

TECHNICAL INFORMATION
CVA 4070/CVA 4075 Coffee Systems

Technical Information

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A Warning and Safety Instructions

General

Any repairs or maintenance performed by unqualified personnel could be dangerous. All applicable laws, codes, regulations, and accident prevention guidelines must be observed when serving, modifying, testing or maintaining appliances. All repairs should be performed by a trained technician in strict accordance with local, state and national codes.

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.

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:

Some components may be very hot, such as heaters. Also, some components may contain pressurized steam. Use caution when working on these parts.

To protect from burns:

1. Allow the CVA to cool down for approximately one hour before starting service or repair work, so that the heaters can cool.
2. In service mode, pump cool water through the heater for a few minutes to shorten the cooling time.

Touch current measurement:

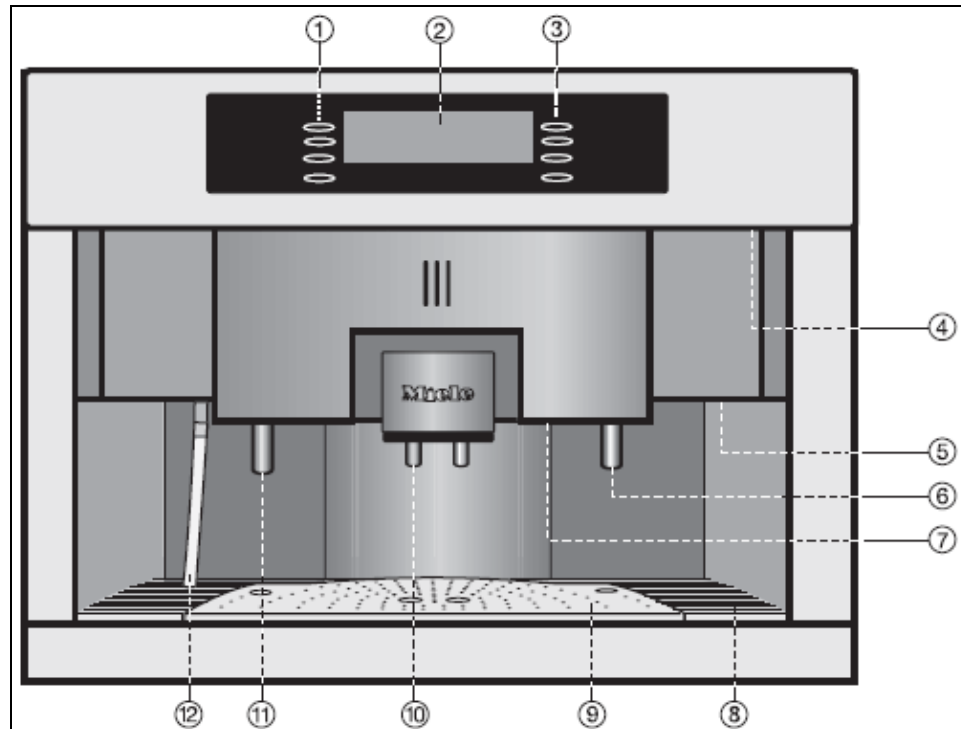
Touch current measurement should be carried out on all accessible conductive parts that are not connected to ground.

Warning!

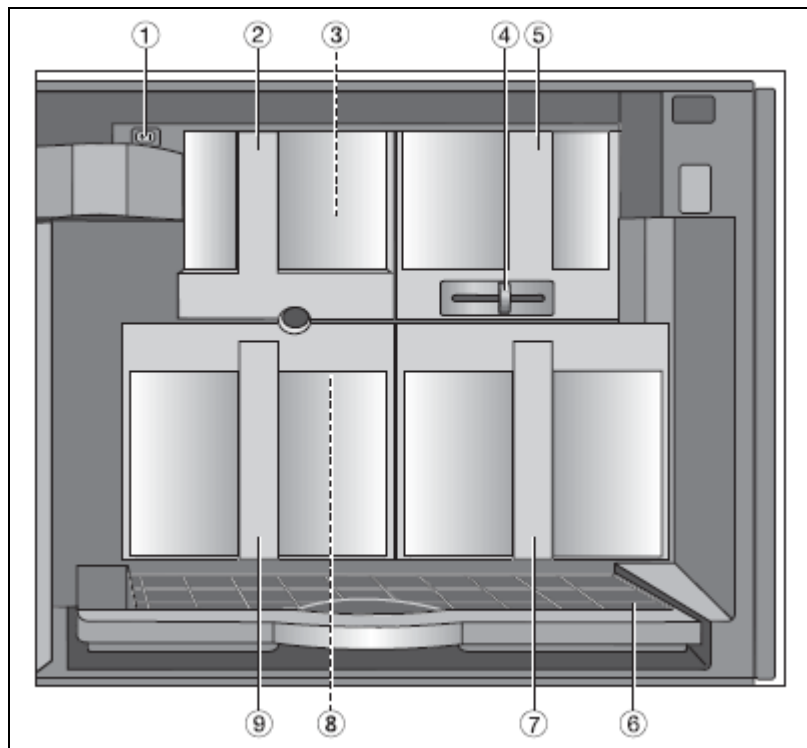
Touch current measurement may only be performed after the ground connection of the appliance being tested has been checked and found to be satisfactory!

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: CVA Front View**

- | | |
|----------------------------|--|
| 1 Touchpad controls | 7 Bottom lighting |
| 2 Display | 8 Plastic drip tray |
| 3 Touchpad controls | 9 Metal drip tray |
| 4 Top lighting | 10 Coffee dispenser
(height-adjustable) |
| 5 Door grip | 11 Froth dispenser
(removable for better cleaning) |
| 6 Hot-water spout | 12 Intake hose
(removable together with froth dispenser) |

1.1.2 Interior View (Front of Appliance Opened)**Figure 1-2: CVA Interior View**

- | | |
|----------------------------------|--|
| 1 Main switch | 6 Drip tray with no-spill grid for transport |
| 2 Cover for ground-coffee funnel | 7 Water tank |
| 3 Ground-coffee funnel | 8 Brew unit |
| 4 Grind control lever | 9 Waste container |
| 5 Coffee bean container | |

1.2 Technical Data

Dimensions:	17 ⁹ / ₁₆ " H x 22" W x 18 ¹ / ₈ " D (446mm x 559mm x 460mm) (Add 2 ¹ / ₂ " to depth for plumbed (CVA 4075) installations.)
Weight:	61.0 lbs (27.5 kg)
Voltage:	USA: 120VAC 60Hz 15A
Electrical cord:	NEMA 5-15P molded plug (6')
CVA 4070:	Not plumbed
CVA 4075:	Plumbed

Table 1-1: Technical Data

Technical Information**Note:**

- Make sure that the cabinet or the walls are stable enough to support the appliance.
- The CVA is designed to be built into cabinets and must be fully installed before any operation is performed.
- 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 installed below.
- Exercise caution while operating the appliance. Coffee, hot water and steam can cause burns and damage to surrounding areas.
- Allow additional depth of 2 ½" for CVA 4075 installations.

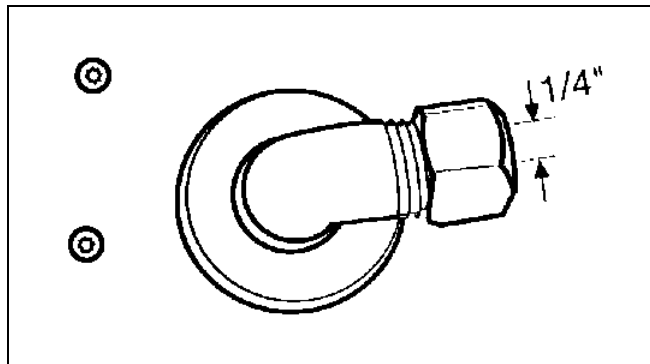
1.2.2 Plumbing Connection for CVA 4075

Figure 1-3: CVA 4075 Plumbing Connection (Rear View)

Plumbing information:

- A plumbed cold-water connection is available only in CVA 4075 models. These models have a factory-installed 90-degree elbow with a ¼" compression fitting (see Figure 1-3). Allow for an extra 2 ½" of depth for this elbow at the back of the coffee system when installing.
- An icemaker kit (not included with the coffee system) with either copper or plastic tubing will work efficiently when installed correctly. The length of this tubing should not exceed 5 feet (1.5 meters).
- A shutoff valve with customer access should be provided with a plumbed CVA 4075 coffee system.
- The customer or installer will be responsible for supplying all plumbing material, as well as connectors to the CVA 4075 coffee system.
- Water pressure for proper operation must be between 14.5 and 145 pounds per square inch. If the water pressure is higher than the maximum allowable pressure, install a water pressure reduction valve.
- If the water pressure is lower than the minimum pressure, disconnect from the water source and re-program the coffee system as a non-plumbed appliance. See the operating manual for programming instructions.
- Connection to the water supply should be in accordance with all local, state and national regulations and codes. A licensed plumber may be required in some states; check with the local municipality.

1.3 CVA 4070 Component Layout

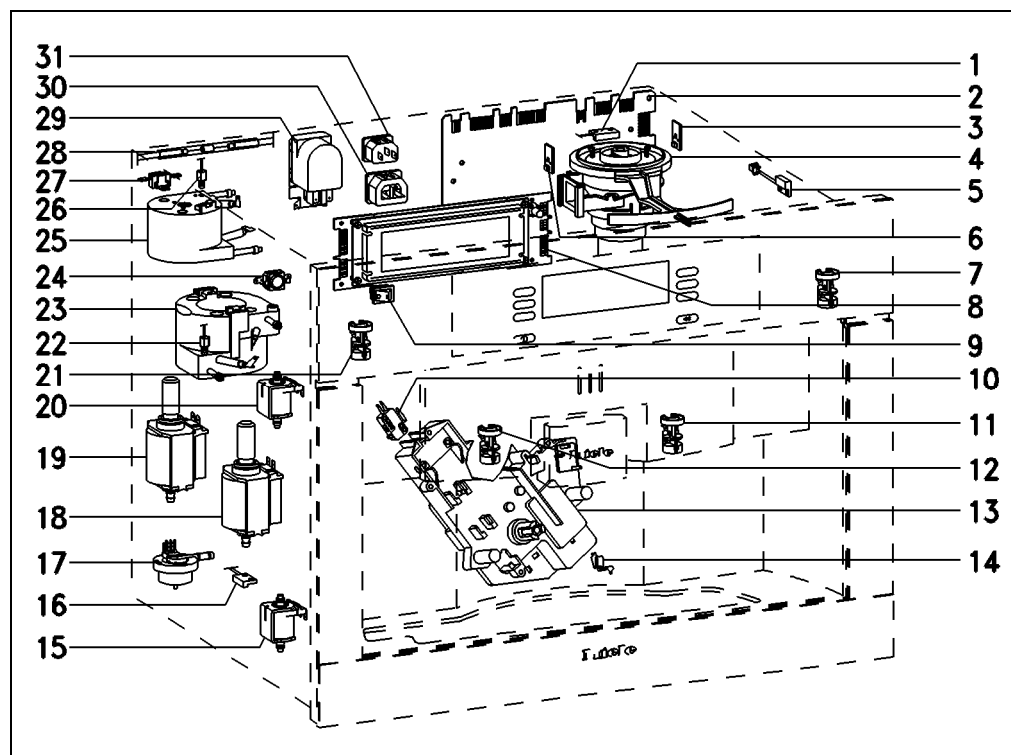


Figure 1-4: CVA 4070 Component Layout

- | | |
|---|---|
| 1 Reed contact – ground coffee funnel | 17 Flow meter |
| 2 Power electronic (EPL) | 18 Steam pump with thermostat |
| 3 Light barrier for coffee bean container | 19 Coffee/hot-water pump with thermostat |
| 4 Grinder | 20 Steam solenoid |
| 5 Reed contact – door | 21 Interior lighting |
| 6 Light barrier for coffee bean container | 22 Temperature sensor – coffee/hot-water heater |
| 7 Interior lighting | 23 Coffee/hot-water heater |
| 8 Control electronic (EPX) | 24 Thermostat – coffee/hot-water heater |
| 9 Main power switch | 25 Steam heater |
| 10 Microswitch for grinding amount compensation | 26 Temperature sensor – steam heater |
| 11 Door lighting | 27 Thermostat – steam heater |
| 12 Door lighting | 28 Fuse (one per heater) |
| 13 Brew unit drive | 29 Interference suppressor |
| 14 Drip tray contact spring (3 springs) | 30 Not used |
| 15 Hot-water solenoid | 31 Socket for main power |
| 16 Reed contact – waste container | |

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1.4 CVA 4075 Component Layout

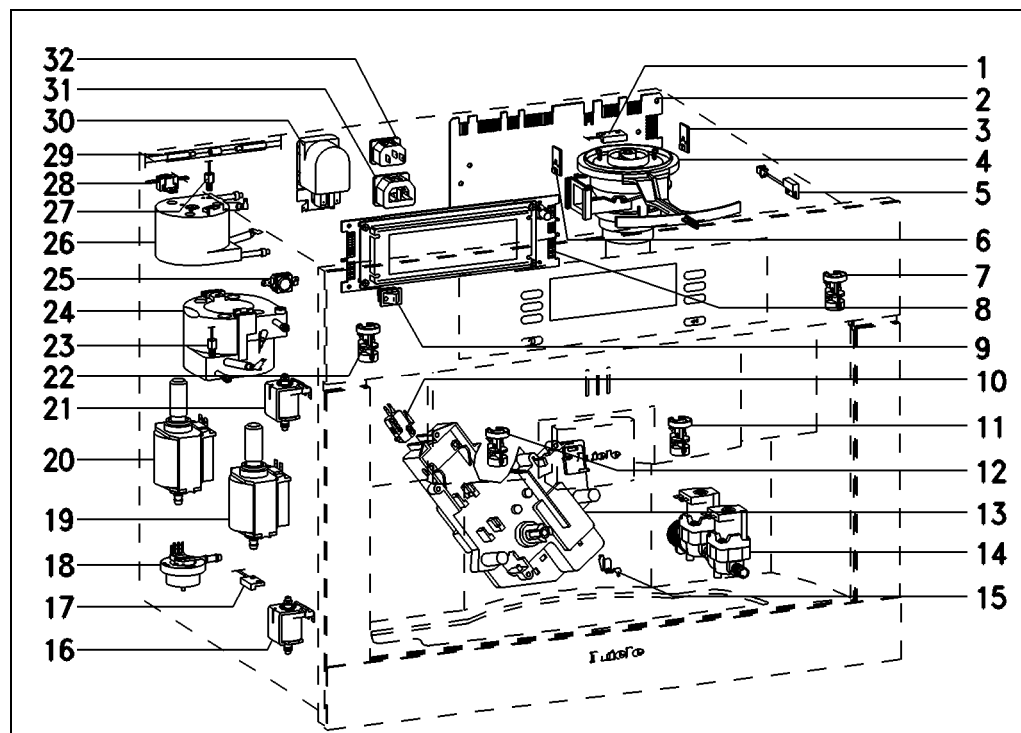


Figure 1-5: CVA 4075 Component Layout

- | | |
|---|---|
| 1 Reed contact – ground coffee funnel | 17 Reed contact – waste container |
| 2 Power electronic (EPL) | 18 Flow meter |
| 3 Light barrier for coffee bean container | 19 Steam pump with thermostat |
| 4 Grinder | 20 Coffee/hot-water pump with thermostat |
| 5 Reed contact – door | 21 Steam solenoid |
| 6 Light barrier for coffee bean container | 22 Interior lighting |
| 7 Interior lighting | 23 Temperature sensor – coffee/hot-water heater |
| 8 Control electronic (EPX) | 24 Coffee/hot-water heater |
| 9 Main power switch | 25 Thermostat – coffee/hot-water heater |
| 10 Microswitch for grinding amount compensation | 26 Steam heater |
| 11 Door lighting | 27 Temperature sensor – steam heater |
| 12 Door lighting | 28 Thermostat – steam heater |
| 13 Brew unit drive | 29 Fuse (one per heater) |
| 14 Inlet valves | 30 Interference suppressor |
| 15 Drip tray contact spring (3 springs) | 31 Socket for warming drawer |
| 16 Hot-water solenoid | 32 Socket for main power |

2.0 Installation

2.1 Product Dimensions

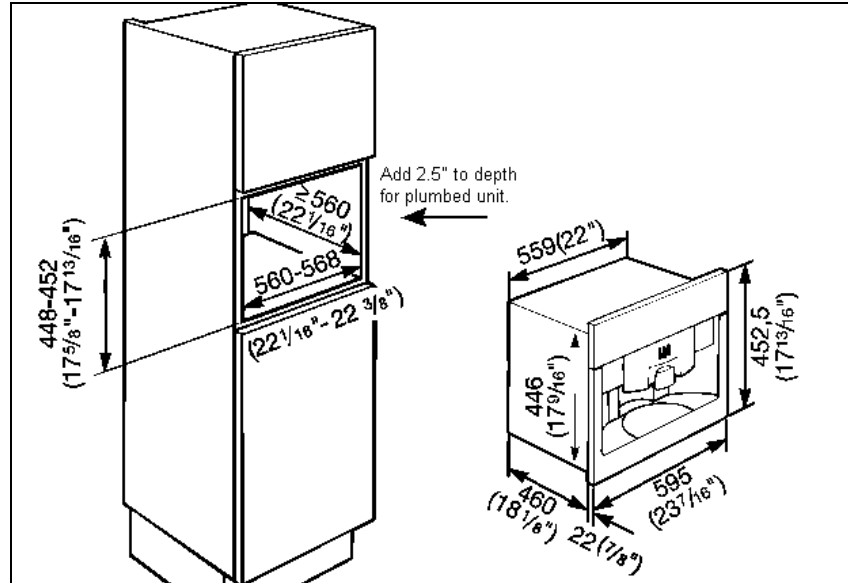


Figure 2-1: CVA 4075 Plumbing

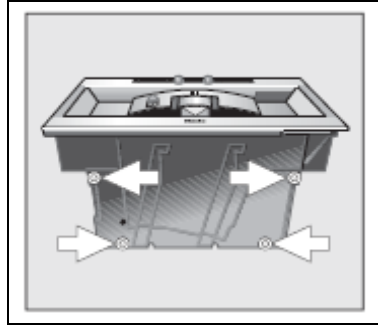
2.2 Installation Procedure

Note:

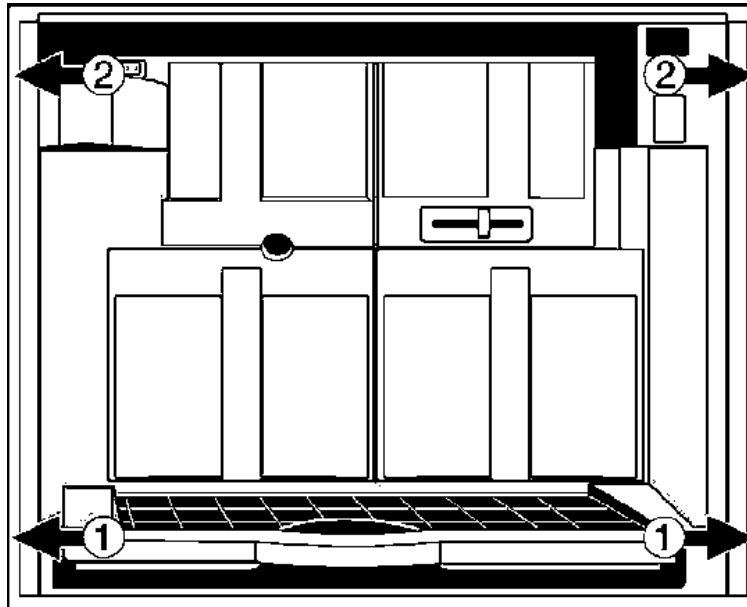
Make sure power is not supplied to the appliance while installation or maintenance work is being performed. Disconnect the power supply to the work area by unplugging the appliance and tripping the circuit breaker. The coffee system must be installed into cabinetry before being used.

1. For installation, provide the proper clearances and shelving support. Also allow an additional depth of 2.5" for CVA 4075 models.
2. Connect to a plumbed cold-water supply (CVA 4075 systems). Before installing the CVA system into the cabinet, check/test the water connections for leaks.
3. The on-site water line must have a water valve to turn water off when needed. If not present, have a water valve installed by a licensed plumber.
4. If necessary, unscrew the height-adjustable feet (Figure 2-2) on the underside of the machine by about $\frac{1}{16}$ " (2 millimeters). These feet can be turned by up to $\frac{3}{8}$ " (10 millimeters), if necessary.

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**Figure 2-2:** CVA Feet Adjustment

4. Plug the power cord into the electrical outlet.
5. Connect the appliance to the water supply; test for leaks.
6. Push the appliance all the way back into the cabinet and center it. If the cabinet has $\frac{3}{4}$ " (19mm) side walls, **mark** the four holes for mounting. (See Figure 2-3, Items 1 and 2 for location.)
7. Take the appliance out of the cabinet and **carefully** drill four holes at the screw marks ($\frac{1}{16}$ " [2mm], diameter $\frac{3}{16}$ " [4.5mm]).
8. Push the appliance back into the cabinet until fully seated.
9. Open the front of the appliance and turn the 4 screws, tightening them against the inside of the cabinet. The screws should be tightened equally to ensure that the appliance is centered to the cabinet. See Figure 2-3.

**Figure 2-3:** CVA Mounting Locations

10. Fill the bean and water containers.
11. Program user settings appropriate for the CVA model.
12. Perform an operational check. Check for leaks.
13. Provide the customer with an operational overview.

2.3 Adjusting the Door Hinges

The door hinges can be adjusted if the door cannot be opened easily. To adjust the door sideways, turn the screw as shown in Figure 2-4, Item 1. To adjust the door forwards or backwards, turn the screw as shown in Figure 2-4, Item 2.

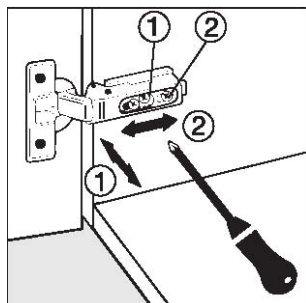


Figure 2-4: Door Hinge Adjustment

3.0 Commission and Operation

3.1 General Operation

3.1.1 Before the First Use

- The appliance must be correctly installed and connected before first use.
- Carefully read all instructions on use and care of the CVA in the operating manual.
- Remove all containers from the CVA and clean them. Refer to the operating manual.
- Turn on the power switch.
- Follow the messages in the display.

3.1.2 Touch Controls

Select a program using the Navitronic touchpads.

3.1.3 Display


To select a menu, press the touchpad next to the desired menu point. If more features can be selected under a menu point, the menu will be followed by three dots (e.g., **Settings...**).

More/Back:	If there are more menus which are not immediately shown, select More or Back to see additional options.
Clear:	Goes back to the previous screen.
Stop:	Cancels coffee preparation.
OK:	Saves settings.

3.1.4 Turning the CVA On

1. Select **On/Off** to turn the coffee system on.
 - The display shows the clock. See Section 3.3.1 for instructions on setting the time.

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- During the very first use, a prompt for language selection will appear.
- 2. Select the desired language touchpad and then **OK**.
 - The flag  symbol indicates the language setting. If an unfamiliar language is accidentally selected, simply look for the flag symbol. Touch the touchpad next to this symbol and select the language of choice.
- 3. Customize the coffee system to the customer's desired settings.

Note:

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

3.1.5 Turning the CVA Off

1. Select **On/Off**.
 - The display shows the time of day. After 60 seconds, the display turns off (depending on the setting). See Section 3.3.4 to change this setting.

Note:

The lines must be rinsed daily before the first use. This will happen automatically if **Rinse automatic** is set to **On** (see Section 6.1) and the machine is cold. After heating, hot water runs out of the two spouts into the drip tray.

3.2 Language Settings

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

1. Press the touchpad next to **Settings** (in the main menu) during the pre-heating phase.

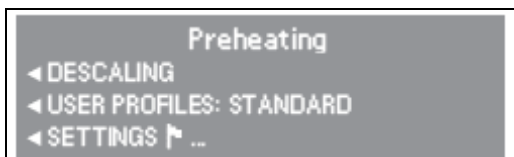


Figure 3-1: Setting the Language, Step 1

2. Press the touchpad next to **Language**.



Figure 3-2: Setting the Language, Step 2

3. Select the desired language. To see more language options, select **More**. (Language options: English, German, Spanish, French, Italian, Polish and Portuguese.)
4. Press the touchpad next to **OK** to save the selection. All displays will now be

shown in the selected language.

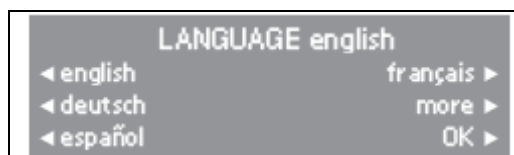


Figure 3-3: Setting the Language, Steps 3 and 4

5. To go back to the main menu, select **Clear**, located on the touchpad control panel next to the display.

3.3 Clock Settings

1. Press the touchpad next to **Settings** (in the main menu).



Figure 3-4: Setting the Clock, Step 1

2. Press the touchpad next to **Clock**.



Figure 3-5: Setting the Clock, Step 2

3. Proceed to **Setting the Time of Day**, **Clock Display Size**, **12- or 24-Hour Clock**, or **Clock Display On/Off**, below, to make desired settings.

3.3.1 Setting the Time of Day

1. Select **Enter Time**.
2. Select **+** or **-** to set the hour.
3. Set the minutes by selecting **Minutes**, then using the **+** and/or **-** touchpads.
4. Select **OK** to save the setting.

3.3.2 Clock Display Size

The size of the clock display can be adjusted to **Normal** or **Large**.

1. Press the **Size** touchpad. The selected size is highlighted in the display.
2. Press the **Size** touchpad again until the desired size is highlighted.
3. Select **OK** to save the selection.

3.3.3 12- or 24-Hour Clock

The clock can be displayed in 12- or 24-hour format.

1. Press the appropriate touchpad. The selected format is highlighted.
2. Select **OK** to save the selection.

Technical Information**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 to **Off**, the display will turn off after 60 seconds.

1. Select **Clock display**. The selected setting is highlighted.
2. Select **OK** to save the setting.

3.4 Filling the Water Tank

Bean and water quality are important for a good espresso or coffee. Therefore, the water tank in a CVA 4070 coffee system should be washed and filled with fresh cold drinking water before each day of use (a reminder will be displayed when the appliance is turned on). In CVA 4075 systems, the water can be filled automatically with fresh cold water.

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 buildup in the machine that can damage the appliance.

3.4.1 Manually Filling the Water Tank

1. Open the appliance door by holding the grip next to the hot-water spout and pulling the door towards you. See Figure 3-6.

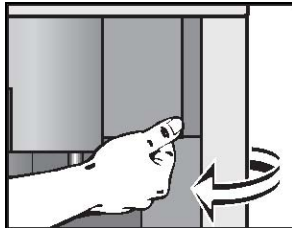


Figure 3-6: Pull Door Open

2. Pull the water tank out. See Figure 3-7.

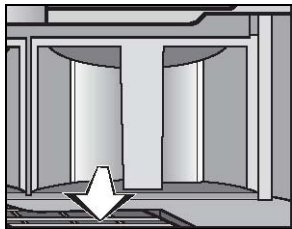


Figure 3-7: Pull Water Tank Out

3. Fill the container with fresh, cold tap water to the "Max" mark (CVA 4070 models only).
4. Close the lid and push the water tank into the appliance 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, then check and clean the niche.

3.4.2 Automatically Filling the Water Tank (CVA 4075 Models Only)

1. Press the **Settings** touchpad in the main menu.



Figure 3-8: Setting Water Fill to Automatic, Step 1

2. Select **More**, until **Plumbed** is displayed.



Figure 3-9: Setting Water Fill to Automatic, Step 2

3. Select **Plumbed**.



Figure 3-10: Setting Water Fill to Automatic, Step 3

4. Select **On** for a plumbed CVA (4075) system.
5. Select **OK** to save the setting.

Note:

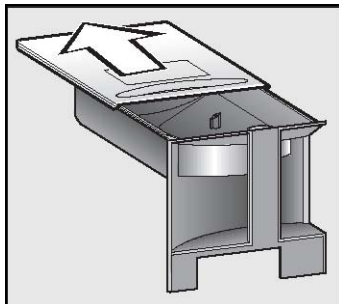
When **Plumbed** is set to **Off**, the water tank must be filled manually with fresh tap water. Refer to Section 3.4.1 for filling instructions.

When **Plumbed** is set to **On**, the water tank is automatically filled.

3.5 Filling the Bean Container

The bean container is to be filled with fresh coffee or espresso beans. No flavored coffee beans or caramelized, pre-treated or ground coffee should be placed in this container as doing so will damage the grinder. Refer to the operating manual for types of coffee that are permitted.

1. Pull the bean container out.

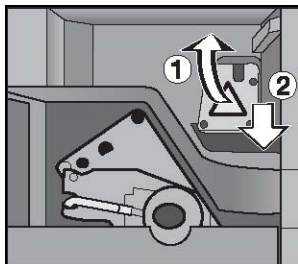
Technical Information**Figure 3-11: Bean Container**

2. Push the lid back and fill the container with coffee beans.
3. Push the lid back into place and push the bean container back into the appliance.
4. Close the door.

3.6 Filling Ground Coffee

A funnel for ground coffee is provided in case the customer would like to prepare a different coffee type, such as decaffeinated coffee.

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.

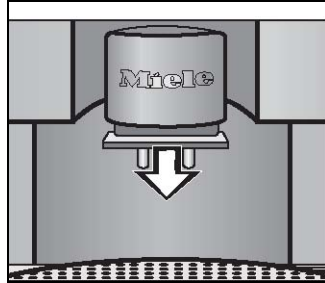
**Figure 3-12: Ground Coffee Funnel Lid**

For more information, see "Making Coffee - Espresso and coffee made from ground coffee" in the operating manual.

3.7 Adjusting the Dispenser Height

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

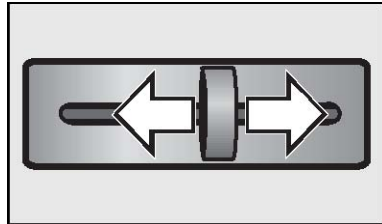
1. Slowly move the coffee dispenser up or down. See Figure 3-13.

**Figure 3-13:** Dispenser Height Adjustment

3.8 Adjusting the Grinder Setting

Push the slide control to the left for a finer grind or to the right for a coarser grind. See Figure 3-14. You should be able to feel the adjustment settings when moving the slide control.

If the slide control will not move, close the machine and dispense a cup of coffee, then try to move the slide control again.

**Figure 3-14:** Grinder Adjustment

3.9 Steam System

The appliance has two heating systems. This allows 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 appliance must heat up first to produce steam. The steam system is turned on by default.

3.10 Froth Dispenser/Intake Hose

Rinse the froth dispenser and intake hose after each use; otherwise, they may become blocked with dried milk and thus hard to clean.

Rinsing does not replace cleaning in the dishwasher.

1. Select **Care** from the main menu.
2. Select **Rinse system**.
3. Set a glass filled with water under the intake hose and select **OK**. The intake hose takes in this water and rinses the system.

Technical Information

3.11 Cleaning in the Dishwasher

All removable parts of the coffee system are dishwasher safe, except for the brew unit and the bean container. Regular cleaning in the dishwasher is important so that components do not clog over time.

Removing the froth dispenser for dishwasher cleaning:

1. Turn the cover above the spout to the left. See Figure 3-15, Item 1.
2. Pull the froth dispenser out of the machine, holding it by the spout and the intake hose. See Figure 3-15, Item 2.

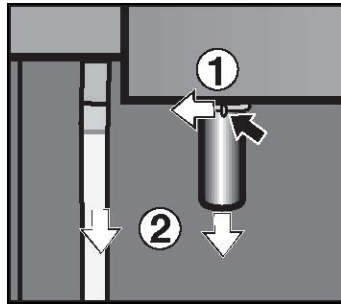


Figure 3-15: Froth Dispenser Removal

3. Pull all pieces apart. Remove the piece with the gaskets by turning and pulling it apart. See Figure 3-16.

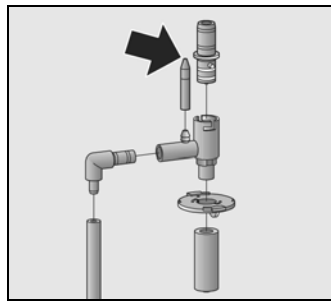


Figure 3-16: Froth Dispenser Components

4. Insert the pieces in the dishwasher and then lubricate the gaskets with the supplied silicone grease.

Note:

Take care that the small holes of the single pieces are not clogged (see arrow, Figure 3-16).

Pinch the soft parts to loosen the soiling, then blow them out.

Do not use a needle to remove residues, as the parts may get damaged.

5. Reassemble the parts as shown in Figure 3-17. Take care that the raised parts (see arrow, Figure 3-17) point downwards and that the marks are lined up (see Figure 3-18).

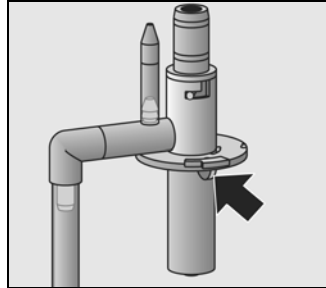


Figure 3-17: Reassembling the Froth Dispenser

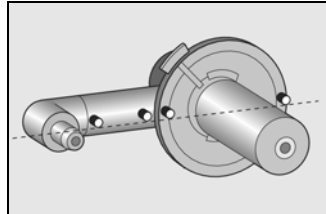


Figure 3-18: Alignment Marks on Froth Dispenser

6. Push the froth dispenser into the machine from underneath (Figure 3-19, Item 1) and turn the cover above the spout to the right (Figure 3-19, Item 2).

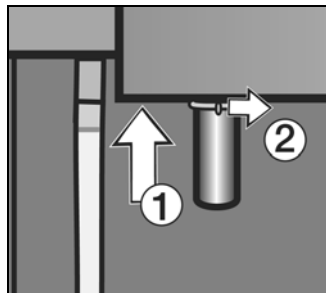


Figure 3-19: Reinstalling the Froth Dispenser

Warning!

Do not use the machine without the froth dispenser installed.
Steam will spit uncontrollably. Danger of scalding and machine damage.

3.12 Descaling the Appliance

The CVA coffee system must be descaled regularly. The CVA will display a reminder message to descale and will lock the appliance if not descaled. Descal tablets are large tablets that were supplied with the appliance, and are specially developed for the CVA coffee system to optimize the descaling process.

Descal tablets can be purchase online or calling Miele directly.

Refer to the operating manual for descaling instructions.

Note:

CVA 4075 models: Set **Plumbed** to **Off** before descaling (press **OK** to save the setting). After the appliance has been descaled, reset **Plumbed** to **On** and save (by pressing **OK**). Refer to Section 3.4.2 for setting instructions.

Technical Information**4.0 Function****4.1 Optical Interface**

The appliance is equipped with an optical interface for “future” diagnostic support and program updates (see Figure 4-1). The optical interface feature is not available on CVA 4070/75 models at this time.



Figure 4-1: CVA Control Panel with Optical Interface Location

4.2 Control Electronic (EPX)

The control electronic is located in the door (Figure 1-4, Item 8).

It is connected to the power electronic via a communication cable and controls the messages in the display.

4.2.1 Appliance Status after a Power Interruption

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

4.3 Brew Unit Controls**4.3.1 Brew Unit General Process**

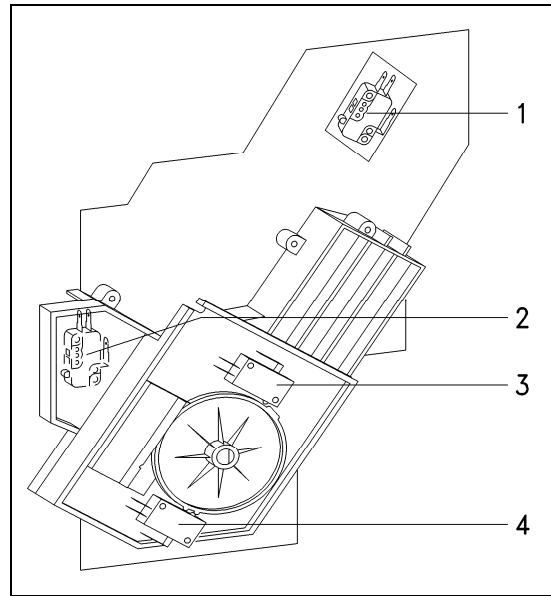
Coffee is dispensed into the hopper of the brew unit by the grinder operation. The brew unit drive motor is energized and the brew unit drives toward the “brew” position; the ground coffee is compressed between the filters. Once the brew unit position switch is actuated, power to the brew unit drive motor is interrupted. Hot water is pumped into the brew unit, which passes through the filters, mixes with the grounds, then exits the brew unit as coffee. The brew unit drive motor is now energized in the reverse position. This drives the brew unit back toward the home position. The compressed used grounds are dumped as pucks into the waste container. Once the brew unit home switch is actuated, power to the brew unit drive motor is interrupted.

4.3.2 Microswitch Positions

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

The drive system and actuator disk are in the neutral position when the left-hand actuator of the double cam is activating the upper microswitch (Figure 4-2, Item 3). This is the initial default position of the brew unit.

When the brew unit correctly installed, the brew unit present microswitch (Figure 4-2, Item 2) is activated.

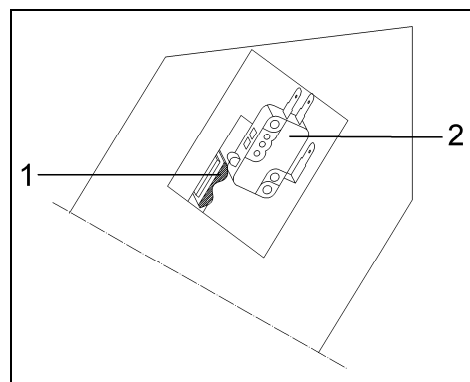
**Figure 4-2: Brew Unit Microswitches**

- 1 Grinding amount compensation microswitch
- 2 Brew unit present microswitch
- 3 Top position control (home position) microswitch
- 4 Bottom position control (compressing and drain position) microswitch

4.3.3 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 range for this setting is between steps 0 and 17, which corresponds to a grinding time of 5.5 to 9.5 seconds (± 1.6 seconds grinding amount compensation). To prevent overflow of the brew unit, the grinding time is limited to a maximum of 10 seconds.

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; see Table 4-1.

**Figure 4-3: Grinding Amount Compensation Microswitch**

- 1 Brew unit switching cam
- 2 Grinding amount compensation microswitch

Technical Information






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: CVA Grind Amount Switching Positions

The ground coffee amount can be measured in three volume areas (Figure 4-4), which correspond to the volume areas at the appliance display menu (Figure 4-5). If the ground coffee volume amount deviates from the set amount, then in the next grinding step the grinding time is extended or shortened by approximately 0.2 seconds, as needed. Since the maximum time for compensation is ± 1.6 seconds, this step can be repeated up to 8 times. The minimum grinding time is 5.5 seconds; maximum grinding time is 10 seconds.

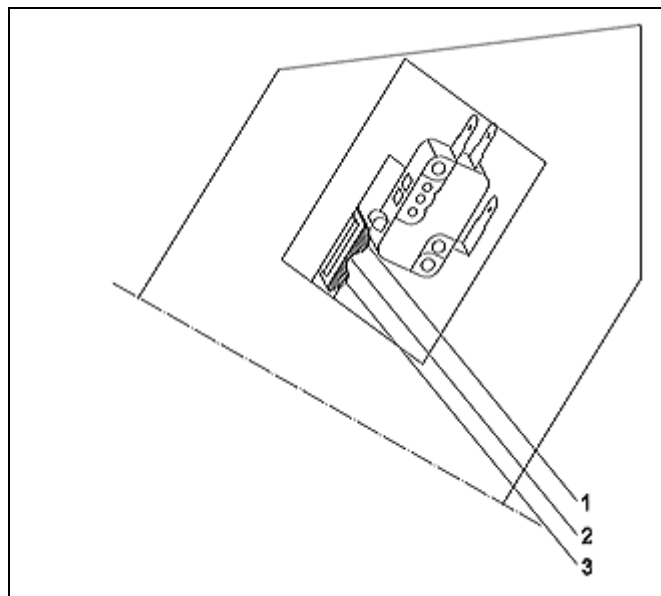

1, 2, 3 Areas of measureable volume

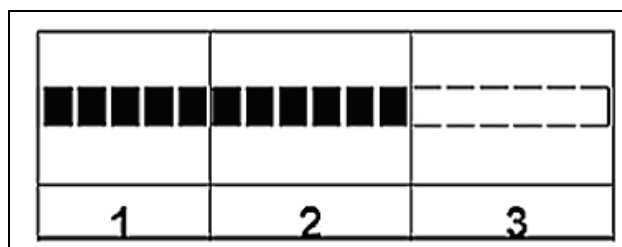
Figure 4-4: Brew Unit Measurable Volume

1, 2, 3 Volume areas
1, 2 and 3

Figure 4-5: Ground Coffee Volume

4.3.4 Brew Unit Drive, Home Position

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 (arrow, Figure 4-7).

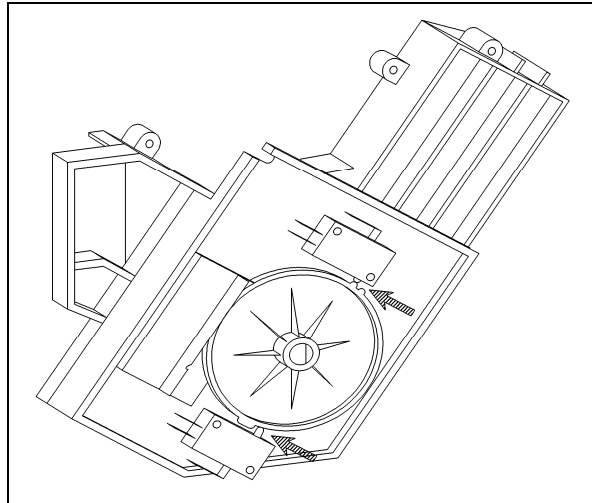


Figure 4-6: Brew Unit Microswitches Highlighted in Home Position

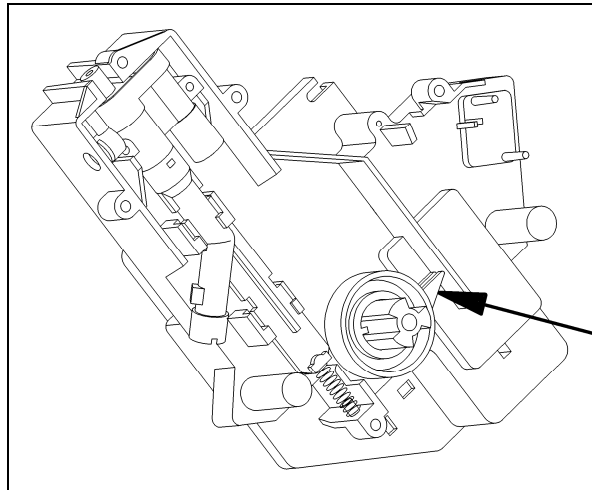
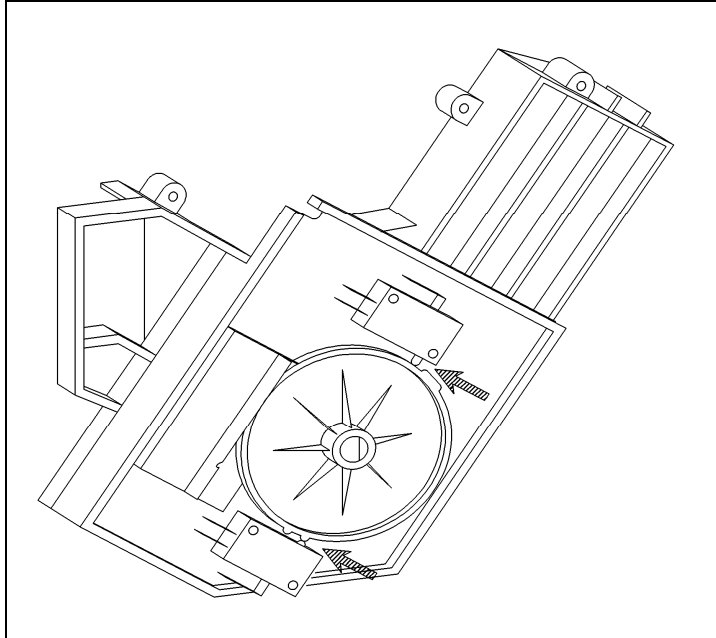
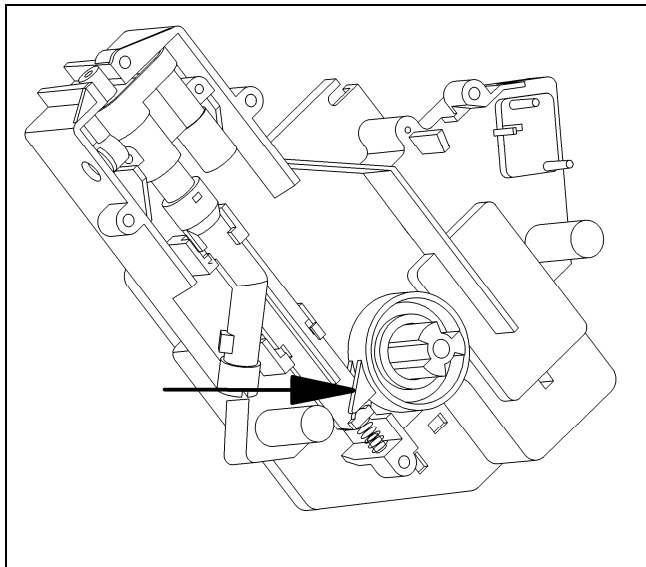


Figure 4-7: Pawl in Home Position

4.3.5 Brew Unit Drive, Compressing Position (Brew Position)

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 (arrow, Figure 4-9) and closes the drain valve. The ground coffee is slightly compressed and then brewed.

Technical Information**Figure 4-8: Brew Unit Microswitches Highlighted in Brew Position****Figure 4-9: Pawl in Brew Position****4.3.6 Brew Unit Drive, Drain Position**

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.

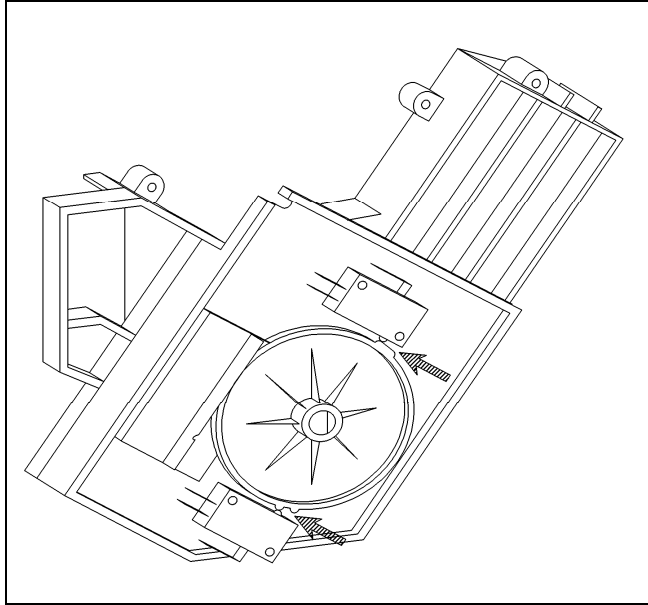


Figure 4-10: Brew Unit Microswitches Highlighted in Drain Position

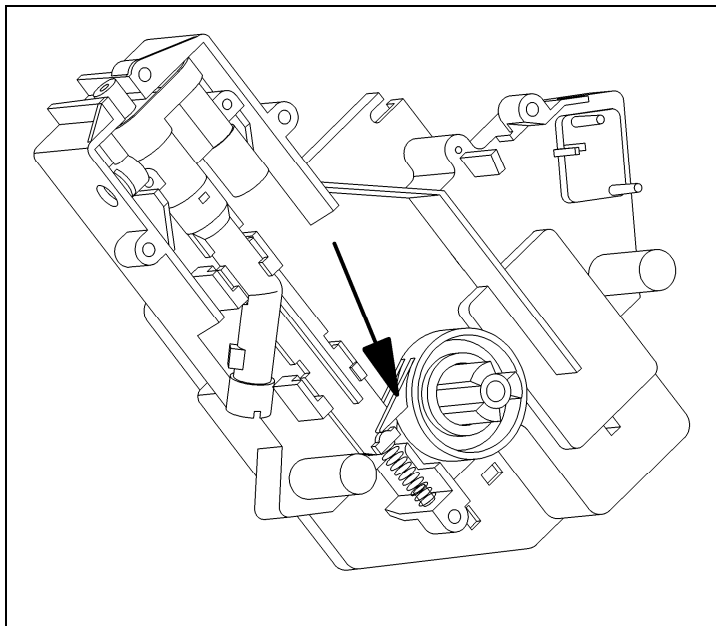
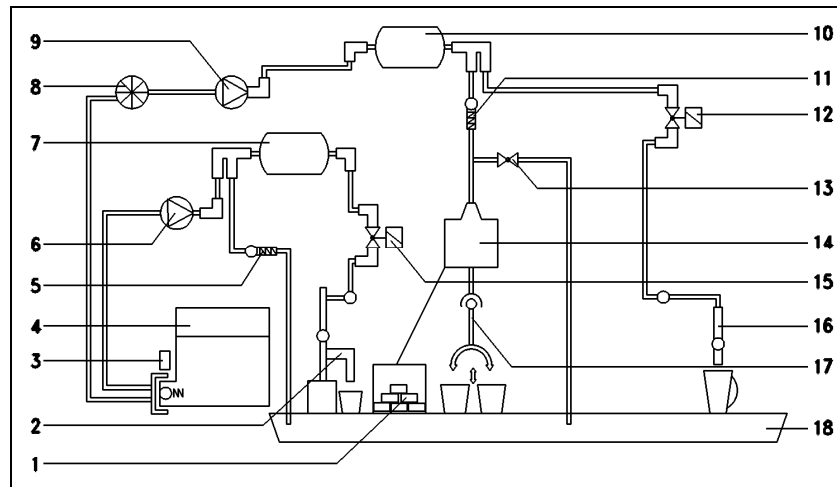


Figure 4-11: Pawl in Drain Position

Technical Information**4.4 Water Paths****4.4.1 Overview****Figure 4-12: CVA Water Path - General**

- | | | | |
|---|------------------------|----|-------------------------|
| 1 | Waste container | 10 | Coffee/hot-water heater |
| 2 | Cappuccinatore | 11 | Pressure relief valve |
| 3 | Water tank reed switch | 12 | Hot-water solenoid |
| 4 | Water tank | 13 | Drain valve |
| 5 | Pressure relief valve | 14 | Brew unit |
| 6 | Steam pump | 15 | Steam solenoid |
| 7 | Steam heater | 16 | Hot-water dispenser |
| 8 | Flow meter | 17 | Coffee dispenser |
| 9 | Coffee/hot-water pump | 18 | Drip tray |

4.4.2 Water Path – Coffee

The highlighted area in Figure 4-13 details the flow of water in the coffee-making process. Water flows from the water tank, through the flow meter, then into the coffee/hot-water pump, where it is pumped out through the flow-thru heater. From there it flows through the pressure relief valve, then the brew unit filled with coffee and finally through the dispenser into the cup(s). The coffee puck drops into the waste container, and the residual water runs via the drain valve into the drip tray.

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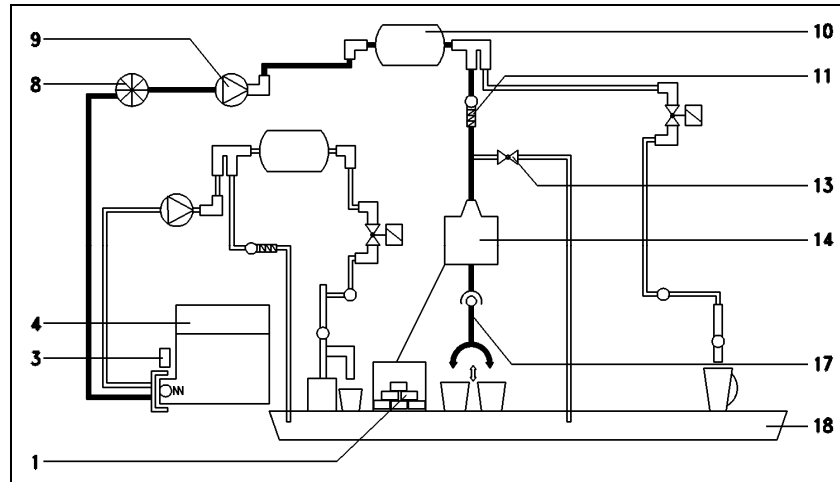


Figure 4-13: Coffee Water Path

- | | | | |
|----|-------------------------|----|-----------------------|
| 1 | Waste container | 11 | Pressure relief valve |
| 3 | Water tank reed switch | 13 | Drain valve |
| 4 | Water tank | 14 | Brew unit |
| 8 | Flow meter | 17 | Coffee dispenser |
| 9 | Coffee/hot-water pump | 18 | Drip tray |
| 10 | Coffee/hot-water heater | | |

4.4.3 Water Path – Hot Water

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 coffee/hot-water flow-thru heater. The hot-water solenoid opens the hot-water path, and the hot water runs through the hot-water dispenser, into the cup.

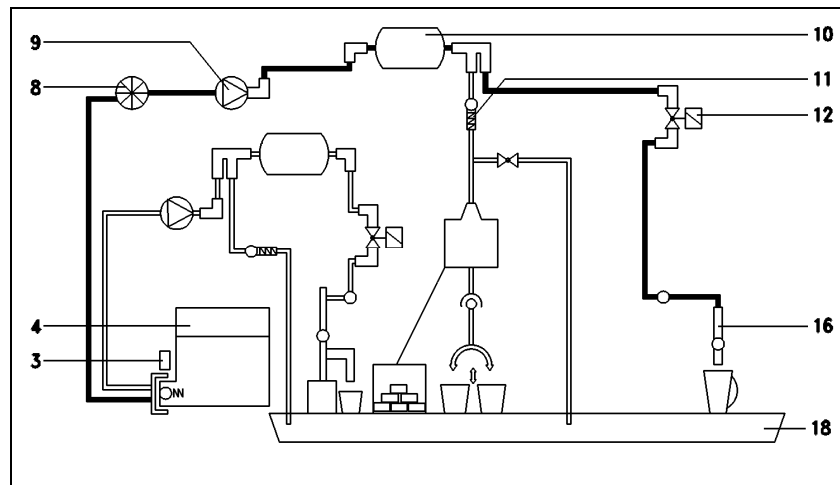


Figure 4-14: Hot-Water Path

- | | | | |
|----|-------------------------|----|-----------------------|
| 3 | Water tank reed switch | 11 | Pressure relief valve |
| 4 | Water tank | 12 | Hot-water solenoid |
| 8 | Flow meter | 16 | Hot-water dispenser |
| 9 | Coffee/hot-water pump | 18 | Drip tray |
| 10 | Coffee/hot-water heater | | |

Technical Information**4.4.4 Water Path – Steam**

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

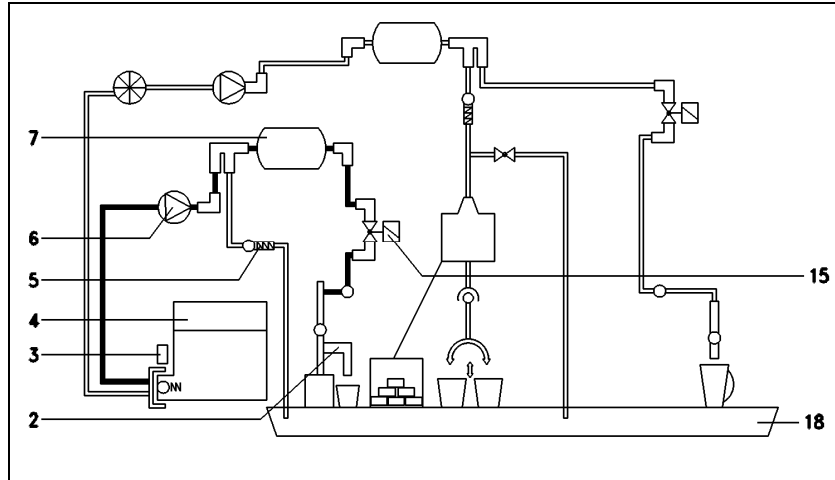


Figure 4-15: Steam Water Path

- | | | | |
|---|------------------------|----|----------------|
| 2 | Cappuccinatore | 6 | Steam pump |
| 3 | Water tank reed switch | 7 | Steam heater |
| 4 | Water tank | 15 | Steam solenoid |
| 5 | Pressure relief valve | 18 | Drip tray |

4.4.5 Plumbed Water Line (CVA 4075 Only)

The CVA 4075 model is designed for operation with a permanent cold tap-water connection, but can be converted from water line to water tank use by programming the plumbed water line connection to **On** or **Off**.

- When the appliance is set to **On**, it uses the cold-water line. Additionally, the water tank for the CVA 4075 contains two reed switches: one for a low water level, and one for a high water level (see Figure 4-16). The water tank is automatically filled when the low water level reed switch sends a signal to the electronic for additional water.
- When the appliance is set to **Off**, the water tank is used and must be filled manually with fresh tap water.

Refer to the operating manual for further installation information for the CVA 4075 coffee system.

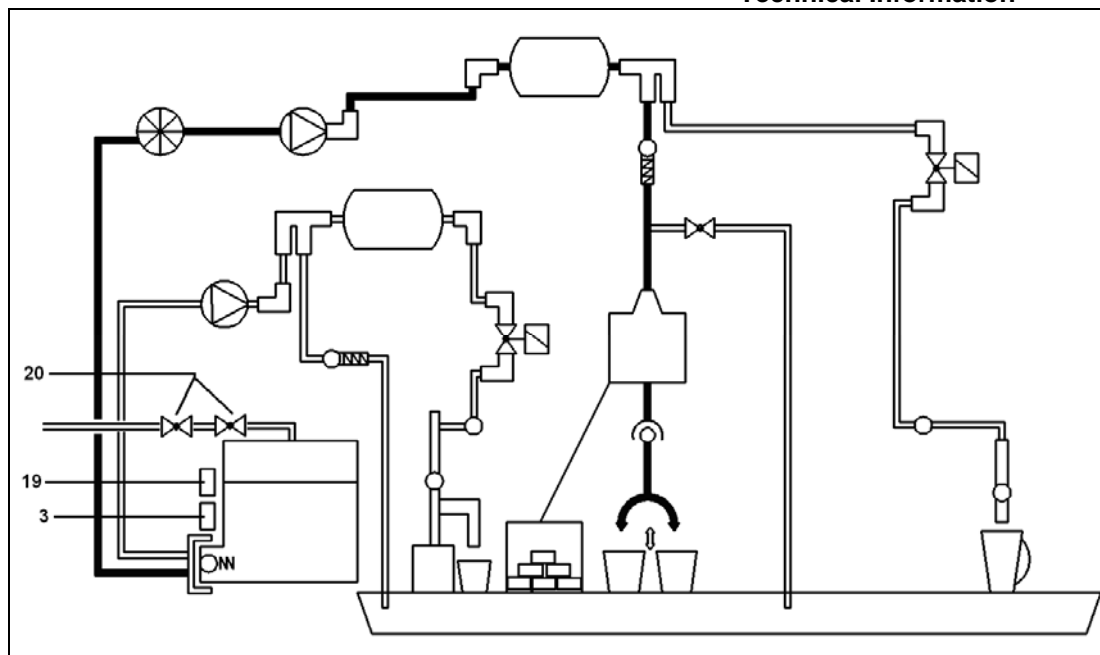


Figure 4-16: CVA 4075 Water Inlet and Tank

- 3 Water tank low water level reed switch
- 19 Water tank high water level reed switch
- 20 Dual water inlet valves

5.0 Service

5.1 Removing the Appliance from a Cabinet

1. Turn off the water supply (CVA 4075).
2. Disconnect the appliance from power.
3. Open the door.
4. Remove all containers and the drip tray.
5. Remove the screws (Figure 5-1, Item 1).
6. Pull the appliance out of the cabinet.
7. Disconnect the appliance from the water supply (CVA 4075).

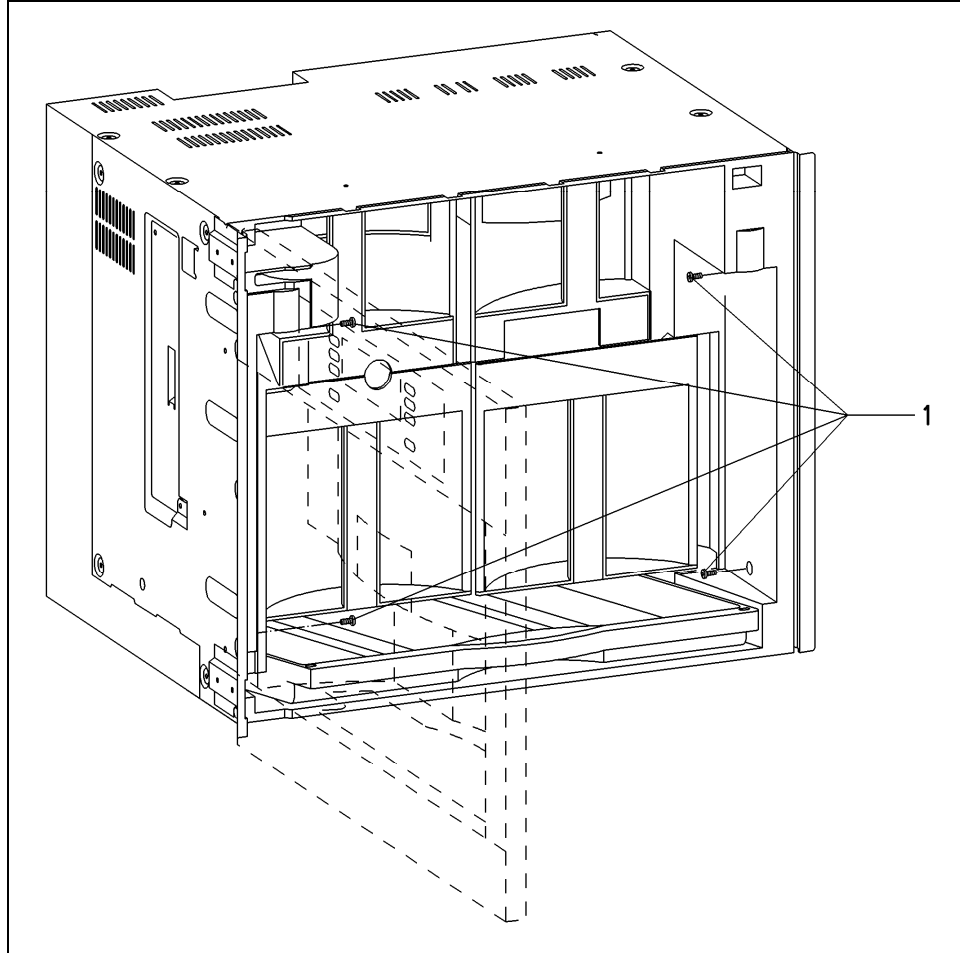
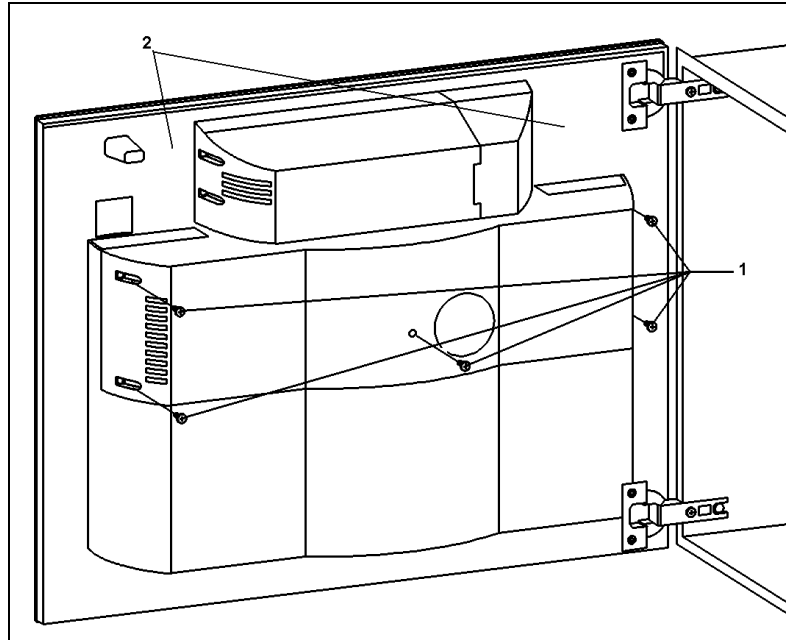
Technical Information

Figure 5-1: CVA Removal from Cabinet Area for Service

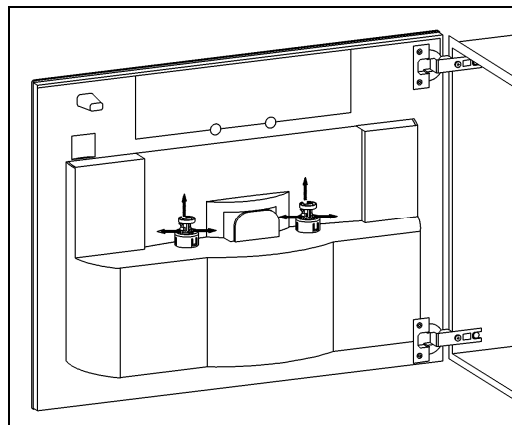
5.2 Removing the Inner Door Covers

1. Disconnect the appliance from power.
2. Open the door.
3. Remove five (5) T10 Torx screws; see Figure 5-2, Item 1.
4. Remove the middle inner door cover.
5. The cover will still be attached to the “flexible coffee hose” in the center of the inner door panel. This flexible coffee hose attachment does not have to be removed in order to access this service area.
6. Remove seven (7) T10 Torx screws from the upper two (2) covers for access to the control electronics area. See Figure 5-2, Item 2.

**Figure 5-2: Inner Door Cover Removal**

5.3 LED Removal

1. Disconnect the appliance from power.
2. Remove the middle inner door cover; see Section 5.2.
3. Release the clips on the LEDs; remove the LEDs by lifting them up and out of their holders. See Figure 5-3.

**Figure 5-3: LED Removal**

5.4 Hot-Water Dispenser Removal

1. Disconnect the appliance from power.
2. Turn off the water supply.
3. Open the door.
4. Remove the LEDs (see Section 5.3).
5. Remove the dispenser retaining screw; refer to Figure 5-4, Item 1.
6. Disconnect the Teflon hose from its connection.

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7. Remove the bracket retaining screws and bracket.
8. Pull the hot-water dispenser down and out of the bracket to remove.

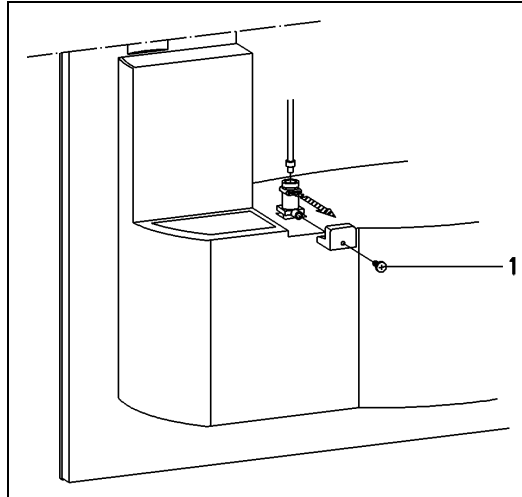


Figure 5-4: Hot-Water Dispenser Removal

Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components/connections when assembling.

5.5 Cappuccinatore Removal

1. Disconnect the appliance from power.
2. Open the door of the appliance.
3. Remove the middle inner door cover (Section 5.2).
4. Release the Teflon hose from its connection and pull it out. See Figure 5-5.
5. Remove the screws securing the bracket (Figure 5-5, Item 1).
6. Remove the bracket.
7. Pull the cappuccinatore downward to remove.

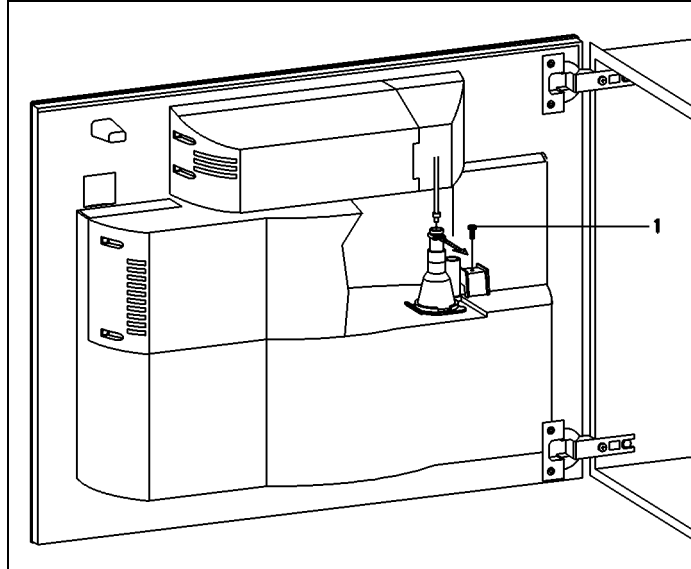


Figure 5-5: Cappuccinatore and Bracket Removal

Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components/connections when assembling.

5.6 Dispenser/Spout Assembly Removal

1. Disconnect the appliance from power.
2. Turn off the water supply (CVA 4075).
3. On the front of the appliance, squeeze the sides of the metal fascia ("Miele") cover and gently slide it forward to remove.
4. Open the door of the appliance.
5. Remove the middle inner door cover (Section 5.2).
6. Release the clear Teflon hose from its clip on the dispenser assembly (Figure 5-6, Item 1).
7. Remove the two T10 screws securing the dispenser assembly to the inner door panel (Figure 5-6, Item 2).

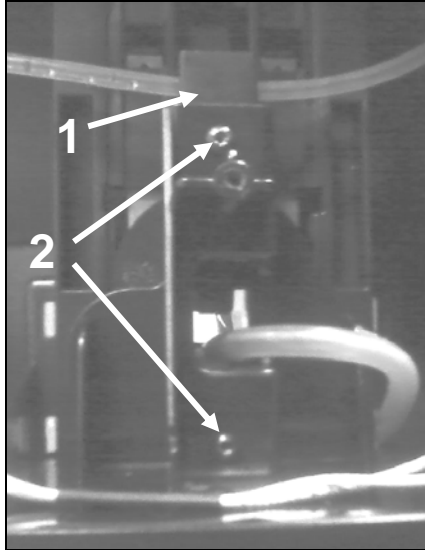
Technical Information

Figure 5-6: Dispenser Assembly Hose Clip and Screws

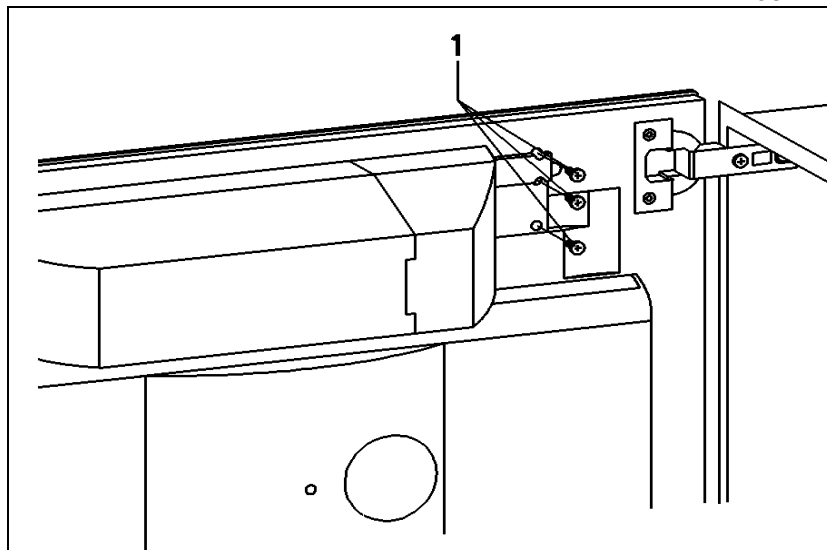
8. Slide the dispenser assembly down and remove it from the front of the appliance.
9. Flip the dispenser assembly over and remove the two T10 screws holding the two halves of the dispenser casing together (Figure 5-7, Item 1).
10. Separate the dispenser casing to release the spout unit; pull off the Teflon hose.



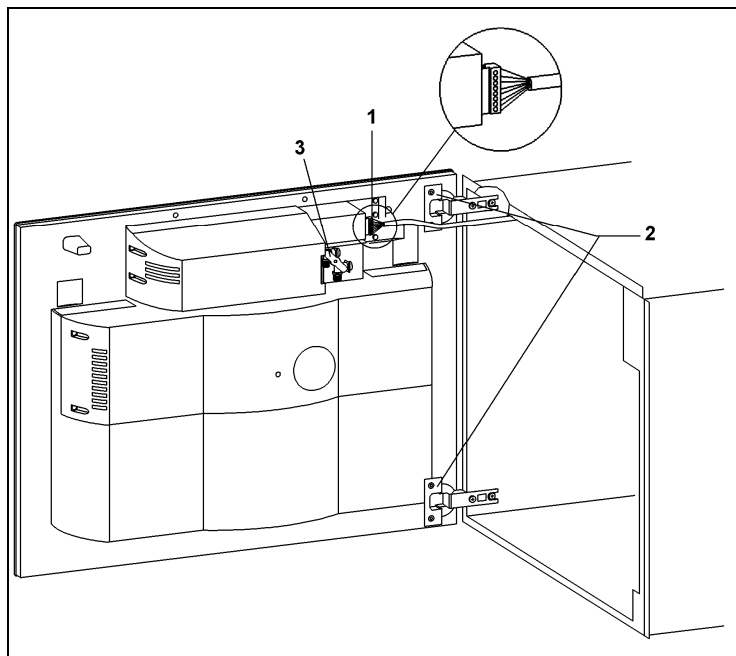
Figure 5-7: Dispenser Casing Screws

5.7 Control Electronic (EPX) Removal

1. Disconnect the appliance from power.
2. Turn off the water supply (CVA 4075).
3. Open the door.
4. Remove the right inner door cover (Figure 5-8, Item 1).

**Figure 5-8: Control Electronic Removal, Part 1**

5. Disconnect the electrical connections (power electronic and other components in the front area) to the control electronic (Figure 5-9, Item 1).
6. Release the Teflon hoses from their connector and pull off. Mark the location of each hose. (See Figure 5-9, Item 3.)
7. Remove the retaining screws from the control electronic board and remove the board.

**Figure 5-9: Control Electronic Removal, Part 2**

Technical Information**5.8 Door Removal**

1. Disconnect the appliance from power.
2. Turn off the water supply (CVA 4075).
3. Open the door.
4. Remove the control electronic. See Section 5-7.
5. Remove the screws that hold the door hinge to the front door cover (see Figure 5-10, Item 2) and remove the door from the appliance.

Note:

The Teflon hoses are different colors, to prevent crossing the lines during reassembly.

Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components/connections when assembling.

5.9 Removing the Brew Unit and Drive

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.

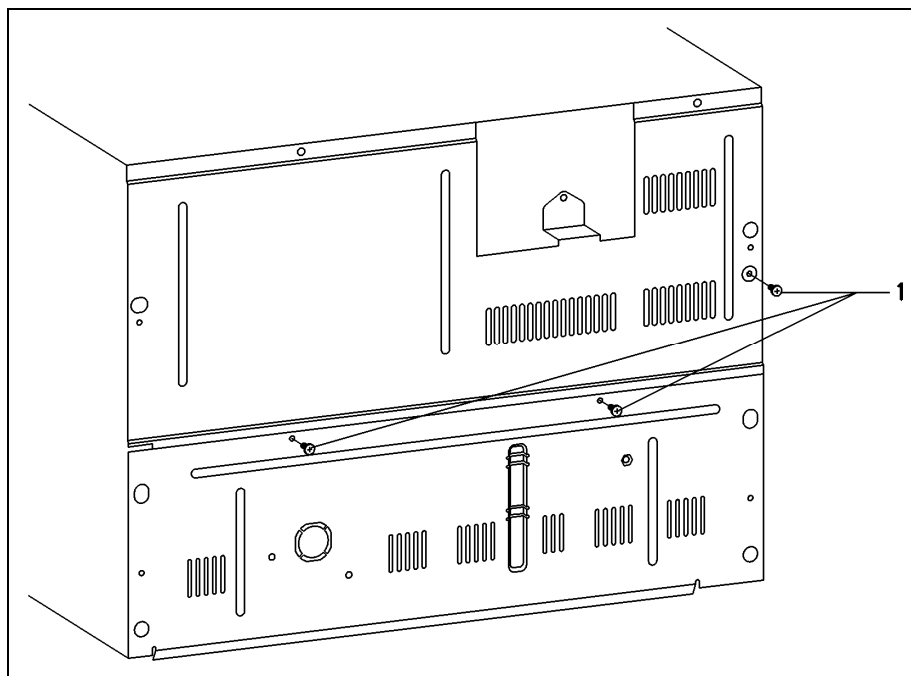


Figure 5-10: Service Door Removal

6. Disconnect the plug from the brew unit drive (Figure 5-11, Item 2).

7. Disconnect plug ST4 from the power electronic.

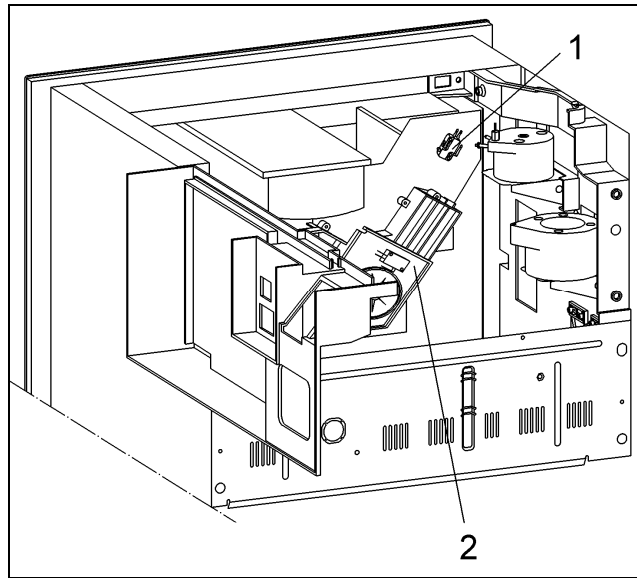


Figure 5-11: Brew Unit Drive Plug Location

8. Open the front door of the appliance.
9. Remove all containers from the appliance.
10. Release the brew unit and take it out of the appliance (Figure 5-12).

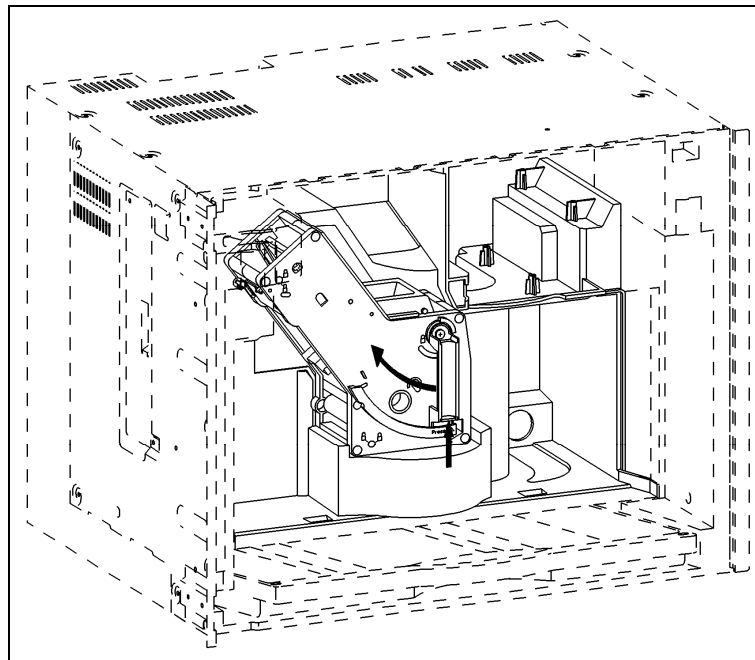
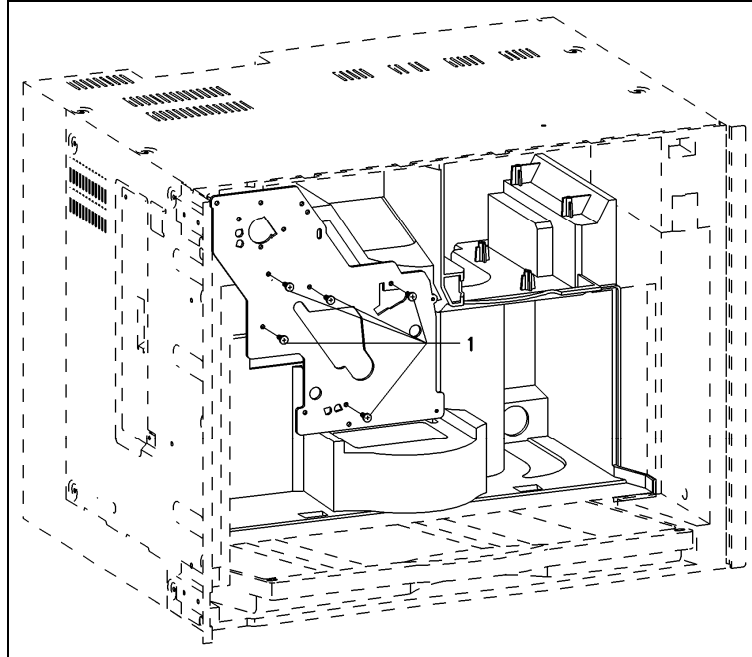


Figure 5-12: Brew Unit Removal

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

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**Figure 5-13:** Brew Unit Drive Retaining Screws**Note:**

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

5.10 Removing the Grinding Amount Compensation Microswitch

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Disconnect the plug from the microswitch (Figure 5-14, Item 1).
7. Unclip the microswitch and take it out.

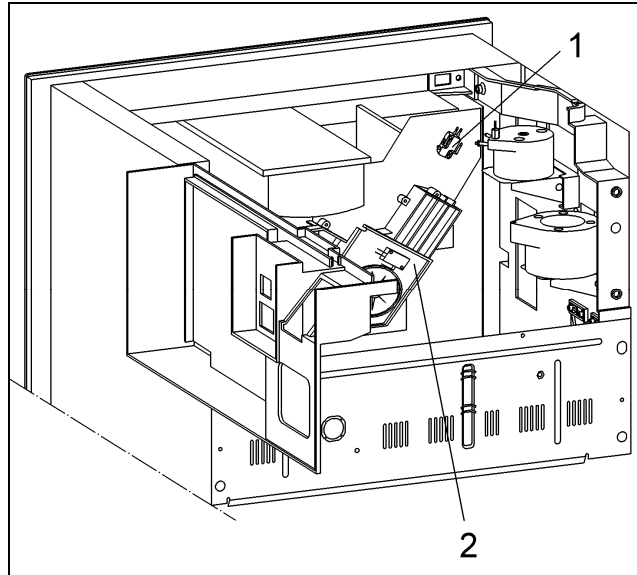
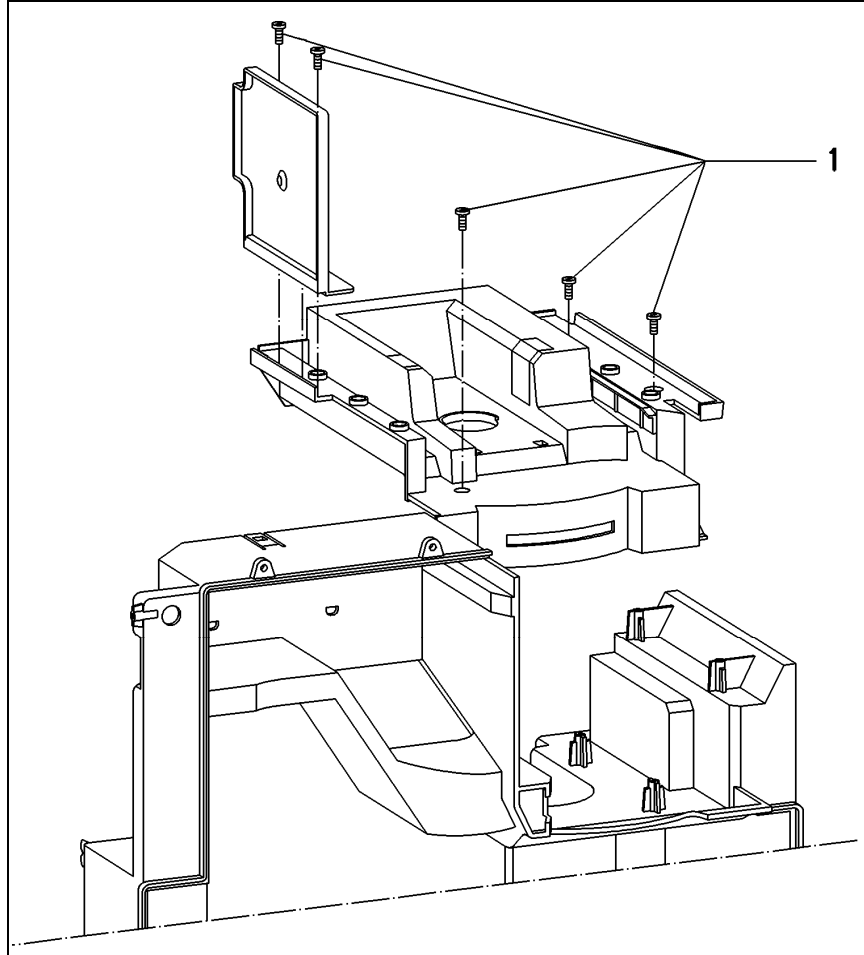


Figure 5-14: Grinding Amount Compensation Microswitch

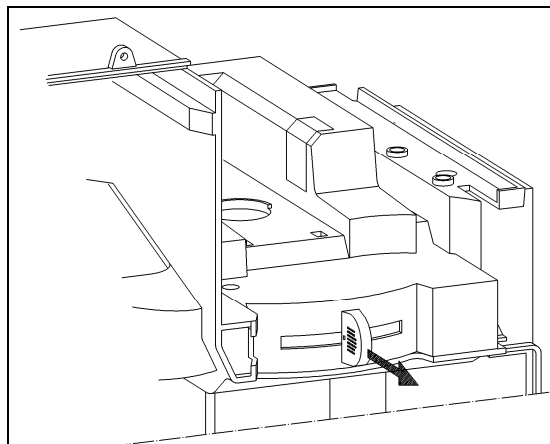
5.11 Grinder Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Take out the bean container.
7. Remove the screws securing the bean container base (Figure 5-15, Item 1).

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**Figure 5-15: Bean Container Screw Removal**

8. Pull the handle off the adjustment lever (Figure 5-16).
9. Remove the bean container base.

**Figure 5-16: Adjustment Lever Removal**

10. Slide the adjustment lever aside (arrow, Figure 5-17).
11. Remove the grinder retaining screws (Figure 5-17, Item 1).

12. Take the grinder out of the appliance.
13. Disconnect the grinder electrical connection.

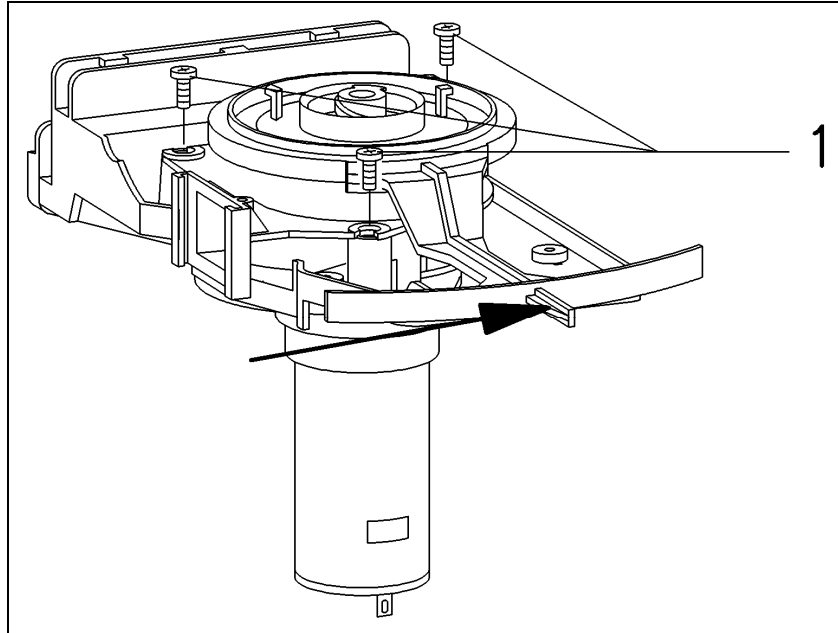


Figure 5-17: Grinder Removal

5.12 Hot-Water Solenoid Removal

1. Remove the screws securing the support plate (Figure 5-18, Item 1).
2. Open the support plate.

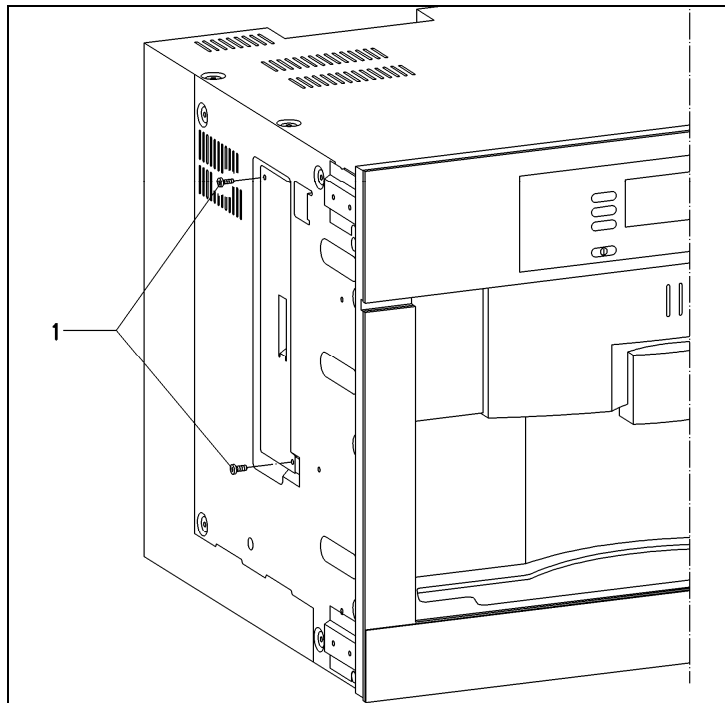


Figure 5-18: Support Plate Removal

Technical Information

3. The hot-water solenoid is shown at Figure 5-19, Item 2.

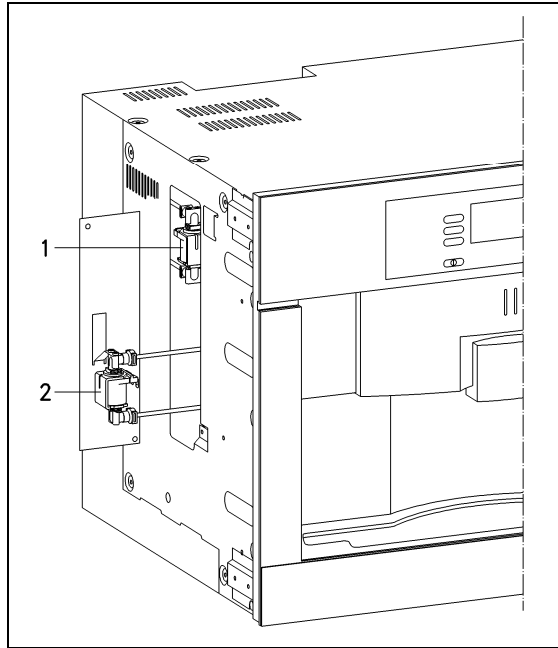


Figure 5-19: Solenoid Locations

4. Pull out the safety springs at the hot-water solenoid connection (Figure 5-20).
5. Take the solenoid out.
6. Disconnect the solenoid electrical connection.

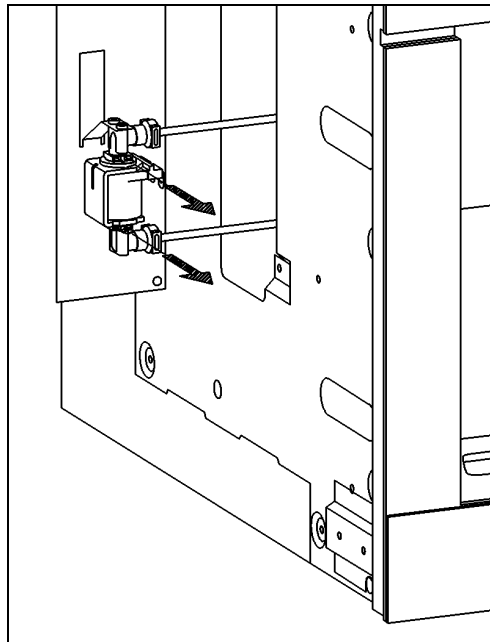


Figure 5-20: Hot-Water Solenoid Safety Springs

Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.13 Steam Solenoid Removal

1. Remove the screws securing the support plate (Figure 5-18, Item 1).
2. Open the support plate.
3. The steam solenoid is shown at Figure 5-19, Item 1.
4. Pull out the safety springs at the steam solenoid connection (Figure 5-21).
5. Take the solenoid out.
6. Disconnect the solenoid electrical connection.

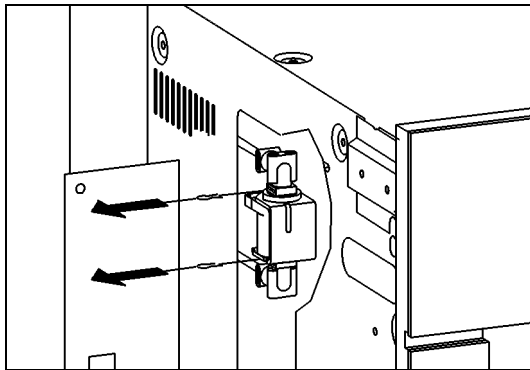


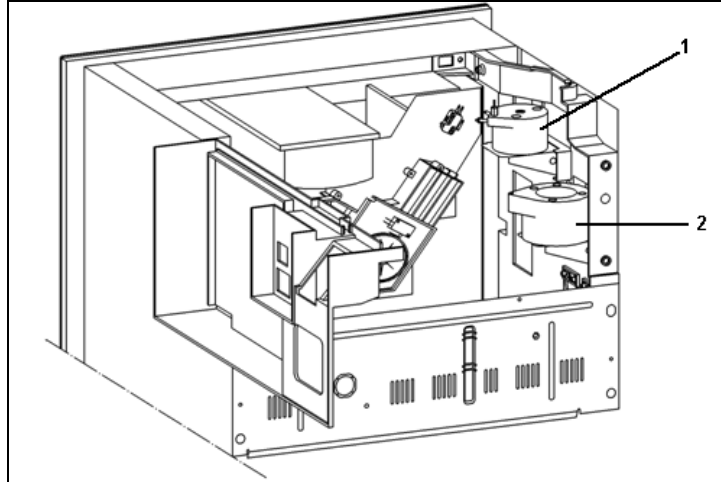
Figure 5-21: Steam Solenoid Safety Springs

Warning!

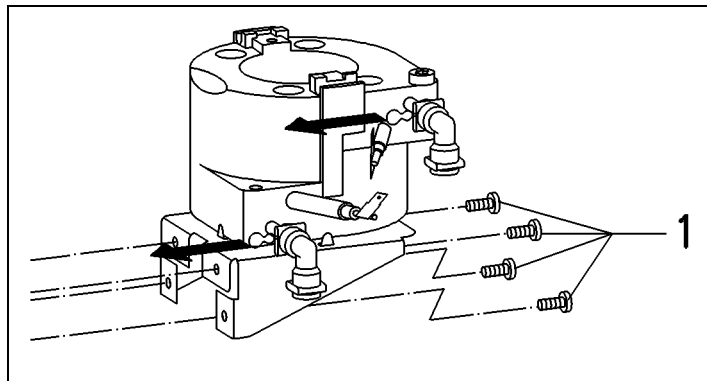
To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components/connections when assembling.

5.14 Coffee/Hot-Water Heater Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door. The coffee/hot-water heater is shown at Figure 5-22, Item 2.

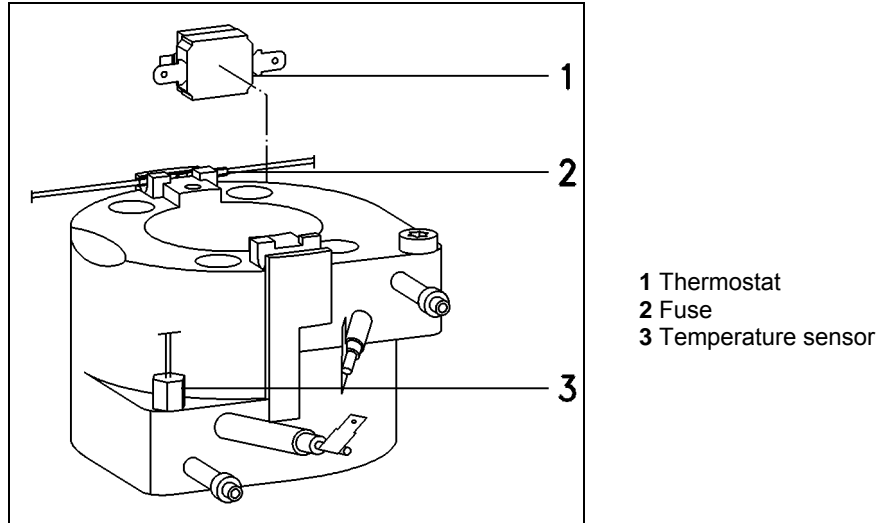
Technical Information**Figure 5-22: Flow-Through Heaters**

6. Remove the rear wall retaining screws at the bottom.
7. Take off the lower rear wall.
8. Pull out the spring clips at the water connection (arrows, Figure 5-23).
9. Remove the mounting bracket and 5 screws (4 shown in illustration plus one center screw) from the heater. See Figure 5-23, Item 1.
10. Remove the heater from the appliance.

**Figure 5-23: Heater Mounting Bracket and Screws**

11. Remove the temperature sensor, thermostat and fuse from the heater (Figure 5-24, items 1 to 3).
12. Disconnect all connections from the heater.

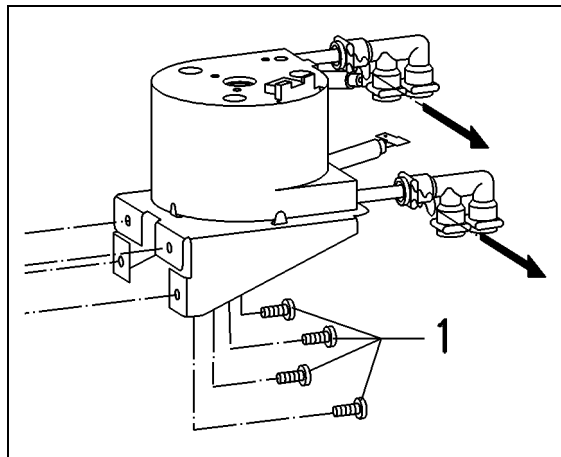
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**Figure 5-24:** Temperature-Regulating Components on Coffee Heater**Warning!**

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.15 Steam Heater Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door. The steam heater is shown at Figure 5-22, Item 1.
6. Pull out the spring clips at the water connection (arrows, Figure 5-25).
7. Remove the mounting bracket and 5 screws (4 shown in illustration plus one center screw) from the heater. See Figure 5-25, Item 1.
8. Remove the heater from the appliance.

**Figure 5-25:** Heater Mounting Bracket and Screws

9. Remove the temperature sensor, thermostat and fuse from the heater (Figure 5-

Technical Information

26, items 1 to 3).

10. Disconnect all connections from the heater.

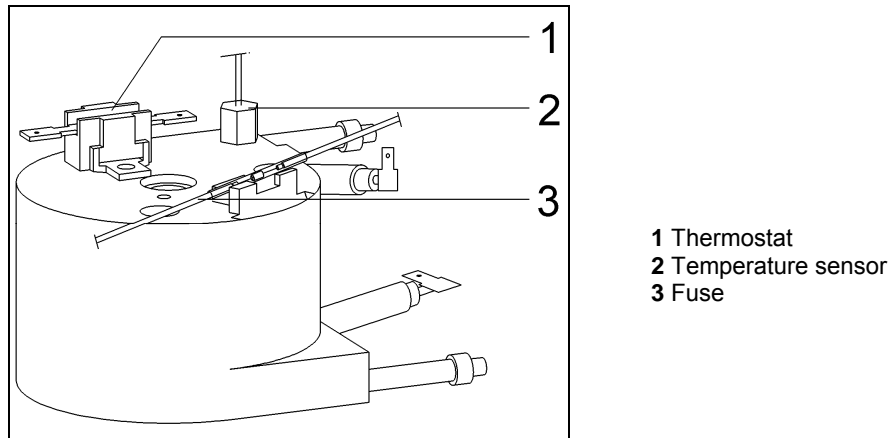


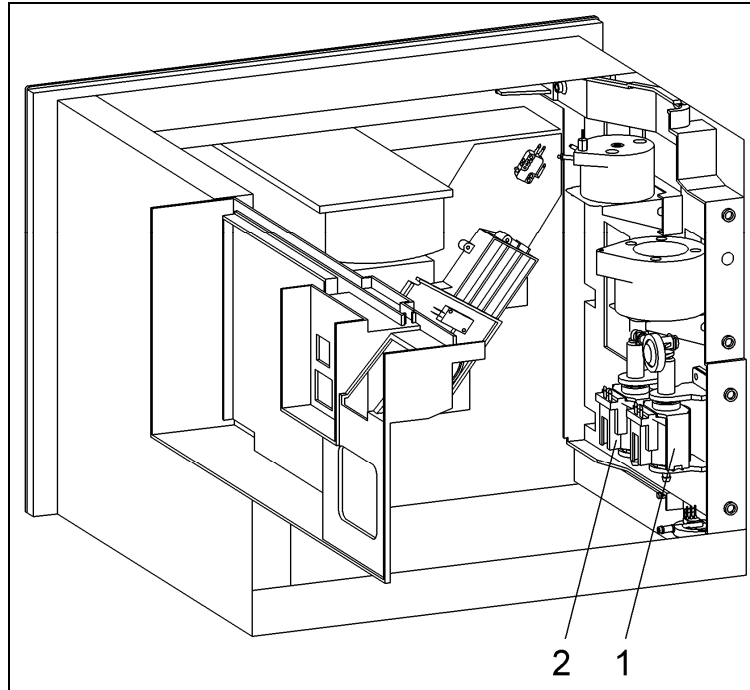
Figure 5-26: Temperature-Regulating Components on Steam Heater

Warning!

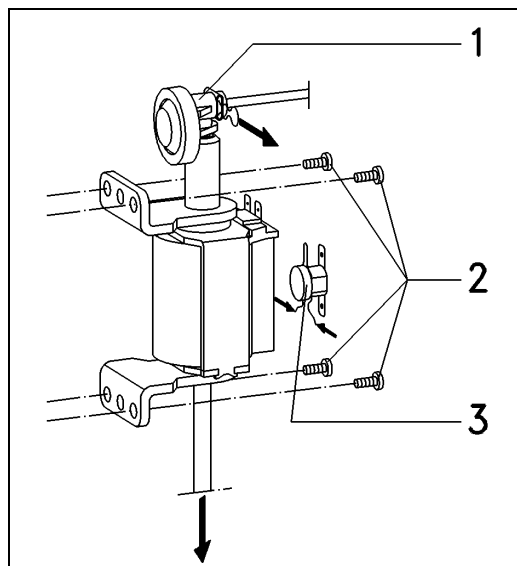
To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.16 Coffee/Hot-Water Pump Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Remove the rear wall retaining screws at the bottom.
7. Take off the lower rear wall. The coffee/hot-water pump is shown at Figure 5-27, Item 1.

**Figure 5-27: Coffee/Hot-Water and Steam Pumps**

8. Release the Teflon hose from the safety valve and disconnect it (Figure 5-28, Item 1).
9. Pull the connectors off the pump.
10. Remove the pump retaining screws (Figure 5-28, Item 2).
11. Remove the pump.
12. Pull the silicone hose off the pump.
13. Unclip the thermostat and remove it (Figure 5-28, Item 3).
14. Unscrew the safety valve (Figure 5-28, Item 1).
15. Take the retaining brackets off the pump.

**Figure 5-28: Coffee/Hot-Water Pump Removal**

Technical Information**Warning!**

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.17 Steam Pump Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Remove the rear wall retaining screws at the bottom.
7. Take off the lower rear wall. The steam pump is shown at Figure 5-27, Item 2.
8. Pull the connectors off the pump.
9. Remove the pump bracket retaining screws (Figure 5-29, Item 1).
11. Remove the pump.
12. Remove the retaining clip from the 90° connector and disconnect the Teflon hose.
13. Pull the silicone hose off the pump.
14. Unclip the thermostat and remove it (Figure 5-29, Item 2).
15. Take the retaining brackets off the pump.

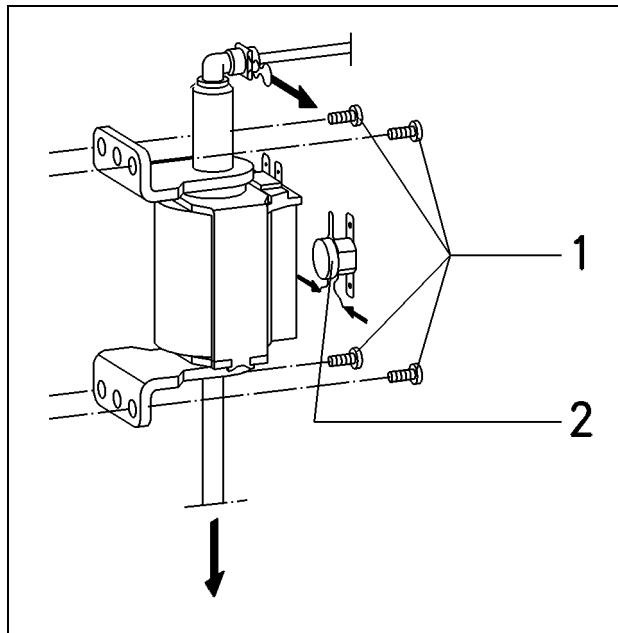


Figure 5-29: Steam Pump Removal

Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.18 Flow Meter Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Remove the rear wall retaining screws at the bottom.
7. Take off the lower rear wall. The flow meter is shown at Figure 5-30, Item 1.

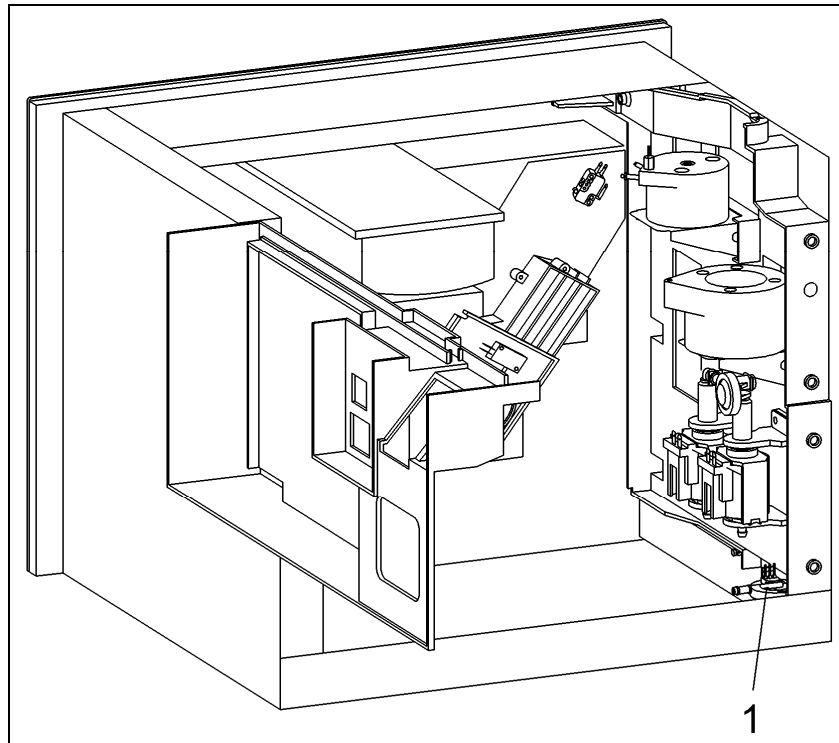


Figure 5-30: Flow Meter Location

8. Pull the silicone hoses off the flow meter.
9. Pull the connector off the flow meter.
10. Pull the flow meter (Figure 5-31, Item 1) upward out of the safety ring (Figure 5-31, Item 2) and remove it.

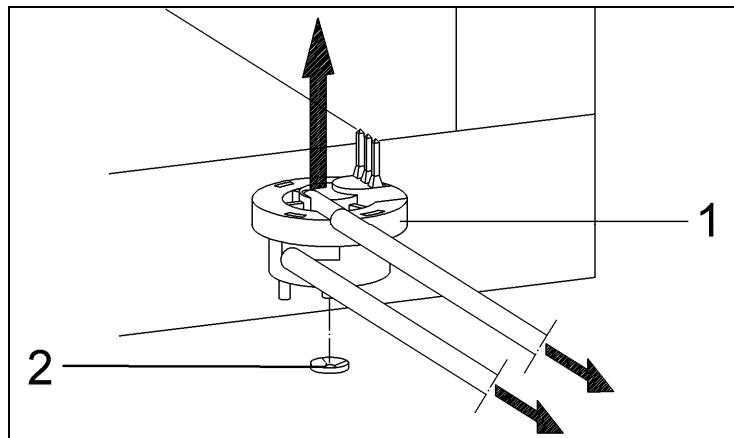


Figure 5-31: Flow Meter and Safety Ring

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Warning!

To prevent malfunctions in the water system (such as clogging of the valves), do **not** apply grease, oil or other lubricants to the water components or connections when assembling.

5.19 Power Electronic (EPL) Removal

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the top rear wall retaining screws. Remove the top rear wall.
3. Remove the screws securing the power electronic (Figure 5-32, Item 1).
4. Remove the power electronic.
5. Disconnect all connections from the power electronic.

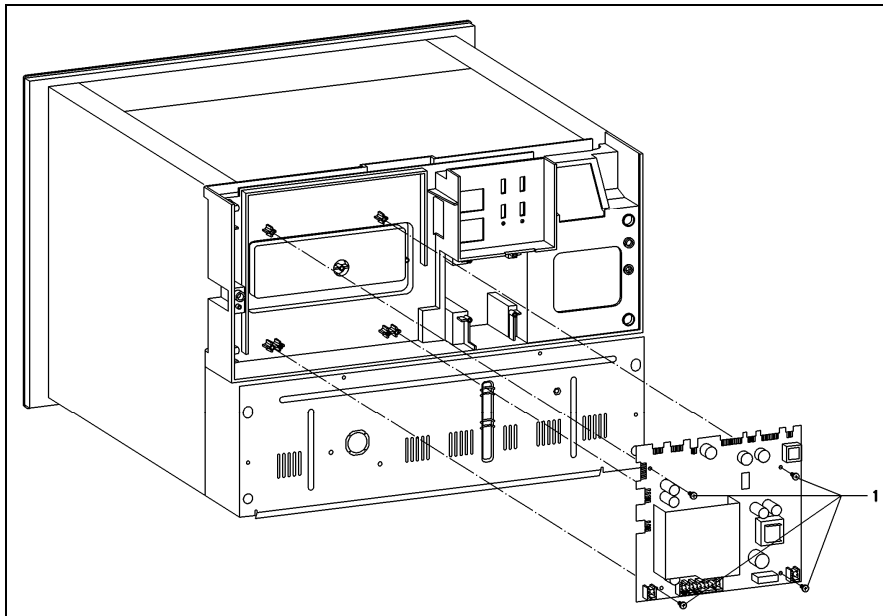


Figure 5-32: Power Electronic and Screws

Note: Power electronic EPL 860 is shipped with an adapter wire and conversion instructions for installation in European models only. The conversion was developed so that electronic EPL 860 could be used in both USA (CVA 4070/4075) and European machines. The adapter wire and conversion instructions should be ignored when replacing the electronic in USA models.

Note: Power electronic connections are illustrated in Figure 5-33, and outlined in Table 5-1.

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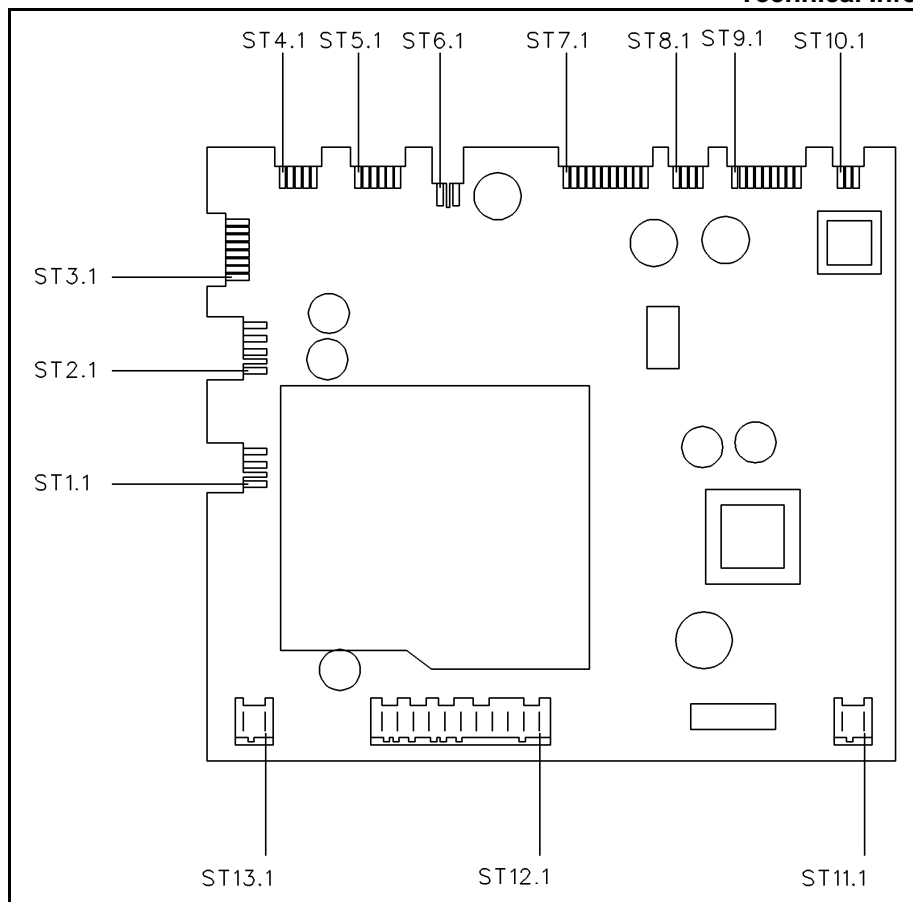


Figure 5-33: Power Electronic

Plug	Pin	Component
ST1	1	Solenoid for hard plumbing (CVA 4075 only)
	2	
	3	
ST2	1	Steam solenoid
	2	
	3	Hot-water solenoid
	4	
ST3	1	Reed contact ground coffee funnel
	2	Reed contact waste container
	3	
	4	Transmitter for electronic light barrier bean container
	5	
	6	Receiver for electronic light barrier bean container
	7	
ST4	8	Receiver for electronic light barrier bean container
	1	Microswitch, brew unit compensation
	2	Microswitch, brew unit clockwise turn
	3	Microswitch, brew unit counterclockwise turn
	4	Microswitch, brew unit present
	5	Microswitch, brew unit GND

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Plug	Pin	Component
ST5	1	Reed contact, water tank fill
	2	
	3	Reed contact water tank in models 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	
ST8	1	Miele@home (optional)
	2	
	3	
	4	
ST9	1	LED interior lamp
	2	Coffee/hot-water NTC
	3	
	4	Steam NTC
	5	
	6	Flow meter
	7	
	8	
	9	
ST10	1	Dish warmer
	2	
	3	
ST11	1	Connector to main power supply
	2	Connection to ST12
ST12	1	Steam heater
	2	Vacant
	3	Coffee/hot-water heater
	4	Vacant
	5	Connection to ST11
	6	Interference suppressor
	7	Coffee/hot-water pump
	8	Steam pump
	9	Vacant
	10	Grinder motor
	11	
ST13	1	Connector to warming drawer
	2	

Table 5-1: Power Electronic Plug and Pin Allocations

5.20 Water Inlet Filter Removal (CVA 4075 Only)

Note:

Whenever a CVA 4075 coffee system is serviced, this requires removing the appliance from a cabinet. After removing the appliance from the cabinet, always remove and clean the water inlet filter as a preventative measure, since this filter is not accessible by the customer.

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the brass elbow fitting from the rear of the CVA (refer to Figure 1-3).
3. Remove the intake filter from the water intake at the rear of the appliance using an appropriate tool (such as needlenose pliers).
4. Check and clean the intake filter with hot water and a brush.

5.21 Removing the Water Inlet Valves (CVA 4075 Only)

1. Remove the appliance from the cabinet. See Section 5-1.
2. Remove the screws securing the appliance lid. Remove the lid.
3. Remove the screws securing the service door (Figure 5-10, Item 1).
4. Release the cable connecting the control and the power electronics from its guide.
5. Open the service door.
6. Remove the brass elbow fitting from the rear of the CVA (refer to Figure 1-3). Remove and clean the water intake filter as a preventative measure. Re-install the filter.
7. Remove two T20 screws holding the water inlet valves. See Figure 5-34, Item 2.
8. Disconnect the cable from the water valves (mark/label). See Figure 5-34, Item 1. The valve on the right is the primary valve; valve on the left, the secondary valve.
9. Disconnect the hose from the water valves and remove. See Figure 5-34, Item 3.

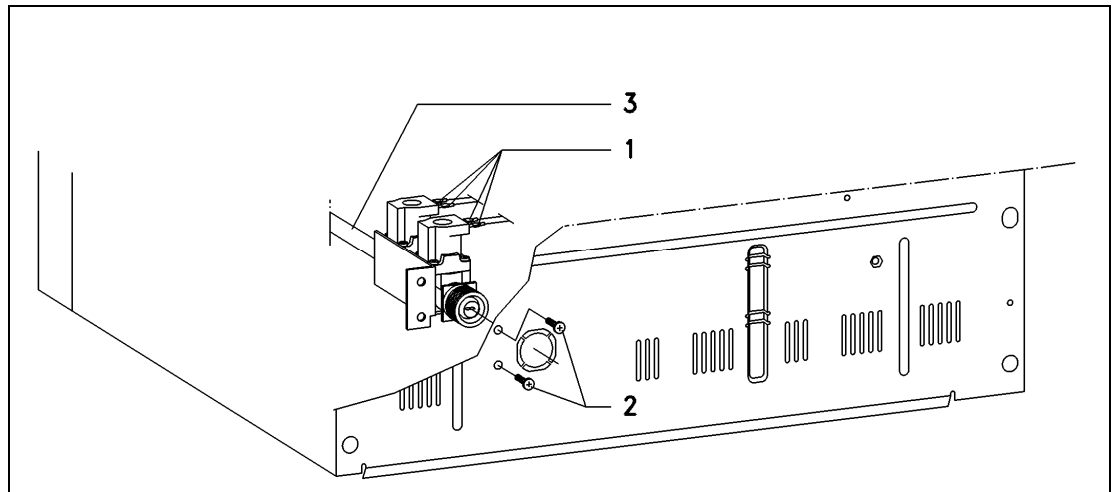


Figure 5-34: Water Inlet Valve Removal

Technical Information

6.0 Fault Diagnosis

6.1 Programming Mode

Initial requirements:

Switch the appliance off.

Accessing:

1. Press and hold the **Clear** touchpad.
2. Press the **On/Off** touchpad once.
3. Release the **Clear** touchpad.
4. Press the **Clear** touchpad 5 times; hold on the 5th time until the programming mode is displayed.

Note:

Access has to be completed within 10 seconds.

Acknowledgement indicator:

Programming is shown in the display, along with the programming options.

Options:

1. Touch the pad next to the desired programming function (see Table 6-1).
2. After selecting a function, touch the pad next to the desired option.
See Table 6-1.
3. To go back to the previous menu, press the **Clear** touchpad.

Save and quit:

1. To save and quit, press the touchpad next to **OK**.
2. To quit without saving any changes, press the **On/Off** touchpad.

Technical Information

Programming function	Option			Description
Reset	No			Go back, without reset
	Yes			All customer-modified settings (except language) are restored to their factory defaults. All user profiles are deleted. The fault code memory remains.
Settings	Language	cestina		The set language will remain the same even if a reset is performed.
		dansk		
		deutsch		
		english		
		espanol		
		francais		
		italiano		
		magyar		
		nederlands		
		norsk		
		polski		
		português		
		suomi		
		svenska		
		türkce		
		greek		
		russian		
	Time	Display	On	The clock is permanently displayed.
			On for 60 seconds	When the appliance is switched off, the clock dims after 60 seconds.
		Time format	12 h	Time is shown in 12-hour format.
			24 h	Time is shown in 24-hour format.
		Setting	e.g., 8:34	Use the +/- buttons to set the current time.
	Settings	Timer	Set	Start at (e.g., 7:30)
Switch off after (e.g., 0:15 for 15 minutes)				
Switch off after (e.g., 9:00 for specific time)				
Active			Switch on at (e.g., 7:30)	The appliance is switched on at the specified time.
			Switch off at (e.g., 9:00)	The appliance is switched off at the specified time.
Grinding amount		Espresso	1 – 17 (9)	Grinding time can be adjusted between 3.9 and 10 seconds.
		Coffee	1 – 17 (9)	
		Cappuccino	1 – 17 (9)	
Pre-brewing		Long		Pre-brew 3 seconds.
		Normal		Pre-brew 1.5 seconds.
		Without		No pre-brewing.

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Technical information					
Programming function	Option			Description	
Settings	Temperature	Espresso	Minimum		Minimum = 205°F at flow-through heater. Low = 208°F at flow-through heater. Medium = 212°F at flow-through heater. High = 215°F at flow-through heater. Maximum = 219°F at flow-through heater.
			Low		
			Medium		
			High		
			Maximum		
		Coffee	Minimum		
			Low		
			Medium		
			High		
			Maximum		
		Cappuccino	Minimum		
			Low		
			Medium		
			High		
			Maximum		
		Hot water	Minimum		
	Low				
	Medium				
	High				
	Maximum				
	Automatic rinse	On			The appliance rinses when it's switched on, and, after a beverage is dispensed, shortly before it switches off.
		Off			Automatic rinse is switched off.
	Steam system	On			The steam system is switched on.
		Off			The steam system is switched off.
	Lighting	Automatic	On		Door/interior lights switched on.
			Off		Door/interior lights switched off.
		Dim	Top	1 – 17 (17)	Interior lights can be dimmed.
			Bottom	1 – 17 (17)	Door lights can be dimmed.
	Coffee total	e.g., 11			The total number of coffees, espressos and cappuccinos is displayed.
	System lock	Accept			System lock is switched on. The machine can be safeguarded against accidental switch-on.
		Do not accept			System lock is switched off.
	Water hardness	Soft 1			Set the water hardness. See Table 6-2.
		Medium 2			
		Hard 3			
		Very hard 4			
	User profile	Select	Standard		Factory-default settings for grinding amount, temperature, pre-brewing and portion size.
			Up to 7 user profiles		The selected user profile will be indicated in the main menu. Grinding amount, temperature, pre-brewing and portion size can be modified for each profile.
		Create	e.g., name		Create a new user profile. Up to 7 profiles can be saved.
		Change name			Change the user profile name.
		Delete			Delete a user profile.

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Programming function	Option			Description
Settings	User profile	Change-over	Never	The user profile displayed in the main menu never changes to "Standard."
			At switch-on	The user profile displayed in the main menu changes to "Standard" when the machine is switched on.
			After beverage is dispensed	The user profile displayed in the main menu changes to "Standard" after each beverage service.
	Display	Contrast	1 – 16 (8)	Set the contrast and brightness.
		Brightness	1 – 16 (8)	
	Signal tones	Volume	1 – 18 (18)	Set the touchpad tone volume.
		Touchpad tones	On	Touchpads sound when pressed.
			Off	No touchpad sound when pressed.
	Factory settings	All settings	No	Go back without restoring settings.
			Yes	All modified settings (except language) are reset to factory defaults.
		User profiles	No	Go back without erasing user profiles.
			Yes	Delete all user profiles.
Customer service	Restart			A restart is like a power supply interruption. The fault memory and all customer-modified settings and user profiles will remain unaffected.
	Appliance variant	Hard plumbing	Available	The machine is hooked up to plumbing.
			Not available	The machine cannot be hooked up to plumbing.
Release descale	No			Go back w/out lifting descale lock.
	Yes			Release the descale lock. ¹
Release cleaning	No			Go back w/out lifting cleaning lock.
	Yes			Release the cleaning lock. ¹

Table 6-1: Programming Mode

¹ After service work is completed, the machine must be cleaned and descaled.

Water hardness settings	Grains per gallon	Value (approx.) until message "50 servings until descale"	
		Coffee/hot-water flow (pulses)	Steam discharge (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 6-2: Water Hardness Settings

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6.2 Service Mode Overview**Initial requirements:**

Switch the appliance off.

Accessing:

1. Press and hold the **Clear** touchpad.
2. Press the **On/Off** touchpad once.
3. Release the **Clear** touchpad.
4. Press the **Clear** touchpad 3 times; hold on the 3rd time until the service mode is displayed.

Note:

Access has to be completed within 10 seconds.

Acknowledgement indicator:

Service is shown in the display, along with the service options.

Options:

1. Touch the pad next to the desired service function (see Table 6-3).
2. After selecting a function, touch the pad next to the desired option.
See Table 6-3.
3. To go back to the previous menu, press the **Clear** touchpad.

Save and quit:

1. To save and quit, press the touchpad next to **OK**.
2. To quit without saving any changes, press the **On/Off** touchpad.

Technical Information

Service function	Option		Description
ID number	EPX (e.g., ID01087 V21)		ID number of control electronic.
	EPL (e.g., ID33849 V10)		ID number of power electronic.
Fault memory (See Section 6.3.)	Registered faults		All faults that have occurred so far are indicated. To show the fault description, touch the touchpad next to the fault.
	Delete		All saved faults will be deleted.
Component test	Steam valve	Open	The solenoid for steam is opened.
		Close	The solenoid for steam is closed.
	Hot-water valve	Open	The solenoid for hot water is opened.
		Close	The solenoid for hot water is closed.
	Brew unit	Initialize	The microswitches are tested and the brew unit is returned to the home position. To prevent mechanical damage, as a final step, always activate the brew unit to move clockwise for a short period of time.
		Move counterclockwise for set period of time	The brew unit moves in the specified direction.
		Move clockwise for set period of time	
		Home position ¹	The brew unit moves into the specified position.
		Drain position ¹	
		Compressing position ¹	
	Grinder	On	The grinder runs.
		Off	The grinder switches off.
	Water pump	On	The coffee/hot-water pump runs.
		Off	The coffee/hot-water pump is switched off.
	Steam pump	On	The steam pump runs.
		Off	The steam pump is switched off.
	System drain pump	On	The coffee/hot-water and steam pumps are both activated.
		Off	The coffee/hot-water and steam pumps are both switched off.

Technical Information

Service function	Option		Description
Component test	Flow-through heater water	On	The coffee/hot-water heater heats. The temperature indication on the heater increases.
		Off	The coffee/hot-water heater is switched off.
	Flow-through heater steam	On	The steam heater heats. The temperature indication on the heater increases.
		Off	The steam heater is switched off.
	Dish-warming drawer (n/a for US models)	On	The dish warmer is heated.
		Off	The dish warmer is switched off.
	Water supply valve 1	On	No function.
		Off	
	Water supply valve 2	On	No function.
		Off	
	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.
	Bean container	Empty	The bean container is empty or not inserted.
		Full	The bean container is full.
	Brew unit 1	Closed	The microswitch for grinding amount compensation is activated.
		Open	The microswitch for grinding amount compensation is not activated.
	Brew unit 2	Closed	The microswitch top position control is activated.
		Open	The microswitch top position control is not activated.
	Brew unit 3	Closed	The microswitch bottom position control is activated.
		Open	The microswitch bottom position control is not activated.
	Brew unit 4	Closed	The brew unit is locked.
		Open	The brew unit is released.

Technical Information

Service function	Option		Description
Sensor test	Ground coffee funnel	Closed	The ground coffee funnel is closed.
		Open	The ground coffee funnel is open.
	Waste container	Closed	The waste container is present.
		Open	The waste container is missing.
	Door contact	Closed	The door is closed.
		Open	The door is open.
	Water tank	Closed	The water tank is seated and full.
		Open	The water tank is not seated or is empty.
	Hard plumbing	Closed	No function.
		Open	
Operating hours	NTC flow-thru water heater	e.g., 48°C	Indicates the temperature at the coffee/hot-water heater.
	NTC flow-thru heater steam	e.g., 74°C	Indicates the temperature at the steam heater.
	Flow-thru heater water		Operating hours of the coffee/hot-water heater.
	Flow-thru heater steam		Operating hours of the steam heater.
	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		Number of descales performed.
	Number of cleanings		Number of cleanings performed.

Table 6-3: Service Mode

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

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6.3 Reading, Saving, Deleting Fault Codes**6.3.1 Fault Code Accessing****Initial requirements:**

Switch the appliance off.

Accessing:

1. Press and hold the **Clear** touchpad.
2. Press the **On/Off** touchpad once.
3. Release the **Clear** touchpad.
4. Press the **Clear** touchpad 3 times; hold on the 3rd time until the service mode is displayed.

Note:

Access has to be completed within 10 seconds.

Acknowledgement indicator:

Service is shown in the display, along with the service options.

Options:

1. Press the touchpad next to **Fault memory**.
2. Touch the pad next to the fault to show the fault description.
3. To save a fault and go back, touch the touchpad next to **OK**, then the one next to **Clear**.
4. To delete a fault and go back, touch the touchpad next to **Delete**.
5. To quit, touch the **On/Off** touchpad.

A list of fault codes is shown in Table 6-4.

Fault code	Fault description
F1	Short-circuit in coffee/hot-water NTC
F2	Open circuit in coffee/hot-water NTC
F3	Short-circuit in steam NTC
F4	Open circuit in steam NTC
F10	No water supply
F17	Insufficient water supply
F41	EEPROM faulty/wrong data
F42	Frequency not registering
F47	No communication between control electronic and power electronic
F73	Brew unit fault
F76	Fault during pressing in brew unit
F80	Coffee/hot-water heater not heating
F81	Steam heater not heating (can also appear as TB2003)
F82	Coffee/hot-water heater too hot (can also appear as TB2001)
F83	Steam heater too hot
F94	Water intake fault (CVA 4075 only)

Table 6-4: Fault Code Summary

6.3.2 Fault Code F1: Short Circuit in Coffee/Hot-Water NTC**Remedy:**

1. Check the connecting cables.
2. Replace the connecting cables, if necessary.
3. Test the coffee/hot-water heater NTC in service mode. See Section 6.2.
4. Replace the NTC, if necessary.

6.3.3 Fault Code F2: Open Circuit in Coffee/Hot-Water NTC**Remedy:**

1. Check the connecting cables.
2. Replace the connecting cables, if necessary.
3. Test the coffee/hot-water heater NTC in service mode. See Section 6.2.
4. Replace the NTC, if necessary.

6.3.4 Fault Code F3: Short Circuit in Steam NTC**Remedy:**

1. Check the connecting cables.
2. Replace the connecting cables, if necessary.
3. Test the steam heater NTC in service mode. See Section 6.2.
4. Replace the NTC, if necessary.

6.3.5 Fault Code F4: Open Circuit in Steam NTC**Remedy:**

1. Check the connecting cables.
2. Replace the connecting cables, if necessary.
3. Test the steam heater NTC in service mode. See Section 6.2.
4. Replace the NTC, if necessary.

6.3.6 Fault Code F10: No Water Supply**Cause:**

Hoses broken, clogged, or kinked.

Remedy:

1. Check the hoses.
2. Replace the hoses, if necessary.

Cause:

Water tank valve jammed or clogged.

Remedy:

1. Check the water tank valve.
2. Replace the water tank, if necessary.

Cause:

Flow meter defective.

Remedy:

Replace the flow meter. See Section 5.18.

Technical Information**Cause:**

Coffee/hot-water pump defective.

Remedy:

Replace the coffee/hot-water pump. See Section 5.16.

6.3.7 Fault Code F17: Insufficient Water Supply**Cause:**

The water tank is not seated correctly.

Remedy:

Push the water tank in correctly.

Cause:

Hoses broken, clogged, or kinked.

Remedy:

1. Check the hoses.
2. Replace the hoses, if necessary.

Cause:

Water tank valve jammed or clogged.

Remedy:

1. Check the water tank valve.
2. Replace the water tank, if necessary.

Cause:

Flow meter defective.

Remedy:

Replace the flow meter. See Section 5.18.

Cause:

Coffee/hot-water pump defective.

Remedy:

Replace the coffee/hot-water pump. See Section 5.16.

6.3.8 Fault Code F28: Too Much Ground Coffee in Brew Unit**Cause:**

Excessive ground coffee was taken in through the funnel.

Remedy:

1. Remove the ground coffee.
2. Advise the customer about correct dispensing amounts as outlined in the operating instructions.

6.3.9 Fault Code F41: Faulty EEPROM/Wrong Data**Remedy:**

Replace the control electronic (EPX). See Section 5.7.

6.3.10 Fault Code F42: Main Power Frequency Not Registered**Cause:**

Frequency fluctuations or interference in main power supply.

Remedy:

Verify correct source voltage and frequency.

6.3.11 Fault Code F47: No Communication between Control Electronic and Power Electronic**Cause:**

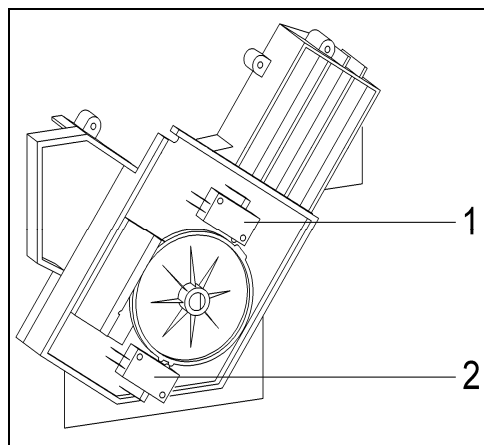
Faulty interface of control electronic and power electronic.

Remedy:

1. Check the cable between the control electronic and the power electronic.
2. Replace the connecting cable, if necessary.

6.3.12 Fault Code F73: Faulty Brew Unit**Symptom:**

When the brew unit is activated, if one of the two microswitches does not switch within approximately 10 seconds, fault F73 is registered.



- 1 Microswitch position control top (home position)
- 2 Microswitch position control bottom (compress and drain position)

Figure 6-1: Microswitch Position Controls on Brew Unit

Cause:

Brew unit blocked.

Remedy:

1. Disconnect the appliance from the main power supply.
2. Remove any foreign objects.
3. Clean the affected components.

Cause:

Defective microswitch or no continuity in connectors.

Remedy:

1. Check the connecting cables.
2. Replace the connecting cables as necessary.
3. Check the position control microswitch in service mode. See Section 6.2.
4. Replace the microswitch, if necessary.

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Brew unit drive defective.

Remedy:

Install a new brew unit drive.

Note:

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

6.3.13 Fault Code F76: Fault during Pressing in Brew Unit**Cause:**

Grind amount too high.

Remedy:

Reduce the grind amount; see Table 6-1.

Cause:

Grind level too coarse.

Remedy:

Adjust the grind level to a finer setting (slide the grind control lever to the left).

6.3.14 Fault Code F80: Coffee/Hot-Water Heater Not Heating**Cause:**

Coffee/hot-water heater (2R1) does not heat.

Remedy:

1. Test the coffee/hot-water heater in service mode. See Section 6.2.
2. Replace the coffee/hot-water heater, if necessary. See Section 5.14.

Cause:

Fuse has tripped.

Remedy:

Replace the fuse.

6.3.15 Fault Code F81 (TB2003): Steam Heater Not Heating**Cause:**

Steam heater does not heat.

Remedy:

1. Test the steam heater in service mode. See Section 6.2.
2. If necessary, replace the steam heater. See Section 5.15.

Cause:

Fuse has tripped.

Remedy:

Replace the fuse.

Note:

To be able to continue using the appliance for the preparation of coffee and hot water until service work can be performed, the customer can switch the steam system off in the programming mode. See Section 6.1.

6.3.16 Fault Code F82 (TB2001): Coffee/Hot-Water Heater Too Hot**Cause:**

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

Remedy:

If the fuse has tripped, it has to be replaced.

6.3.17 Fault Code F83: Steam Heater Too Hot**Cause:**

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

Remedy:

If the fuse has tripped, it has to be replaced.

6.3.18 Fault Code F94: Water Intake Fault (CVA 4075 Only)**Symptom:**

Float switch does not indicate any water intake within a preset amount of time.

Cause:

No water intake from the water intake valves.

Remedy:

Check the water intake valves in the service mode. See Section 6.2.

Cause:

Inadequate water intake.

Remedy:

Check the water intake filter.

Cause:

Previous error codes stored in memory (e.g., F10, F17).

Remedy:

Clear fault codes.

Cause:

Machine type not set to **Plumbed**.

Remedy:

Verify that machine type has been set to **Plumbed** in the programming mode.

Cause:

Float switch defective.

Remedy:

Check proper float switch operation. Replace the float switch, if necessary.

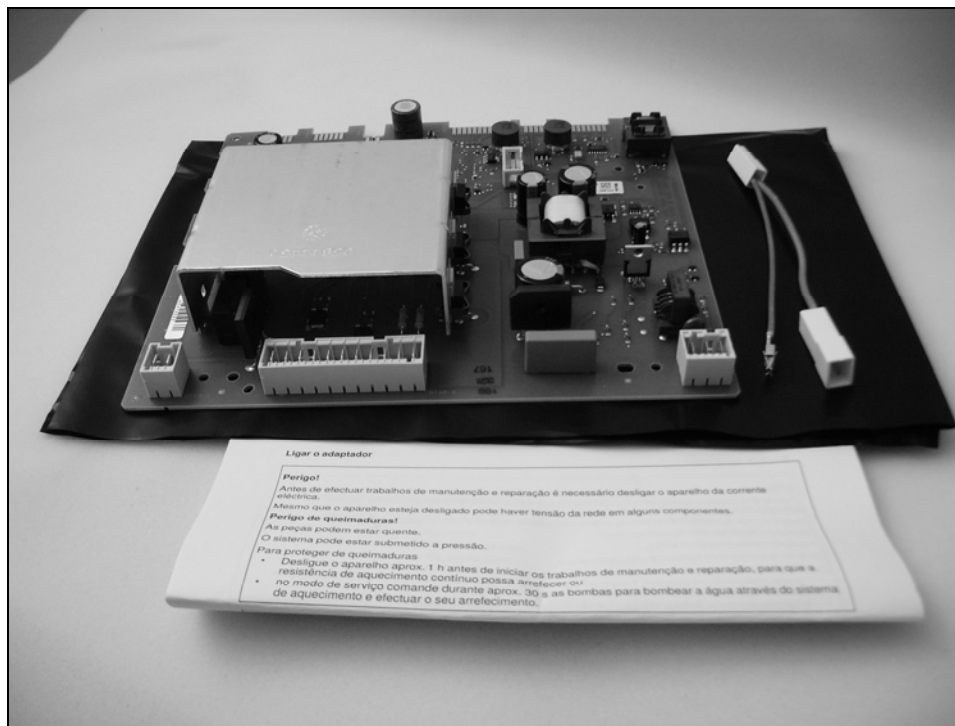
Note:

CVA 4075 coffee systems must operate with a specially designed water tank with two floats. The water tank in CVA 4070 models contains only one float.

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Technical Service Bulletins**1****CVA 4070 Electronic Comes with an Adapter Wire**

CVA 4070 power electronic EPL 860 (part no. 06878041) is shipping with an adapter wire and conversion instructions.

**Note:**

This conversion is designed to adapt the same electronic to the USA (CVA 4070/4075) and European (CVA 4060) coffee makers. This conversion is to be applied to European coffeemakers only. The adapter wire and conversion should be ignored when replacing the electronic in USA model variants.

2**CVA 4075 Displays F94**

The CVA 4075 is the direct-plumbed version of the CVA 4070.

Item:

The CVA 4075 coffee system displays F94. The electronic monitors the float switch during water intake. If the float switch does not indicate water intake within a predetermined amount of time, F94 occurs. You also may find an F10 or F17 stored in memory. These can be a result of inadequate or no water fill from the inlet valve.

Troubleshooting:

1. Enter programming mode.
2. Check to see if 'Machine type' is set to 'Plumbed'.
3. Enter service mode.

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4. Operate the water inlet valve in component test.
5. Check the water supply; turn on the water. Make sure the copper line is not kinked.
6. Remember that the inlet valve is a dual valve, much like the waterproof system in a dishwasher.

3 Some CVA 40xx Coffee Systems May Exhibit a Static Discharge While Frothing Milk

(Internal use only)

The frothing system in the CVA 4070 and CVA 4075 may experience a static electricity 'discharge' in some situations. This may manifest itself in the form of sparks or a clicking sound around the cappuccinatore mug and stainless-steel drip tray cover. Here are a few points to remember:

1. This is harmless and poses no threat or danger to the customer whatsoever.
2. The occurrence of this phenomenon is extremely rare (4 cases so far) and most likely is caused by the operating environment in the customer's home, e.g., carpeted kitchen, other flooring material, dry environment, etc.
3. Machines below serial number 81407731 may be affected.

With this in mind, there is a fix available, part number 07098500, called "Assembly Kit Grounding". Installing this kit will make the problem go away. This kit is only to be used when the customer complaint specifically addresses sparking and clicking (static discharge) when frothing.

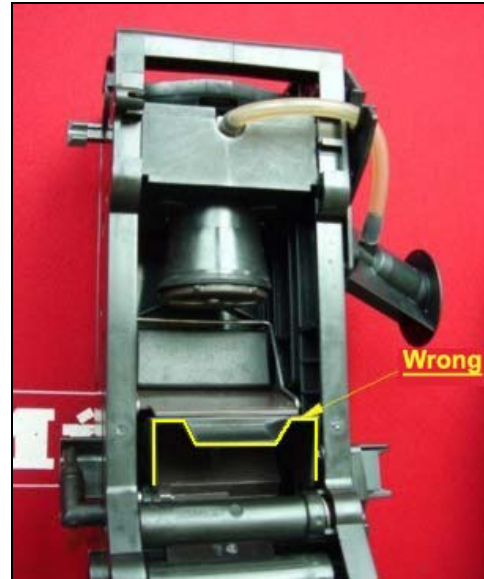
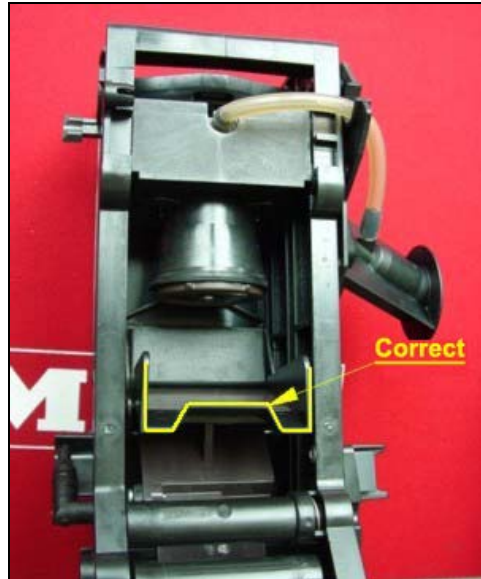
When setting up service, please keep the following points in mind:

1. Serial number must be in the incident header and text.
2. The text must contain a clear description of the problem.
3. Part number 07098500 must also be referenced in the text.

4 How to Diagnose and Repair CVA 4070, CVA 4075 F73 Faults

Always check the brew unit first. The CVA 40xx series coffee system brew unit has a guide piece, P/N 6466730, which may become dislodged when the customer manually cleans it. If incorrectly re-inserted it may jam the brew unit, causing the F73. When correctly installed, the front edge resembles the cross-section of a 'W'. If this piece is broken, replace it with part number 6466731 which is less likely to become dislodged. Machines with serial number 81400924 and up have the modified guide. The photos below reflect the right and wrong ways to insert the guide.

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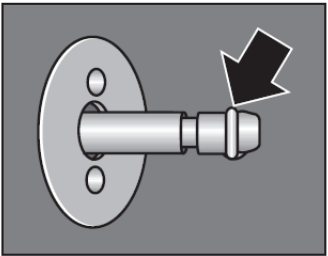


5 Wet Pucks

CVA 4070 & CVA 4075 users may find “wet pucks” in the waste container for no apparent reason.

While “wet pucks” may be an indication of a clogged brew unit or other coffee-related issues, be sure to investigate the condition of the sealing ring on the coffee dispenser connector. This part (p/n 06725850) is located on the back of the main door. Should this ring crack or fall off, fresh coffee will drip into the waste container. Remind the customer that a spare sealing ring is included with the coffee system along with the silicone lubricant intended for that part. Please note the instructions from the user’s manual:

Coffee dispenser connector



A connector between the brew unit and coffee dispenser is located on the inner door.

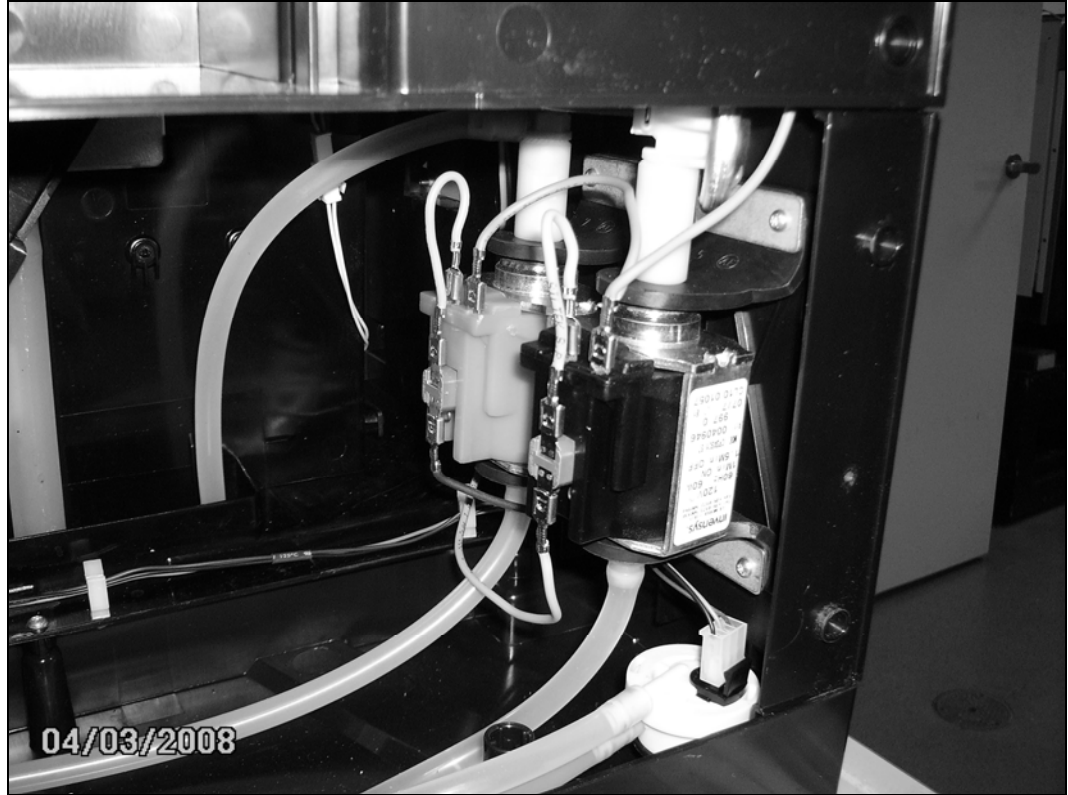
- Gently clean the connector regularly with a damp cloth without removing the lubricant for the gasket.
- Lubricate the gasket once a month with the supplied silicone grease.

6 CVA 40xx Pumps Have Incorrect (Transposed) Part Numbers

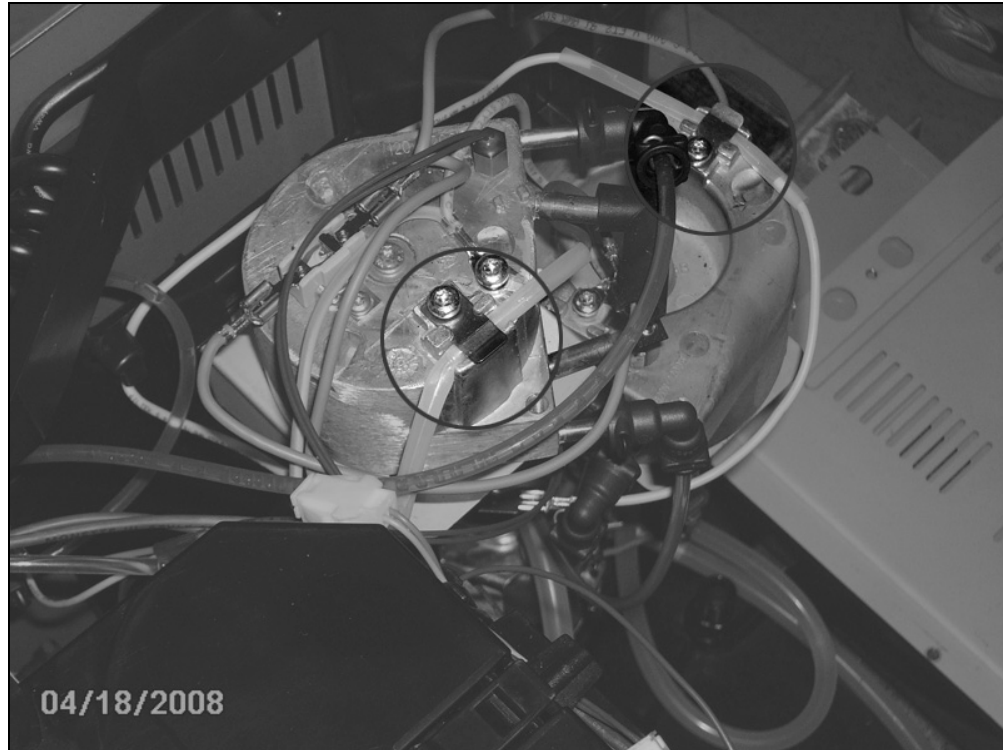
The parts CD incorrectly shows the numbering for the hot water and steam pumps for the CVA 4070 and CVA 4075. This has been corrected on the Web ETD but will not appear on the offline CD until the July release. The correct numbering is shown here:

<input type="checkbox"/>	29	6453780		1	units	Pump Steam CPA3A/ST 120V60HZ
<input type="checkbox"/>	30	6913310		1	units	Pump Coffee CPA3AS/C1 110/120V

Remember, the coffee pump is black and the steam pump is orange. Their correct placement is shown below:

Technical Information**7 Understanding CVA 40xx Temperature Fuses**

The CVA 4070 and CVA 4075 have temperature fuses on both the coffee and steam heaters. These fuses are SODs (single-operation devices) designed to protect the system from a “runaway heater” scenario.



The heaters are controlled by NTC feedback to the electronic and energized via a TRIAC. TRIACS are power transistors designed to switch high-current AC devices on and off. As a second layer of temperature control, the heaters have self-resetting bimetal thermostats which interrupt the AC power to the heater at a predetermined temperature (steam = 160°C; coffee = 116°C). As a final layer of protection, the temperature fuses are calibrated to open at 216°C. Once this fuse opens, the heater will no longer operate.

“Runaway Heater” Scenario:

In some cases, a TRIAC can fail. This device can fail open or shorted. If it fails open, AC power can no longer be sent to the heater. If it fails shorted, it will continuously deliver AC to the heater, regardless of the NTC feedback. At this point, the heater will cycle based on its bimetal self-resetting thermostat. Since this is a mechanical device being stressed in this scenario, it also can possibly fail. Once this happens, the heater can ‘run away’ and possibly damage other components or the entire appliance. This is where the temperature fuse will activate and shut the heater down permanently. This is not the only scenario that can cause runaway heat. Other causes could be a faulty NTC or an internally shorted heater.

If you find a heater with an open temperature fuse:

During the diagnosis process, if you find that a temperature fuse has opened, all of the other parts in this circuit should be suspect.

1. Ohm out the heater element (steam = 12.5Ω and coffee = 12.7Ω) and be sure to check both ends of the element against the heater case (ground). This should read infinity (∞). If either of these tests fail, the heater is bad. The heater may have caused the electronic to fail.
2. Disconnect the heater and see if voltage is present (with the machine turned off via the electronic, not the mains switch). If voltage is present, the electronic is

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bad.

3. Ohm out the NTC sensor (approx 130kΩ at room temp.) and make sure its resistance decreases as you warm it up. If in doubt, replace it.
4. Once the determination has been made, the parts should be replaced, and in all cases, replace the appropriate bimetal self-resetting thermostat. To replace the temperature fuse, the part designated for the CVA 2650 will work. Currently, the temperature fuses are not listed under the CVA 40xx models in the parts CD. We expect that to change in the near future.

8 **Some CVA 4000 Coffee Systems May Get Stuck in Cleaning or Descaling Mode**

You may experience CVA 4070 and CVA 4075 coffee systems locking up in certain modes. These symptoms include:

- Problems setting or changing the clock.
- The machine goes into descale mode and stops.
- The machine goes into cleaning mode and stops.
- F10 and F17 faults with no obvious cause.

Machines up to serial number 81432181 may be affected.

If you encounter any of these problems, you must replace **both** electronics as outlined in the table below:

Model number	Power/control electronic	Display electronic
CVA 4070	06878042 (ID 1466)	07046541 (ID 1468)
CVA 4075	06815713 (ID 1466)	07046551 (ID 1468)

You can check the IDs in service mode to see if the latest electronics are installed.

Note:

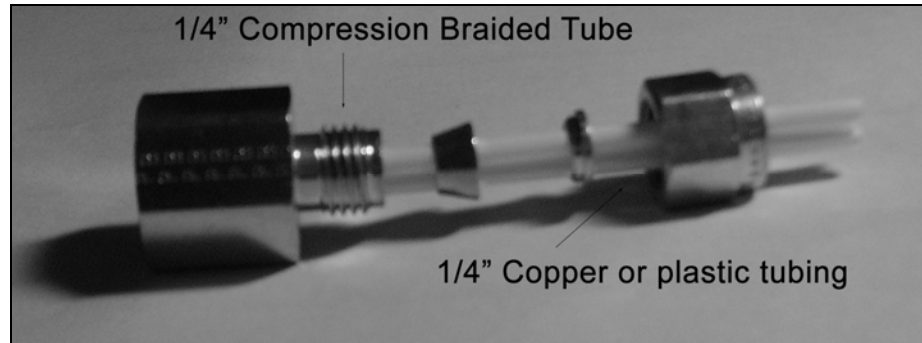
Replacing both electronics should only be performed if the ID numbers are lower than those listed above. This is not a cure for persistent F10 & F17 faults. These faults need to be diagnosed individually. You most likely will find that a clogged upper screen in the brew unit can cause this. Be sure that the coffee grind is not set too fine then run a cleaning cycle **with a cleaning tablet**. Otherwise, try a clean replacement brew unit.

9 **How to Remedy CVA 4075 Water Line Compatibility Issues**

When connecting the CVA 4075 elbow to a water line, you may experience difficulties connecting a ¼" copper or plastic tube. It will also be not possible to connect a standard ¼" braided hose to this elbow.

We have a plumbing adapter now available that will assure the compatibility with US plumbing standards. The part number for this piece is 99999999.

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This adapter will either accept a copper/plastic tube or directly connect to a commercially available braided hose. Note the split ferrule. Please orient these two ferrule pieces as shown when connecting tubing.

When affixing this piece to the supplied CVA elbow, you must use thread sealant (paste preferred) or regular Teflon tape. Do not use yellow Teflon tape as it is too thick. You must also thread the adapter all the way on to the elbow. See the photo.



10 CVA 4075 Plumbed Machine Water Leak

Machines affected:

All plumbed machines

Narrative:

There is a possibility of a water leak caused by the double solenoid to stick open resulting in a slow flow of water that, if unnoticed, can eventually cause damage to the surrounding cabinetry and floor.

Immediate remedy:

If water is observed to be leaking from the CVA 4075, close the water supply valve leading to the machine.

Corrective action:

Reprogram the machine to convert it from a permanent tap water connection to water tank use. To do so, refer to the operating/installation manual, page 33, for the procedure. Doing so will require the operator to fill the internal reservoir to operate the machine.

Technical Information**11 CVA 4075 - Inlet Valves Leaking**

In some situations the inlet valves can develop a slow leak into the water tank. This could happen due to low water pressure. It is important that the plumbing installation meets Miele's pressure requirements of 14.5 – 145 psi. Pressure below 14.5 psi can allow this leak to occur. Unchecked, this leak could cause the machine to overflow and cause damage to the cabinetry and floor.

To remedy this situation, either correct the plumbing issue causing the low pressure, or shut off the water supply and program the appliance as non-plumbed. The customer will have to manually fill the reservoir to operate the machine.

12 CVA Water Tank Cleaning

Plumbed CVA appliances: CVA 4066 & CVA 4075

When using a plumbed water supply for CVA appliances, there is the possibility that, over time, certain impurities may collect in the water tank. These impurities may exist in many municipal and private water supplies.

To remedy this, Germany recommends that the fresh water tanks in these appliances should be cleaned in the dishwasher every 30-60 days. There is no fault with the equipment and no reason to replace the tank.

13 CVA & French Roast Coffee

In many cases, customers who use Starbucks or Costco French Roast coffee are experiencing frequent episodes of brew unit blockages. We do not recommend using this style of coffee at this time. The preferred method for brewing French Roast is to use a 'French Press'. Our manufacturing engineers are looking into this situation and if there are any changes, we will announce it here. In the meantime, you can quote this passage from the Starbucks UK Website:

<http://starbucks.co.uk/en-GB/ Worlds+Best+Coffee/ Coffee+Detail+Pages/French+Roast.htm>

Brewing French Roast

The best brewing method for French Roast is the coffee press (cafetiere).

14 CVA Replacement Coffee Grinders

Should the need arise to replace a grinder assembly in any whole-bean CVA system, be advised that you (or the servicer) may find some coffee residue in the new grinder. This is normal. These grinders are calibrated at the factory using real coffee beans. There is no need to question the fact that this is a new part.