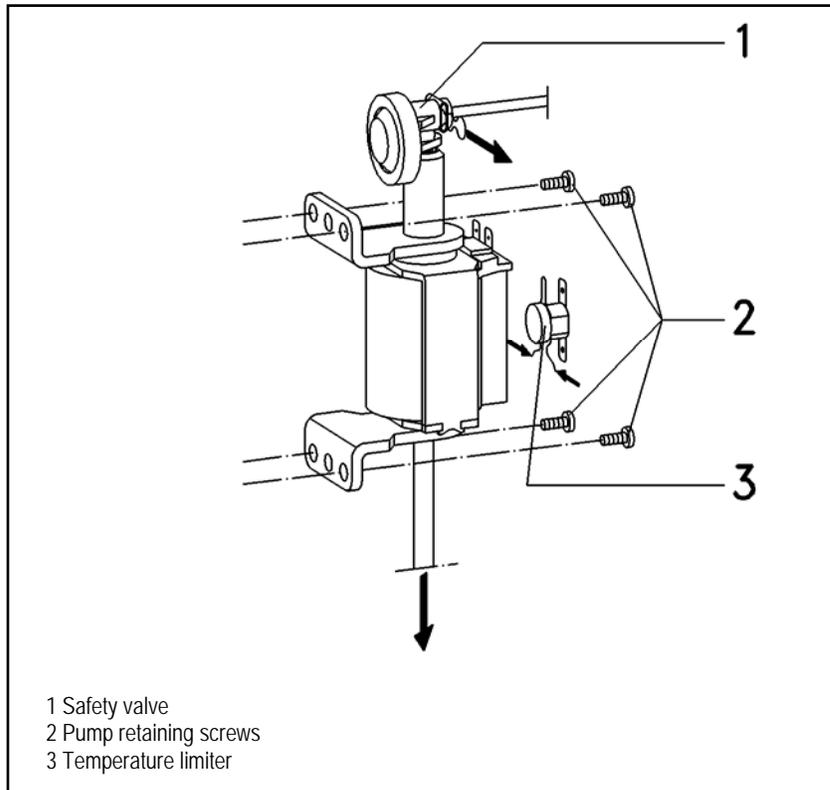


Figure 5-36: CVA4070 Coffee/Hot Water Pump

Technical Information

**Figure 5-37:** CVA4070 Coffee/Hot Water Pump Removal

9. Release the teflon hose from the safety valve and disconnect it (Figure 5-37, Item 1).
10. Pull the connectors off the pump.
11. Remove the pump retaining screws (Figure 5-37, Item 2).
12. Remove the pump.
13. Pull the silicone hose off the pump (Figure 5-37).
14. Unclip the temperature limiter and remove it (Figure 5-37, Item 3).
15. Unscrew the safety valve (Figure 5-37, Item 1).
16. Take the retaining brackets off the pump.

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

5.14 Steam Pump – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the cover retaining screws.
3. Remove the cover.

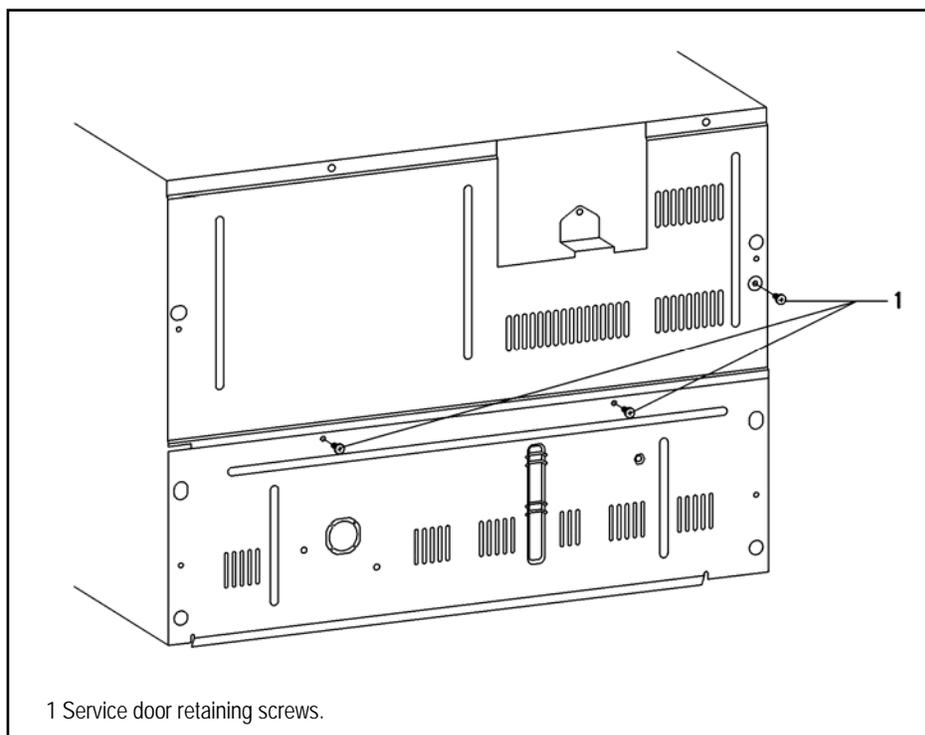


Figure 5-38: CVA4070 Service Door Steam Pump Removal

4. Remove the service door retaining screws (Figure 5-38, Item 1).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

Technical Information

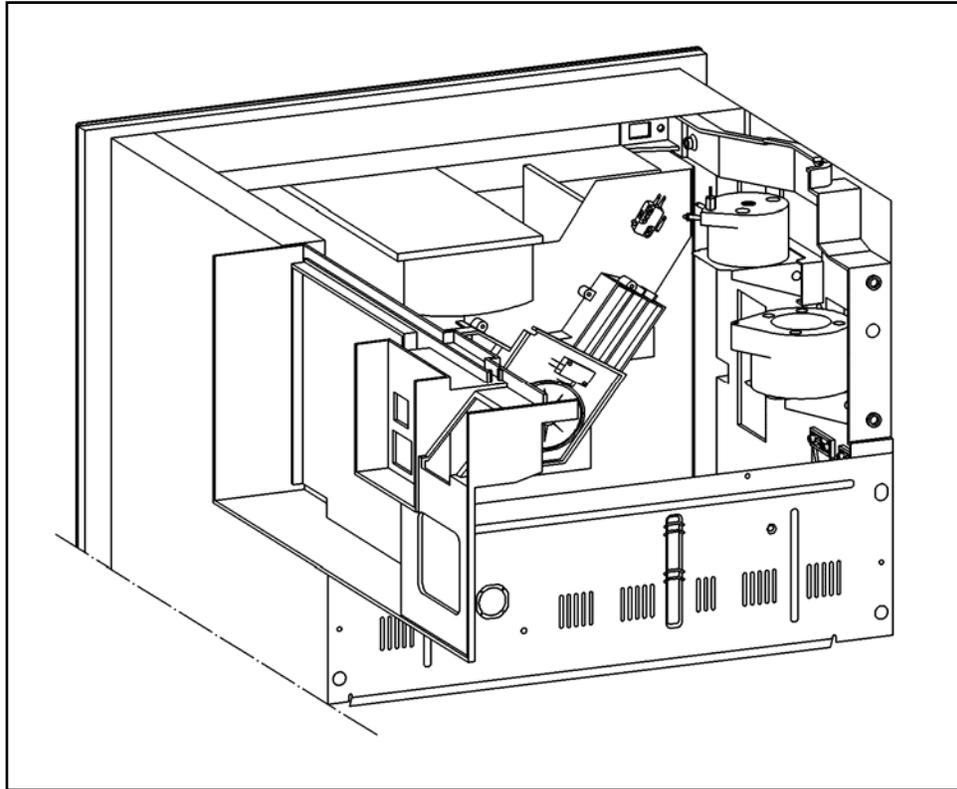


Figure 5-39: CVA4070 Steam Pump Removal

7. Remove the rear wall retaining screws at the bottom.
8. Remove the lower wall.

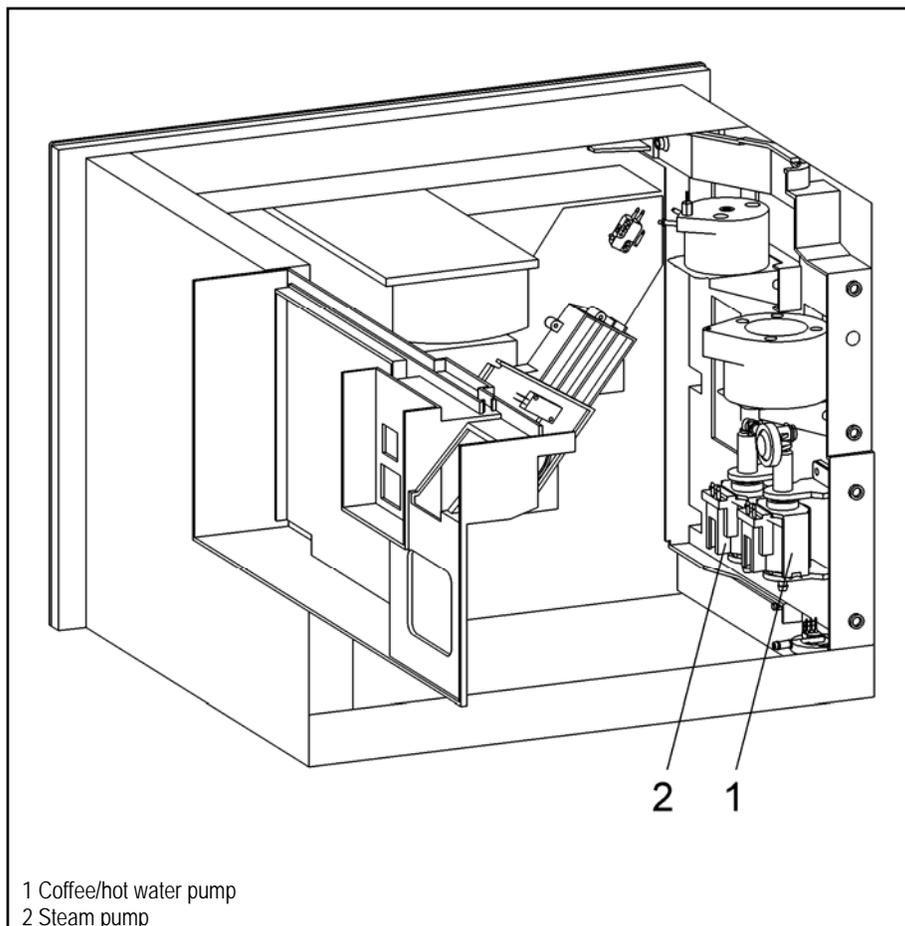
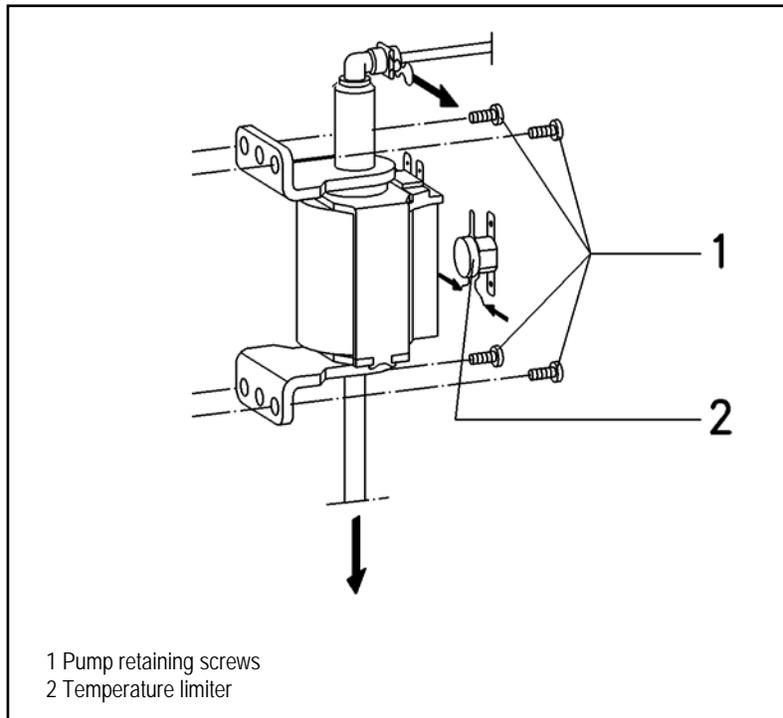


Figure 5-40: CVA4070 Coffee/Hot Water Pump Removal

Technical Information

**Figure 5-41:** CVA4070 Pump Retaining Screws Removal

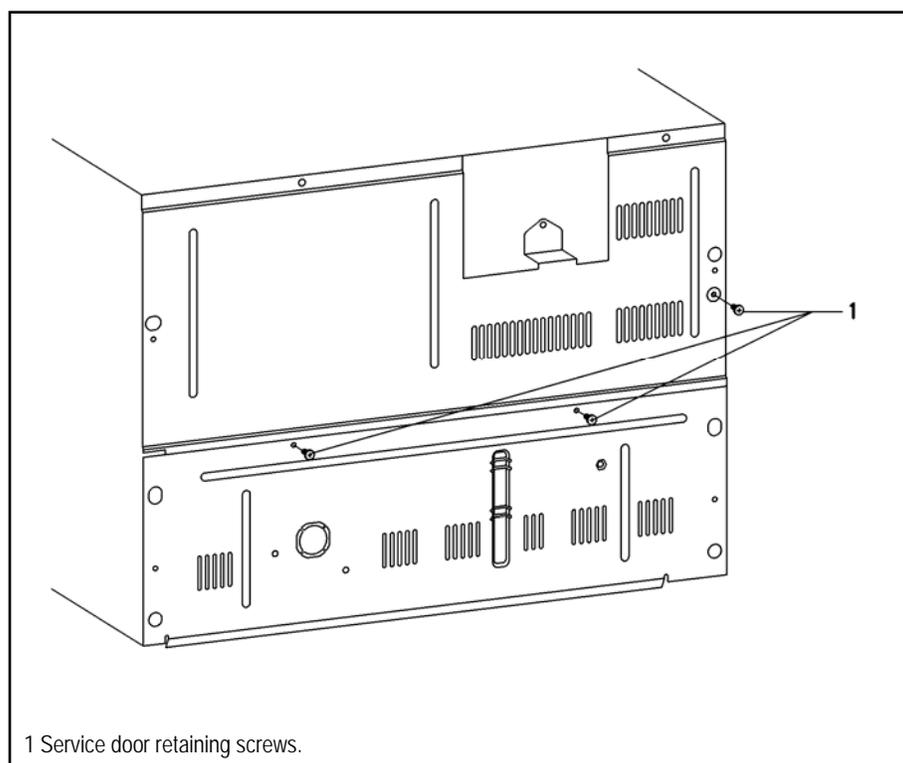
9. Pull the connectors off the pump.
10. Remove the pump bracket retaining screws (Figure 5-41, Item 1).
11. Remove the pump.
12. Remove the retaining clip from the 90 ° connector and disconnect the teflon hose (Figure 5-41).
13. Pull the silicone hose off the pump (Figure 5-41).
14. Unclip the temperature limiter and remove it (Figure 5-41, Item 2).
15. Take the retaining brackets off the pump.

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

5.15 Flow Meter – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the cover retaining screws.
3. Remove the cover.

**Figure 5-42:** CVA4070 Flow Meter Screws Removal

4. Remove the service door retaining screws (Figure 5-42).
5. Take the cable connecting the control and the power electronic out of its guide.
6. Open the service door.

Technical Information

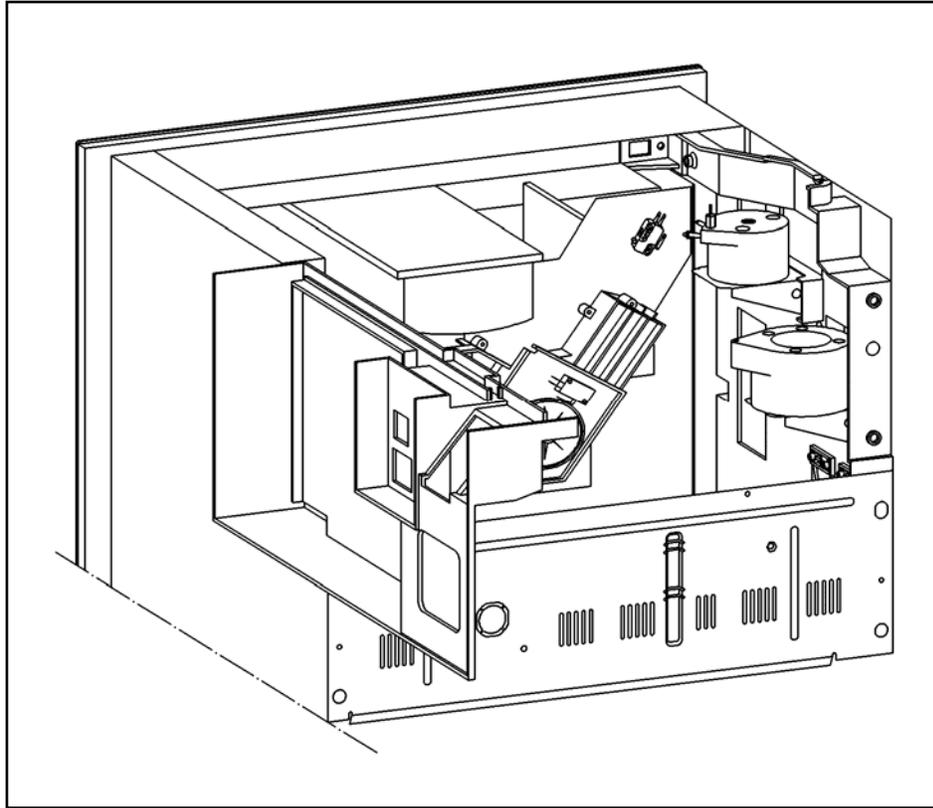


Figure 5-43: CVA4070 Flow Meter Removal

7. Remove the rear wall retaining screws at the bottom.
8. Remove the lower wall.

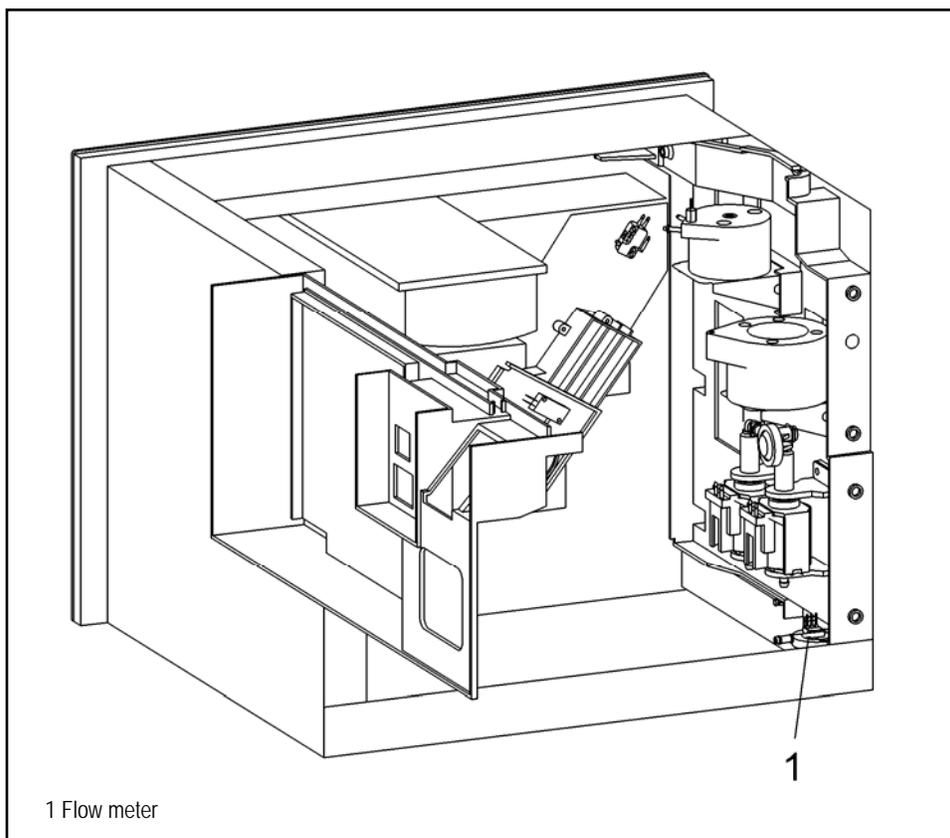
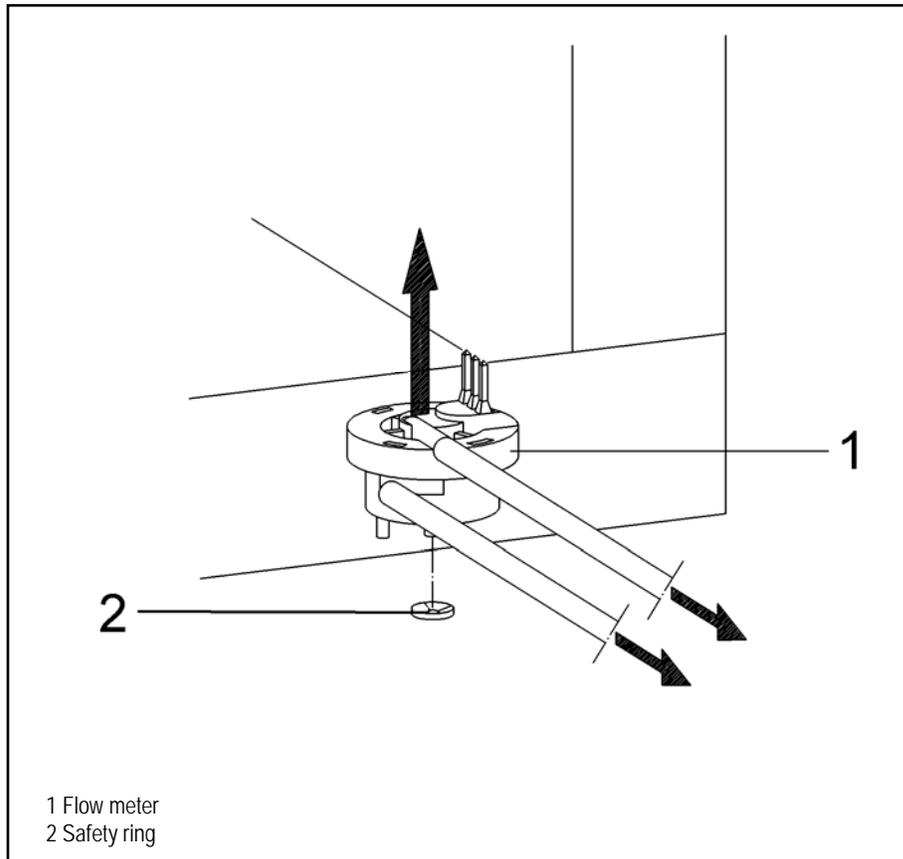


Figure 5-44: CVA4070 Flow Meter Removal

Technical Information

**Figure 5-45:** CVA4070 Flow Meter Safety Ring Removal

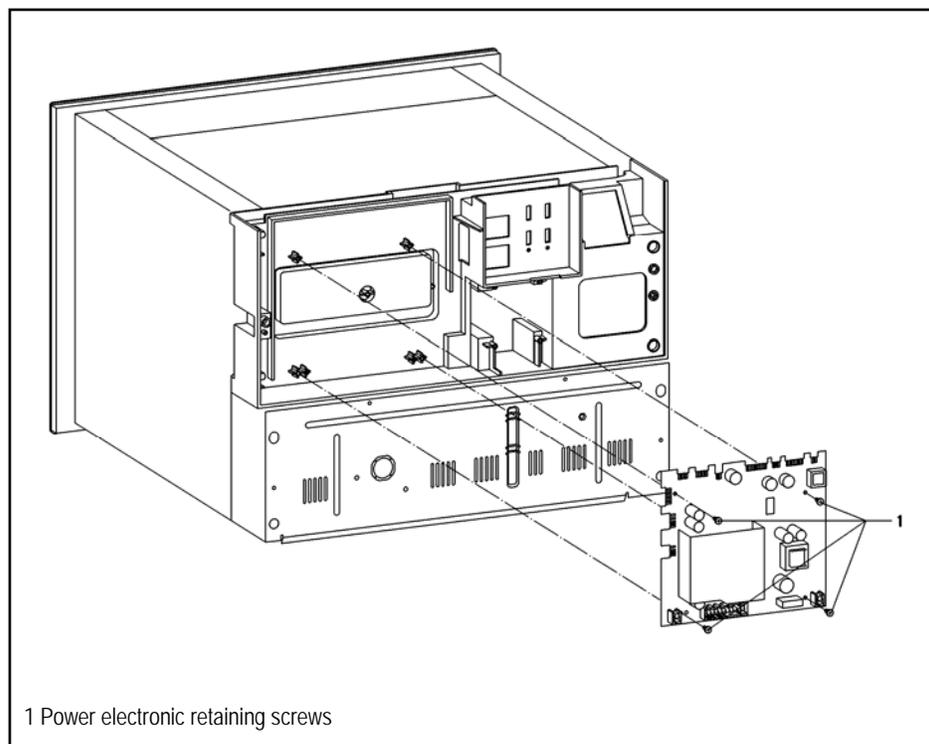
9. Pull the silicone hoses off the flow meter (Figure 5-45).
10. Pull the connector off the flow meter.
11. Pull the flow meter upward out of the safety ring and remove it (Figure 5-45, Item 2).

Warning!

To prevent malfunctions in the water system (for example clogging of the valves), never use grease, oil or other lubricants when assembling the water supplying components.

5.15 Power Electronic EPL – Remove

1. Appliance – Remove from cabinet”, (Figure 5-1).
2. Remove the rear wall retaining screws at the top.
3. Remove the top rear wall.

**Figure 5-46:** CVA4070 Power Electronic Retaining Screws Removal

4. Remove the screws of the power electronic (Figure 5-46, Item 1).
5. Remove the power electronic.
6. Pull the connectors off the power electronic.

Technical Information

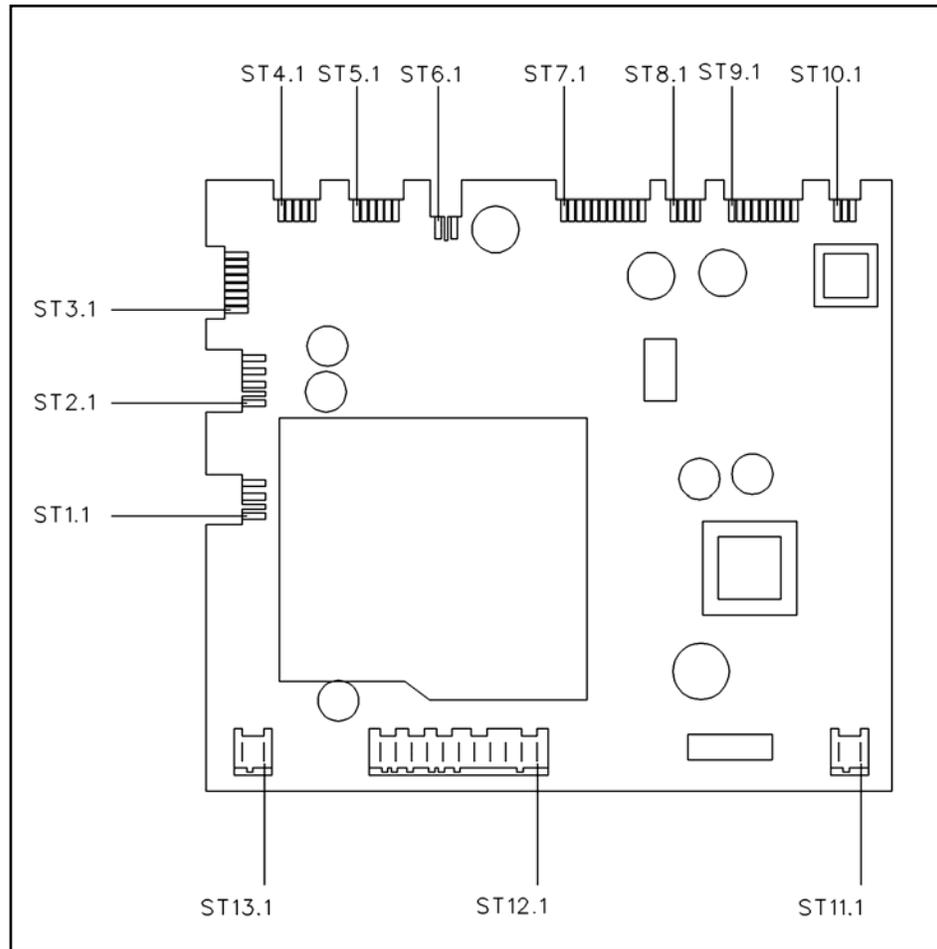


Figure 5-47: CVA4070 Connecting Plugs and Pin Allocations.

Plug #	Pins	Usage / Component
ST1	1	vacant (solenoid for hard plumbing)
	2	
	3	
ST2	1	Steam solenoid
	2	
	3	Hot water solenoid
	4	
ST3	1	Reed contact ground coffee funnel
	2	

Table 5-1: CVA4070 Connecting Plugs and Pin Allocations (Cont. on Table 5-2)

Plug #	Pins	Usage / Component
	3	Reed contact waste container
	4	
	5	Transmitter for electronic light barrier bean container
	6	
	7	Receiver for electronic light barrier bean container
	8	
ST4	1	Microswitch brew unit 1 compensation
	2	Microswitch brew unit 2 clockwise turn
	3	Microswitch brew unit 3 counter-clockwise turn
	4	Microswitch brew unit 4 present
	5	Microswitch brew unit XXXXMasse
ST5	1	Reed contact water tank fill
	2	
	3	Reed contact water tank in units with hard plumbing
	4	
	5	Reed contact door closed
	6	
ST6	1	Brew unit motor
	2	
ST7	1	Connection to control electronic
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	

Table 5-2: CVA4070 Connecting Plugs and Pin Allocations (Cont. from Table 5-1) (Cont. on Table 5-3)

Technical Information

ST8	1	
	2	
	3	
	4	
ST9	1	LED interior lamp
	2	
	3	Temperature sensor NTC coffee/hot water
	4	
	5	Temperature sensor NTC steam
	6	
	7	Flow meter
	8	
	9	
ST10	1	
	2	
	3	
ST11	1	Connector to main power supply
	2	Connection to Plug 12
ST12	1	Flow-thru heater steam
	2	vacant
	3	Flow-thru heater coffee/hot water
	4	vacant
	5	Connection to plug 11
	6	Interference suppressor
	7	Pump coffee/hot water
	8	Steam pump
	9	vacant
	10	Grinder motor
	11	
ST13	1	Connector to warming drawer
	2	

Table 5-3: CVA4070 Connecting Plugs and Pin Allocations (Cont. from Table 5-2)

6.0 Fault Diagnosis

6.1 Programming Mode

Initial requirements

1. Switch the appliance off.

Accessing

Note

Access has to be completed within 10 seconds.

2. Touch pad **Clear** and hold it.
3. Touch pad **On/Off** once.
4. Release pad **Clear**.
5. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch the pad next to the desired position (refer Table).
2. Touch the pad next to the desired setting (refer Table).

Back (without saving): Touch pad **Clear**.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **To end:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information

Position		Setting	Function	Factory Setting	
Reset		No	Back, without Reset	-	
		yes	All settings made by the customer (except language) are deleted. All own user profiles are deleted. The fault code memory remains.		
Settings	Language	cestina	The language remains, even when the program is reset to factory setting. If the language setting is wrong, use the bilder\t4640s02.tif icon as a guide to the language menu.	-	
		dansk			
		deutsch			
		english			
		espanol			
		francais			
		italiano			
		magyar			
		nederlands			
		norsk			
		polski			
		português			
		suomi			
		svenska			
		türkce			
greek					
russian					
Settings	Time	Display	on	The Time display stays switched on	On
			on for 60 seconds	When the unit is switched off, the time display dims after 60 seconds.	
		Time Format	12 h	The time is shown in the 12 hour format.	24 h
			24 h	The time is shown in the 24 hour format.	
		Setting	e.g. 8:34	Use the pads +/- to set the current time.	-

Table 6-1: CVA4070 Program Mode (Cont. on Table 6-2)

Position			Setting	Function	Factory Setting		
Settings	Timer	Set	Start at	e. g. 7:30	Use the pads +/- to set the desired time.	-	
			Switch off after	e. g. 0:15			
			Switch off after	e. g. 9:00			
		Active	Switch on at	e. g. 7:30	The unit is switched on at the specified time.		-
			Switch off at	e. g. 9:00	The unit is switched off at the specified time.		-
Settings	Grinding Amount	Espresso	Step 1 – 17	Grinding Time 3.9 s – 10 s	Step 9		
		Coffee	Step 1 – 17		Step 9		
		Cappuccino	Step 1 – 17		Step 9		
Settings	Pre-Brewing		Long	Pre-brew 3.0 s	Without		
			Normal	Pre-brew 1.5 s			
			Without	No pre-brewing			
Settings	Temperature	Espresso	Minimum	= 205 °F (96 °C) (in the flow-thru heater)	Medium		
			Low	= 208 °F (98 °C) (in the flow-thru heater)			
			Medium	= 212 °F (100 °C) (in the flow-thru heater)			
			High	= 215 °F (102 °C) (in the flow-thru heater)			
			Maximum	= 219 °F (104 °C) (in the flow-thru heater)			

Table 6-2: CVA4070 Program Mode (Cont. from Table 6-1; Cont. on Table 6-3)

Technical Information

Position			Settings	Function	Factory Setting
Settings	Temperature	Coffee	Minimum	= 205 °F (96 °C) (in the flow-thru heater)	Medium
			Low	= 208 °F (98 °C) (in the flow-thru heater)	
			Medium	= 212 °F (100 °C) (in the flow-thru heater)	
			High	= 215 °F (102 °C) (in the flow-thru heater)	
			Maximum	= 219 °F (104 °C) (in the flow-thru heater)	
Settings	Temperature	Cappuccino	Minimum	= 205 °F (96 °C) (in the flow-thru heater)	Medium
			Low	= 208 °F (98 °C) (in the flow-thru heater)	
			Medium	= 212 °F (100 °C) (in the flow-thru heater)	
			High	= 215 °F (102 °C) (in the flow-thru heater)	
			Maximum	= 219 °F (104 °C) (in the flow-thru heater)	
Settings	Temperature	Hot Water	Minimum	= 205 °F (96 °C) (in the flow-thru heater)	Medium
			Low	= 208 °F (98 °C) (in the flow-thru heater)	
			Medium	= 212 °F (100 °C) (in the flow-thru heater)	
			High	= 215 °F (102 °C) (in the flow-thru heater)	
			Maximum	= 219 °F (104 °C) (in the flow-thru heater)	
Settings	Automatic Rinse		On	The appliance rinses when it's switched on, and after a beverage is dispensed, shortly before it switches off.	On
			Off	Automatic rinse is switched off.	

Table 6-3: CVA4070 Program Mode (Cont. from Table 6-2; Cont. on Table 6-4)

Position		Settings	Function	Factory Setting	
Settings	Steam System		On	The steam system is switched on.	On
			Off	The steam system is switched off.	
Settings	Lighting	Automatic	On	The lamps of the door and the interior are switched on.	On
			Off	The lamps of the door and the interior are switched off.	
	Dim	Top	step 1 – 17	The lamps of the appliance interior can be dimmed.	Step 17
		Bottom	step 1 – 17	The lamps of the appliance door can be dimmed.	Step 17
Settings	Coffee Total		e. g. 11	The number of coffees, espressos and capuccinos dispensed is indicated.	-
Settings	System Lock		Accept	System lock is switched on. The appliance can be safeguarded against accidental switch-on.	Do Not Accept
			Do Not Accept	System lock is switched off.	
Settings	Water Hardness		Soft 1	refer to 021 Table 4	Very Hard 4
			Medium 2		
			Hard 3		
			Very Hard 4		

Table 6-4: CVA4070 Program Mode (Cont. from Table 6-3; Cont. on Table 6-5)

Technical Information

Position		Settings	Function	Factory Setting	
Settings	User Profile	Select	Standard	The main menu contains a standard user profile: The settings for the grinding amount, temperature, pre-brewing and portion size correspond to the factory setting.	Standard
			Up to 7 own user profiles	The selected user profile is indicated in the main menu. Grinding amount, temperature, pre-brewing and portion size can be modified in the menu item Settings for each user profile.	
		Create	e. g. name	Create a new user profile. Up to 7 user profiles are possible.	-
		Change name	-	Change the name of a user profile.	-
		Delete	-	Delete a user profile.	-
		Change-over	never	The display of the user profile in the main menu never changes over to Standard.	Never
			At switch-on	The display of the user profile in the main menu changes over to Standard as the machine is switched on.	
			After beverage is dispensed	The display of the user profile in the main menu changes over to Standard after each beverage service.	

Table 6-5: CVA4070 Program Mode (Cont. from Table 6-4; Cont. on Table 6-6)

Technical Information

Position		Settings	Function	Factory Setting	
Settings	Display	Contrast	Step 1 – 16	Low to High	Step 8
		Brightness	Step 1 – 16	Dim to Bright	Step 14
Settings	Signal Tones	Volume	Step 1 - 18	Low to High	Step 18
		Touch Pad Tones	On	Touch pads emit a tone when they are touched.	On
Off	Touch pads do not emit a tone when they are touched.				
Settings	Factory Settings	All settings	No	Back, without restoring the factory setting.	-
			Yes	All settings made by the customer (except language) are reset to factory setting.	
		User profiles	No	Back, without deleting the user profiles	-
			Yes	Back, without deleting the user profiles.	
Customer Service	Restart	-	A restart is like a break from the power supply. The fault memory, as well as all settings and user profiles created by the customer will remain.	-	

Table 6-6: CVA4070 Program Mode (Cont. from Table 6-5; Cont. on Table 6-7)

Technical Information

Position			Settings	Function	Factory Setting
Customer Service	Appliance Variant	Hard plumbing	Available	The appliance is hooked-up to plumbing.	Not Available
			Not Available	The appliance cannot be hooked-up to plumbing.	
Release Descale			No	Back, without lifting the descale lock.	-
			Yes	Release the descale lock. *1	
Release Cleaning			No	Back, without lifting the cleaning lock.	-
			Yes	Release the cleaning lock. *2	

Table 6-7: CVA4070 Program Mode (Cont. from Table 6-6)

*1 Attention! After service work is completed, descale the appliance.

*2 Attention! After service work is completed, clean the appliance.

6.1.1 Reset

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch the pad next to **Reset**.

No: Back, without Reset.

Yes: All settings made by the customer (except language) are deleted. All own user profiles are deleted. The fault code memory remains.

Save and quit

1. Touch the **On/Off** pad.

Technical Information

6.1.2 Language – Set**Initial requirements**

Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Language**.
2. Touch the pad next to the desired language.
3. **Back (without saving)**: Touch pad **Clear**.

Available languages: cestina, dansk, deutsch, english, espanol, francais, italiano, magyar, nederlands, norsk, polski, portugês, suomi, svenska, türkce, greek, russian.

Note

The language remains even if the factory setting is restored.

If the language is not set correctly, use the 4640s02.tif icon as a guide to get to the setting for language.

Save and quit

1. Save and back: Touch pad next to **OK**.
2. **End**: Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

6.1.3 Time – Set

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad Clear and hold.
2. Touch pad On/Off once.
3. Release pad Clear.
4. Touch pad Clear 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode Programming.

Options

1. Touch pad next to Time.
2. Touch pad next to the desired setting.
3. **Back (without saving):** Touch pad **Clear**.

Indication:

on: The panel shows the time of day.

on for 60 seconds: When the appliance is switched off, the display dims after 60 seconds.

Factory setting: on.

Time format:

12 hour: The time is shown in the 12 hour format.

24 hour: The time is shown in the 24 hour format.

Factory setting: 24 hours.

Set: Enter the current time using the pads + or –.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad On/Off.

Technical Information

6.1.4 Timer – Set / Activate**Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Clock Timer**.
2. Touch pad next to the desired activation.
3. **Back (without saving):** Touch pad **Clear**.

To Set

switch on at: If the timer is activated, the appliance will be switched on at the specified time. Enter the desired time via the touch pads + or –.

switch off after: The appliance will be switched off after the specified time has elapsed. Enter the desired time via the touch pads + or –.
Factory setting: 2:00 hours.

switch off at: If the timer is activated, the appliance will be switched off at the specified time. Enter the desired time via the touch pads + or –.

To Activate

on: Switches the feature on at a given time.

off: Switches the feature off at a given time.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

4.1.5 Grinding Amount – Set

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Grinding amount**.
2. Touch pad next to the desired type of coffee.
3. **Back (without saving)**: Touch pad **Clear**.

Espresso: Set the desired grinding amount using the touch pads less or more.

Range: Step 1 – 17 representing a grinding time of 3.9 s – 10 s.
Factory setting: Step 9.

Coffee: Set the desired grinding amount using the touch pads less or more.

Range: Step 1 – 17 representing a grinding time of 3.9 s – 10 s.
Factory setting: Step 9.

Cappuccino: Set the desired grinding amount using the touch pads less or more.

Range: Step 1 – 17 representing a grinding time of 3.9 s – 10 s.
Factory setting: Step 9.

Save and quit

1. Save and back: Touch pad next to OK.
2. End: Touch pad On/Off.

Quit (without saving)

1. Touch pad On/Off.

Technical Information

6.1.6 Pre-brewing – Set**Initial requirements**

Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Pre-brewing**.
2. Touch pad next to the desired setting.
3. **Back (without saving):** Touch pad **Clear**.

Long: 3.0 s pre-brewing.

Normal: 1.5 s pre-brewing.

Without: no pre-brewing.

Factory setting: without.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

6.1.7 Temperatures for Coffee and Hot Water – Set

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

1. The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Temperature**.
2. Touch pad next to the desired setting.
3. Back (without saving): Touch pad Clear.

Espresso:

minimum: Represents 96 °C (in the flow-thru heater).

low: Represents 98 °C (in the flow-thru heater).

medium: Represents 100 °C (in the flow-thru heater).

high: Represents 102 °C (in the flow-thru heater).

maximum: Represents 104 °C (in the flow-thru heater).

Factory setting: medium.

Coffee:

minimum: Represents 96 °C (in the flow-thru heater).

low: Represents 98 °C (in the flow-thru heater).

medium: Represents 100 °C (in the flow-thru heater).

high: Represents 102 °C (in the flow-thru heater).

maximum: Represents 104 °C (in the flow-thru heater).

Factory setting: medium.

Cappuccino:

minimum: Represents 96 °C (in the flow-thru heater).

low: Represents 98 °C (in the flow-thru heater).

medium: Represents 100 °C (in the flow-thru heater).

high: Represents 102 °C (in the flow-thru heater).

maximum: Represents 104 °C (in the flow-thru heater).

Factory setting: medium.

Technical Information**Hot water:**

minimum: Represents 96 °C (in the flow-thru heater).

low: Represents 98 °C (in the flow-thru heater).

medium: Represents 100 °C (in the flow-thru heater).

high: Represents 102 °C (in the flow-thru heater).

maximum: Represents 104 °C (in the flow-thru heater).

Factory setting: medium.

Save and quit

1. Save and back: Touch pad next to OK.
2. End: Touch pad On/Off.

Quit (without saving)

1. Touch pad On/Off.

6.1.8 Automatic Rinse – On / Off

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Rinse automatic**.
2. Touch pad next to the desired setting.
3. **Back (without saving)**: Touch pad **Clear**.

on: The appliance rinses when it is switched on, and after dispensing a beverage shortly before it switches off.

off: Automatic rinse is switched off.

Factory setting: on.

Save and quit

1. **Save and back**: Touch pad next to **OK**.
2. **End**: Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information

6.1.9 Steam System – On / Off**Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

2. Touch pad **Clear** and hold.
3. Touch pad **On/Off** once.
4. Release pad **Clear**.
5. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Steam system**.
2. Touch pad next to the desired setting.
3. **Back (without saving)**: Touch pad **Clear**.

on: The steam system is switched on.

off: The steam system is switched off.

Factory setting: on.

Save and quit

1. **Save and back**: Touch pad next to **OK**.
2. **End**: Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

6.1.10 Door and Interior Lighting – Set

Initial requirements

Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Lighting**.
2. Touch pad next to the desired setting.
3. **Back (without saving)**: Touch pad **Clear**.

Automatic

on: Door and interior lighting are switched on.

off: Door and interior lighting are switched off.

Factory setting: on.

Dim

top: The interior lighting can be set using the touch pads **darker** or **brighter**.

Range: Step 1 – 17.

Factory setting: Step 17.

bottom: The door lighting can be set using the touch pads **darker** or **brighter**.

Range: Step 1 – 17.

Factory setting: Step 17.

Save and quit

1. **Save and back**: Touch pad next to **OK**.
2. **End**: Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information**6.1.11 Coffee Count – Indicate****Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **coffee total**.
2. The display shows the total number of coffee, espresso and cappuccino dispensed.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

6.1.12 System Lock – Set

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **System lock**.
2. Touch pad next to the desired setting.
3. Back (without saving): Touch pad **Clear**.

accept: The system lock is switched on. The appliance can be safeguarded against accidental operation.

do not accept: The system lock is switched off.

Factory setting: do not accept.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information

6.1.13 Water Hardness – Set**Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Water hardness**.
2. Touch pad next to the desired setting.
3. **Back (without saving):** Touch pad **Clear**.

Water Hardness Settings	gr/gal	Value (approx.) until message "50 servings until descale"	
		Flow coffee/hot water (pulses)	Discharge steam (min)
Soft	0 - 4	150.000	120
Medium	5 - 9	144.000	90
Hard	10 - 18	108.000	60
Very Hard	> 18	72.000	30

Table 6-7: CVA4070 Water Hardness Settings

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

6.1.14 User Profile – Set**Initial requirements**

Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to User profile.
2. Touch pad next to the desired setting or activation.
3. **Back (without saving):** Touch pad **Clear**.

select: The main menu shows the selected user profile. In the menu item “settings”, the grinding amount, temperature, pre-brewing and portion size can be set for the respective user profile.

Factory setting: Standard. The settings for the grinding amount, temperature, pre-brewing and portion size are as in the factory setting.

create: Create a new user profile (e. g. name). A maximum of 7 user profiles are possible.

change name: Change the name of a user profile.

delete: Delete a user profile.

Change-over:

never: The main menu indicates the user profile and never changes over to standard.

at switch-on: As the appliance is switched on, the main menu changes to a standard user profile.

Technical Information

after dispensing: After each time a beverage is dispensed, the main menu changes to a standard user profile.

Factory setting: never.

Save and quit

Save and back: Touch pad next to OK.

End: Touch pad On/Off.

Quit (without saving)

Touch pad On/Off.

6.1.15 Display – Set**Initial requirements**

Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Display**.
2. Touch pad next to the desired setting.
3. **Back (without saving):** Touch pad **Clear**.

Contrast: Set the contrast using the touch pads lower or higher.

Range: Step 1 – 16.

Factory setting: Step 8

Brightness: Set the brightness using the touch pads darker or brighter.

Range: Step 1 – 16.

Factory setting: Step 14.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information

6.1.16 Signal Tones – Set**Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Signal tones**.
2. Touch pad next to the desired setting.
3. **Back (without saving):** Touch pad **Clear**.

Volume: Set the volume higher or lower using the touch pads.

Range: Step 1 – 18.

Factory setting: Step 18.

Touch pad tones

on: Touch pads emit a tone when pressed.

off: Touch pads do not emit a tone when pressed.

Factory setting: on.

Save and quit

Save and back: Touch pad next to OK.

End: Touch pad On/Off.

Quit (without saving)

Touch pad On/Off.

6.1.17 Factory Setting – Restore

Initial requirements

Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

1. Touch pad next to **Factory setting**.
2. Touch pad next to the desired action.
3. **Back:** Touch pad **Clear**.

All Settings

no: Back, without restoring the factory setting.

yes: All settings made by the customer (except the language) are reset to the factory setting.

User profiles

no: Back, without deleting the user profiles.

yes: All user profiles are deleted.

Save and quit

Touch pad **On/Off**.

Technical Information**6.1.18 Restart****Initial requirements**

1. Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode

Programming.**Options**

1. Touch pad next to **Customer service**.
2. Touch pad next to **Restart**.

The appliance restarts. A restart is like a disconnection from main power. The fault code, as well as all settings made by the customer and user profiles created remain.

Save and quit

1. Touch pad **On/Off**.

6.1.19 Appliance Variant – Set

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode **Programming**.

Options

1. Touch pad next to **Customer service**.
2. Touch pad next to **Appliance variant**.
3. Touch pad next to the desired setting.
4. **Back (without saving):** Touch pad **Clear**.

Hard plumbing

available: The appliance is hooked up to plumbing.

not available: The appliance is not hooked up to plumbing.

Factory setting: not available.

Dish warming drawer

available: A dish warming drawer is connected.

not available: No dish warming drawer.

Factory setting: not available.

Save and quit

1. **Save and back:** Touch pad next to **OK**.
2. **End:** Touch pad **On/Off**.

Quit (without saving)

1. Touch pad **On/Off**.

Technical Information

6.1.20 Descale Lock – Reset**Initial requirements**

Switch the appliance off.

Accessing**Note**

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode
Programming.

Options

Touch pad next to **Reset descale.**

no: Back, without releasing the descale lock.

yes: The descale lock is lifted.

Save and quit

Touch pad **On/Off.**

Warning!

After service work is completed, descale the appliance.

6.1.21 Cleaning Lock – Reset

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 5 times and at the 5th time, hold it until the programming mode appears.

Acknowledgement indicator

The display shows the positions of the programming mode Programming.

Options

1. Touch pad next to Reset cleaning.

no: Back, without lifting the cleaning lock.

yes: The cleaning lock is lifted.

Save and quit

Touch pad On/Off.

Warning!

After service work is completed, clean the appliance.

Technical Information

6.2 Service Mode Overview

Initial requirements

1. Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 3 times and at the 3rd time, hold it until the service mode appears.

Acknowledgement indicator

The display shows the positions of the **Service** mode.

Options

1. Touch the pad next to the desired position (refer).
2. Touch the pad next to the desired activation (refer).
3. **Back:** Touch pad **Clear**.

Save and quit

1. Touch pad On/Off.

Position		Display / Activation	Description / Results
ID NUMBER	EPX	e. g. ID01087 V21	The ID number of the control electronic is displayed
	EPL	e. g. ID33849 V10	The ID number of the power electronic is displayed
FAULT MEMORY		registered faults, refer to 021 Table 2	All faults that have occurred so far are indicated. To show the fault description, touch the pad next to the fault.
		Delete	All saved faults are deleted.
COMPONENT TEST	STEAM VALVE	Open	The solenoid for steam is opened.
		Close	The solenoid for steam is closed.

Table 6-8: CVA4070 Service Mode (Continued on Table 6-9)

Technical Information

Position		Display / Activation	Description / Results
COMPONENT TEST	HOT WATER VALVE	Open	The solenoid for hot water is opened.
		Close	The solenoid for hot water is closed.
COMPONENT TEST	BREW UNIT	initialize	The micro switches are tested, and the brew unit is returned to its home position. To prevent mechanical damage, as a final step, always activate intializing. move clockwise for given period of time
		move counter-clockwise for given period of time	The brew unit moves into the respective direction.
		move counter-clockwise for given period of time	
		home position(1)	The brew unit moves into the respective direction.
		drain position (1)	
		compressing position (1)	
COMPONENT TEST	GRINDER	On	The grinder is running.
		Off	The grinder is switched off.
COMPONENT TEST	WATER PUMP	On	The pump coffee/hot water runs.
		Off	The pump coffee/hot water is switched off.
COMPONENT TEST	STEAM PUMP	On	The steam pump runs.
		Off	The steam pump is switched off.
COMPONENT TEST	SYSTEM DRAIN PUMP	On	The coffee/hot water and the steam pumps operate until both, the coffee/hot water and steam system.
		Off	The coffee/hot water and the steam pumps are switched off.

Table 6-9: CVA4070 Service Mode (Cont. from Table 6-8; Cont. on Table 6-10)

Technical Information

Position		Display / Activation	Description / Results
COMPONENT TEST	FLOW-THU HEATER WATER	On	The flow-thru heater coffee/hot water heats. The temperature indication on the heater goes increases.
		Off	The flow-thru heater coffee/hot water is switched off.
COMPONENT TEST	FLOW-THRU HEATER STEAM	On	The flow-thru heater steam heats. The temperature indication on the heater increases.
		Off	The flow-thru heater steam is switched off.
COMPONENT TEST	DISH WARMING DRAWER N/A US models	On	The dish warming drawer is being heated.
		Off	The dish warming drawer is switched off.
COMPONENT TEST	WATER SUPPLY VALVE 1	On	no function
		Off	
COMPONENT TEST	WATER SUPPLY VALVE 2	On	no function
		Off	
COMPONENT TEST	WATER SUPPLY VALVE 1+2	On	no function
		Off	
SENSOR TEST	DRIP TRAY	empty	The drip tray is not full.
		full	The drip tray is full.
SENSOR TEST	BEAN CONTAINER	empty	The bean container is not empty.
		full	The bean container is empty or not inserted.
SENSOR TEST	BREW UNIT 1	closed	The microswitch grinding amount compensation is activated.
		open	The microswitch grinding amount compensation is not activated.

Table 6-10: CVA4070 Service Mode (Cont. from Table 6-9; Cont. on Table 6-11)

Technical Information

Position		Display / Activation	Description / Results
SENSOR TEST	BREW UNIT 2	closed	The microswitch top position control is activated.
		open	The microswitch top position control is not activated.
SENSOR TEST	BREW UNIT 3	closed	The microswitch bottom position control is activated.
		open	The microswitch bottom position control is not activated.
SENSOR TEST	BREW UNIT 4	closed	The brew unit is locked.
		open	The brew unit is released
SENSOR TEST	GROUND COFFEE FUNNEL	closed	The ground coffee funnel is closed.
		open	The ground coffee funnel is open.
SENSOR TEST	WASTE CONTAINER	closed	The waste container is present.
		open	The waste container is missing
SENSOR TEST	DOOR CONTACT	closed	The door is closed.
		open	The door is open
SENSOR TEST	WATER TANK	closed	The water tank is seated and filled.
		open	The water tank is not seated or empty
SENSOR TEST	HARD PLUMBING	closed	no function
		open	
SENSOR TEST	NTC FLOW-THRU HEATER / WATER	e. g. 48 °C	Indicates the temperature at the flow-thru heater coffee/hot water.
SENSOR TEST	NTC FLOW-THRU HEATER STEAM	e. g. 74 °C	Indicates the temperature at the flow-thru heater steam.

Table 6-11: CVA4070 Service Mode (Cont. from Table 6-10; Cont. on Table 6-12)

Technical Information

Position	Display / Activation	Description / Results
OPERATING HOURS	FLOW-THRU HEATER WATER	Operating hours of the flow-thru heater coffee/hot water.
	FLOW-THRU HEATER STEAM	Operating hours of the flow-thru heater steam.
	ESPRESSOS DISPENSED	Number of espressos dispensed.
	DOUBLE ESPRESSOS DISPENSED	Number of double espressos dispensed
	COFFEES DISPENSED	Number of coffees dispensed.
	DOUBLE COFFEES DISPENSED	Number of double coffees dispensed.
	CAPPUCCINOS DISPENSED	Number of cappuccinos dispensed.
	HOT WATER DISPENSED	Number of hot water servings dispensed.
	MILK FROTH DISPENSED	Number of milk froth servings dispensed.
	NUMBER OF DESCALES	Shows the number of descales that have been carried out.
NUMBER OF CLEANINGS	Number of cleanings that have been carried out.	

Table 6-12: CVA4070 Service Mode (Continued from Table 6-11)

*1 The positions only become visible once the brew unit has been initialized.

6.3 Fault Codes – Read, Save and Delete

6.3.1 Fault Code Accessing

Initial requirements

Switch the appliance off.

Accessing

Note

Complete the access within 10 seconds.

1. Touch pad **Clear** and hold.
2. Touch pad **On/Off** once.
3. Release pad **Clear**.
4. Touch pad **Clear** 3 times and at the 3rd time, hold it until the service mode appears.

Acknowledgement indicator

The display shows the positions of the **Service mode**.

Options

1. Touch pad next to Fault memory.
2. To show the fault description, touch the pad next to the fault.
3. Save the fault and back: Touch pad next to OK. Touch pad Clear.
4. Delete the fault and back: Touch pad next to delete.

Faulty codes Refer to Tables:

Save and quit

1. Touch pad On/Off.

Technical Information

6.3.2 Fault Code Summary

Fault Code	Fault Description
F1	Shortcircuit temperature sensor NTC coffee/hot water
F2	Open circuit temperature sensor NTC coffee/hot water
F3	Shortcircuit temperature sensor NTC steam
F4	Open circuit temperature sensor NTC steam
F10	No water supply
F17	Insufficient water supply
F41	EEPROM faulty /wrong data
F42	Frequency not registering
F43	No communication between control electronic and power electronic
F73	Brew unit fault
F80	Flow-thru heater coffee/hot water not heating
F81	Flow-thru heater steam not heating
F82	Flow-thru heater coffee/hot water too hot
F83	Flow-thru heater steam too hot

Table 6-13: CVA4070 Fault Code Summary

- 6.3.3 F1**
Short circuit in the temperature sensor NTC coffee/hot water
- Check the connecting cables.
 - Replace the connecting cables if necessary.
 - Temperature sensor Flow-thru heater coffee/hot water– Check, 0214.46.
 - Check the temperature sensor.
- 6.3.4 F2**
Open circuit temperature sensor NTC coffee/hot water
- Check the connecting cables.
 - Replace the connecting cables if necessary.
 - Temperature sensor Flow-thru heater coffee/hot water– Check, 0214.46.
 - Replace the temperature sensor if necessary.
- 6.3.5 F3**
Short circuit temperature sensor NTC steam
- Check the connecting cables.
 - Replace the connecting cables if necessary.
 - Temperature sensor Flow-thru heater steam.
 - Replace the temperature sensor if necessary.
- 6.3.6 F4**
Open circuit temperature sensor NTC steam
- Check the connecting cables.
 - Replace the connecting cables if necessary.
 - Temperature sensor Flow-thru heater steam
 - Replace the temperature sensor if necessary.
- 6.3.7 F10**
Hoses broken, clogged, kinked.
- Check the hoses.
 - Replace the hoses if necessary.

Technical Information

Water tank valve jammed, clogged.

- Check the water tank valve.
- Replace the water tank if necessary.

Flow meter defective.

- Flow meter – Remove
- Install a new flow meter.

Pump coffee/hot water defective.

- Coffee/hot water pump – Remove
- Install a new pump coffee/hot water.

6.3.8 F17 – Insufficient Water Supply

The water tank is not seated correctly.

- Push the water tank in correctly.

Hoses broken, clogged, kinked.

- Check the hoses.
- Replace the hoses as necessary.

Water tank valve jammed, clogged.

- Check the water tank valve.
- Replace the water tank as necessary.

Flow meter defective.

- Flow meter – Remove,
- Install a new flow meter.

Pump coffee/hot water defective.

- Coffee/hot water pump – Remove
- Install a new pump coffee/hot water.

6.3.9 F41
Faulty EEPROM/Wrong data

- Control electronic EPX – Remove
- Install a new control electronic.

6.3.10 F42
Main power frequency not registered

- Verify correct source voltage & frequency.

6.3.11 F47
Faulty interface of control electronic and power electronic.

- Check the cable between control electronic and power electronic.
- Replace the connecting cable if necessary.

6.3.12 F73 – Faulty Brew Unit
When the brew unit is activated, if one of the two microswitches does not switch within approx. 10seconds. F73 is registered.

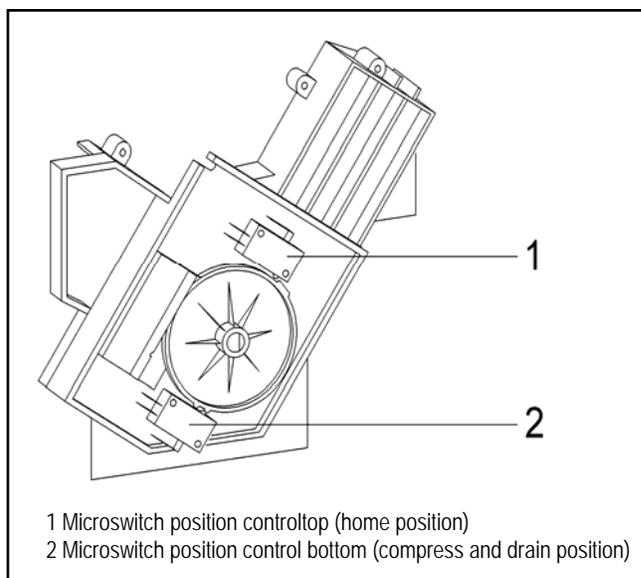


Figure 6-1: CVA4070 Faulty Brew Unit

Brew unit blocked.

- Disconnect the appliance from the main power supply.
- Remove any foreign matter.
- Clean the affected components

Technical Information

Defective microswitch or no continuity in connectors.

- Check the connecting cables.
- Replace the connecting cables as necessary.
- Position control microswitch– Check
- Replace the microswitch if necessary.

Brew unit drive defective.

Note

When installing the brew unit, make sure that the pawl is set to the home position, refer to Figure 6-1. Brew unit drive, home position.

- Install a new brew unit drive.

6.3.13**F80 Cause**

Flow-thru heater coffee/hot water (2R1) does not heat.

- Flow-thru heater coffee/hot water – Check
- If necessary, Flow-thru heater coffee/hot water – Remove
- Install a new flow-thru heater coffee/hot water.

Temperature fuse has tripped.

- Replace the temperature fuse.

6.3.14**F81**

Flow-thru heater steam does not heat.

- Flow-thru heater steam – Check
- If necessary, Flow-thru heater steam – Remove
- Install a new flow-thru heater steam.

Temperature fuse has cut out.

Note

To be able to continue using the appliance for the preparation of coffee and hot water until service is performed, the customer can switch the steam system off, refer to Steam system – On/off.

- Replace the temperature fuse.

6.3.15

F82

The temperature is higher than 266°F(130 °C).

- If the temperature fuse has tripped it has to here placed.

6.3.16

F83

The temperature is higher than 356°F(180 °C).

- If the temperature fuse has tripped, it has to here placed.

Date: September 8, 2006 LG.