



HOT WATER DISPENSER

#236HWDD1, 236HWDD2, 236HWDD5, 236HWDD5D

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Note: Save these instructions for future reference.

CRITICAL INFORMATION

- **Water Softening:** Water used in the equipment must be softened before use to minimize the accumulation of minerals within the machine, thereby ensuring its longevity and efficient operation.
- **Dedicated Circuit:** The equipment requires a dedicated electrical circuit to ensure its proper functionality and to avoid any electrical issues that may arise from circuit sharing with other appliances.

HAZARD STATEMENTS

- **Read the Manual:** Thoroughly read and understand the manual before setting up, operating, or cleaning the Hot Water Dispenser.
- **Proper Installation:** Have the Hot Water Dispenser installed by a qualified technician following the manufacturer's guidelines and local regulations.
- **Grounding:** Ensure the machine is properly grounded to prevent electric shock.
- **Water Connections:** Properly connect the machine to a clean and suitable water supply, following plumbing codes and guidelines. This must be completed by a certified and insured plumber. The use and maintenance of a water filter is required.
- **Water Quality:** Use filtered or potable water to maintain beverage quality and prevent contamination.
- **Ventilation:** Adequate ventilation is necessary to prevent overheating and ensure efficient operation. Check local ventilation codes and regulations to ensure you have the necessary ventilation for this equipment.
- **Child Safety:** Keep children away from the machine and its components to prevent accidents and misuse.
- **Cord Safety:** Keep cords away from wet areas and do not let them hang over counters to prevent tripping hazards.
- **Cleaning and Maintenance:** Regularly clean and maintain the machine according to the instructions below to ensure safe and hygienic operation.
- **Chemical Usage:** If using cleaning chemicals, follow the guidelines for safe handling and storage.
- **Instruction and Training:** Properly train users on how to use the Hot Water Dispenser correctly and safely.
- **Sanitization:** Maintain proper sanitization procedures to ensure beverage quality and prevent contamination.
- **Cooling System Check:** Regularly inspect the cooling system to ensure that it's functioning correctly and maintaining proper temperatures.
- **No Modifications:** Avoid modifying the machine's components or features, as this may compromise safety and void warranties. Only use genuine manufacturer components.
- **Emergency Procedures:** Know how to turn off the machine quickly in case of emergencies or malfunctions.
- **Instruction Labels:** Ensure any operational or safety labels on the machine are visible and legible.
- **Regular Inspection:** Regularly inspect the machine for signs of wear, damage, or malfunction, and address any issues promptly.
- **Maintenance Schedule:** Follow a maintenance schedule as recommended by the maintenance section to ensure the machine's longevity and safety.
- **Hot Surfaces:** Be cautious of hot surfaces on the machine, especially areas like steam wands or hot water dispensers. Use appropriate protective gear when necessary.
- **Burn Prevention:** Handle hot containers and beverages with care. Allow time for hot beverages to cool before consumption.

INITIAL SETUP

1. **Inspect the Packaging:** Carefully inspect the exterior of the packaging for any signs of damage that might have occurred during shipping.
2. **Unboxing:** Open the packaging with care. Use scissors or a box cutter to open the box without damaging the machine or any parts.
3. **Remove All Components:** Take the machine and any accessories out of the box. Refer to the parts diagram to ensure that you have all the necessary components.
4. **Place in Location:** Ensure the machine is on a stable surface close to an electrical outlet. This equipment needs to be placed in a climate-controlled environment to extend the life of the machine.

Electrical Installation Procedure:

1. **Plug:** This unit is equipped with a plug in correspondence to the rating plate on the machine. The NEMA plug goes into the wall outlet, and the male connector goes into the bottom of the equipment. Please plug unit into a dedicated circuit and do not use an extension cord.
2. **230V:** For 230V machines, the 230 mode is set for optimal performance.
3. **120V:** For 120V machines, the 120 mode is set for optimal performance.

Note: The correct mode is set in the factory accordingly to the rating plate info.

Plumbing Installation Procedure: Plumbing must be completed by a certified and insured foodservice equipment technician.

1. **Compliance with Local Regulations:** Ensure that the installation is in accordance with local plumbing and water regulations.
2. **Water Pressure:** Refer to the rating plate for the required mains water pressure limits.
 - Mains water pressure required (limits): 100-1000kPa, 0.1-1.0MPa (14.5-145psi). Except for machines with built-in water filter, which require: 100-600kPa, 0.1-0.6MPa (14.5-87psi).
3. **Stop Valve Installation:** Install a stop valve on a cold-water line and attach a male fitting (9/16-24 UNEF for the U.S.).
4. **Flush the System:** Before connecting the hose, turn on the water to flush out any impurities, dust, etc., from the inlet hose and water pipe. Allow several gallons through, especially for new installations.
5. **Connect the Hose:** Attach the hose to the inlet valve of the boiler, ensuring that a sealing washer is in place.
6. **Check for Leaks:** After connecting, turn on the water and inspect for any leaks.
7. **Hose Material:** Use only food-grade hoses for connection. Non-food grade hoses can impart “off” tastes/smells and could potentially be toxic.
8. **Water Quality:** Do not connect the machine to pure reverse osmosis water or other aggressive types of water as it may damage the machine or affect the quality of the hot water.

CLEANING

Preparation:

1. **Cool Down:** If the machine was in use recently, allow it sufficient time to cool down. A minimum of 30 minutes is advisable.
2. **Unplug:** For safety, unplug the machine from the electrical outlet to avoid electrical shocks.

Cleaning the Exterior:

1. **Damp Cloth:** Use a damp cloth and a light detergent to clean the exterior of the machine. This helps in removing any dust, spills, or fingerprints.
2. **Gentle Cleaning:** Avoid using abrasive cloths or chemicals, as they can spoil the finish of the machine. A soft, non-abrasive cloth is ideal to prevent scratches and maintain the machine's appearance.
3. **Caution with Water:** Do not use a water jet or spray to clean the machine. Excessive water can cause damage to electrical components and increase the risk of electric shock.
4. **Beware of Accidental Operation:** While cleaning the front of the machine, be cautious of accidentally operating the tap.

Limescale Management:

1. **Scale Reducer:** In areas with hard water, it's recommended to fit an external scale reducer for units without a water filter. This can reduce the build-up of scale but may not eliminate it altogether.
2. **Frequency of Descaling:** The need for descaling depends on the local water supply; hard water areas will require more attention. Descaling should be carried out by a certified and insured foodservice equipment technician.
3. **Warranty Information:** Service calls resulting from limescale are not covered by warranty. It's important to maintain regular descaling and cleaning routines to prevent issues related to limescale buildup.

Reassembly and Inspection:

1. **Reassembly:** After cleaning, reassemble any removed parts in reverse order, ensuring they are correctly positioned and securely attached.
2. **Inspection:** Visually inspect the machine to ensure all parts are clean, dry, and correctly assembled. Ensure that no cleaning residue is left and that the machine is ready for use.

INITIAL OPERATION

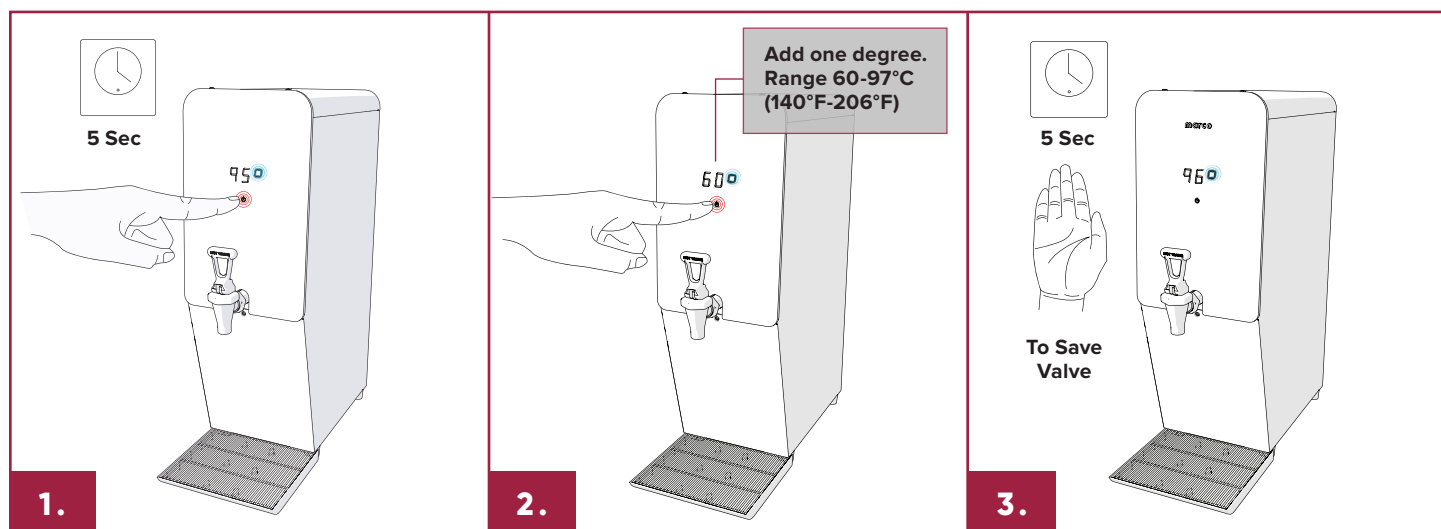
- Ensure that all procedures have been properly carried out from the Initial Setup section of the manual.
 - Ensure that the unit is properly connected to water and that the water supply is on.
1. **Powering On:** Connect the boiler to a suitable power socket. The boiler will automatically power up.
 2. **System Initialization:** Upon starting, the boiler's screen will display the software revision number.
 3. **Water Filling:** The machine will then fill with water and the display will flash between E-2 and the current temperature of the tank, until the water has reached the low-level probe.
 4. **Heating:** Once the water has reached the low-level probe, the element should turn on to heat the water. The display will show the current temperature of the tank.
 5. The water will continuously fill the tank until it reaches the high-level probe and water stops filling the tank.
 6. **Temperature Setting:** The default water temperature is set to 95°C (203°F). However, you can adjust the temperature as needed for your specific requirements.
 7. **Ready for Use:** Once the boiler reaches the set temperature, it is ready for use.

Note: The boiler is equipped with an electronic control system that ensures safety. The heating element will not activate until the system confirms that the water has reached a safe level.

PROGRAMMING

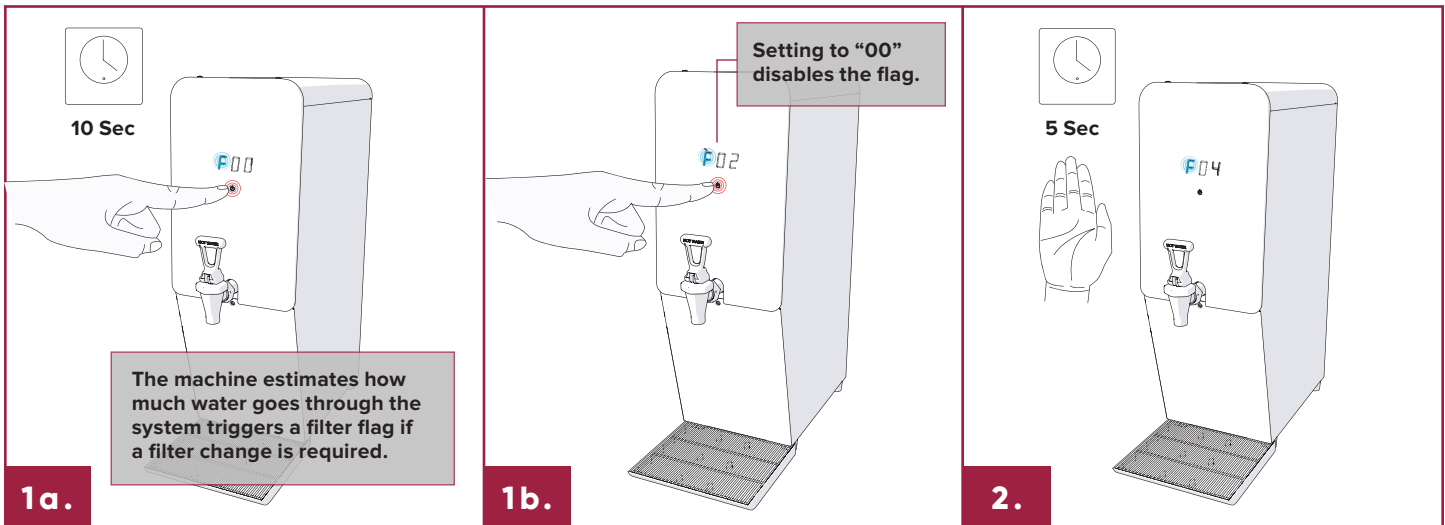
Change Temperature: To adjust the temperature of the equipment, please complete the following steps.

1. Hold the button under the screen for 5 seconds.
2. Each press of the button will increase the temperature by 1 degree.
3. Once the unit reaches the desired temperature, release the button for 5 seconds to save. The machine will once again display the temperature.



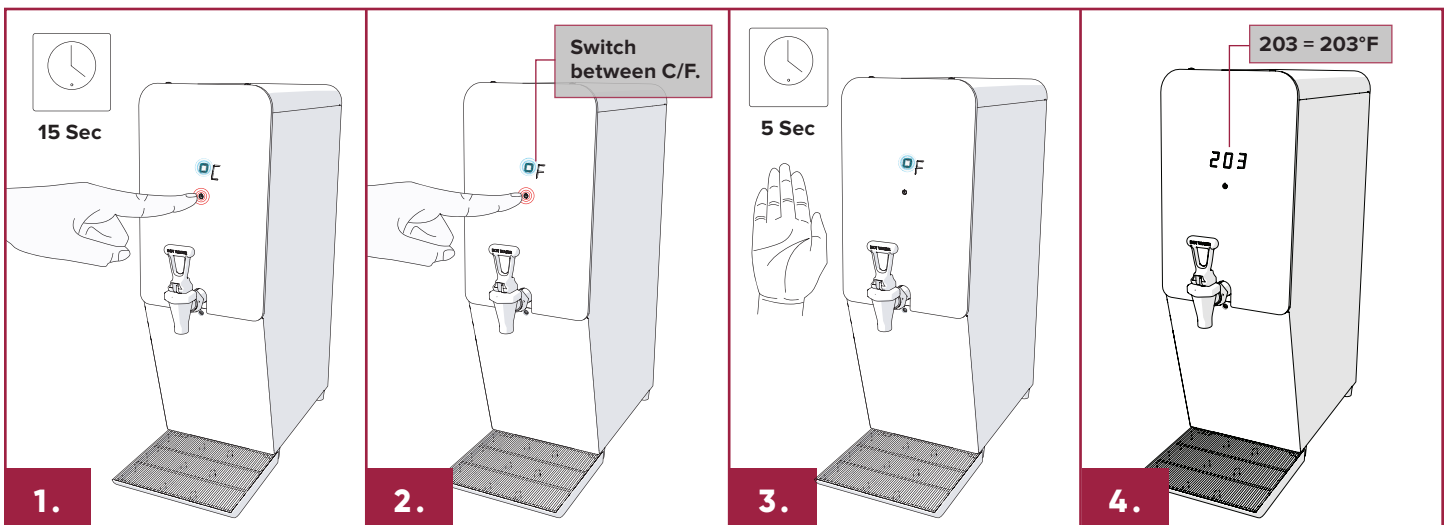
Filter Reset: The system will estimate when the filter needs to be changed.

1. To turn off the flag:
 - a. Hold button down for 10 seconds.
 - b. Keep pressing the button until it reads (00).
2. Release the button for 5 seconds to save.



Changing from Celsius to Fahrenheit:

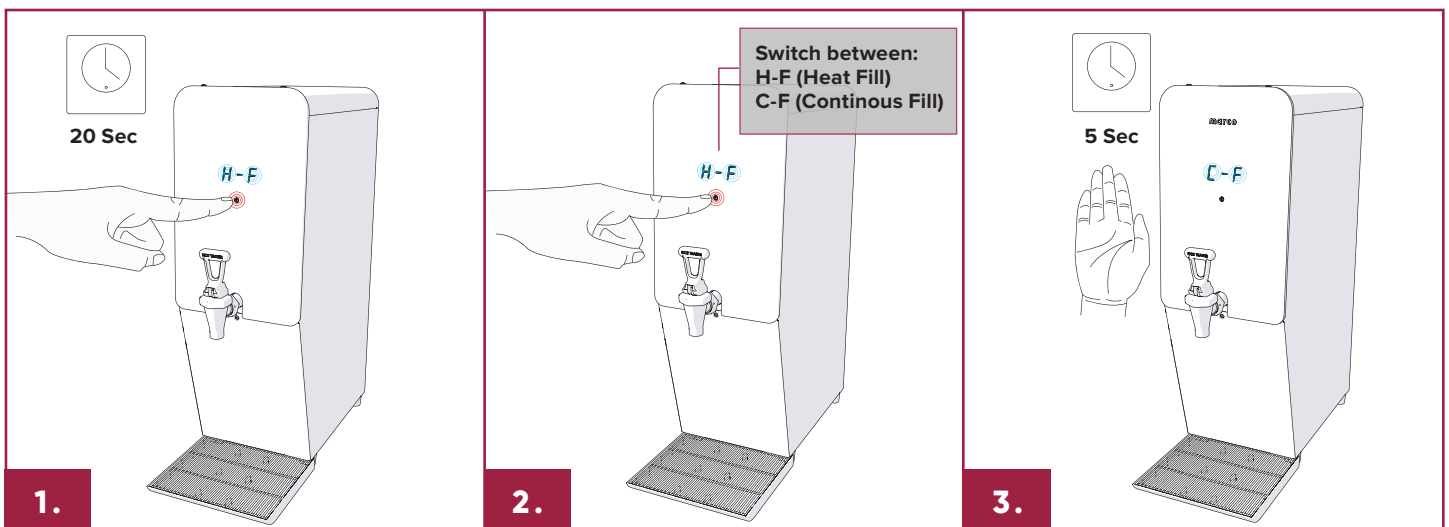
1. Hold the button for 15 seconds.
2. Press the button again to change from Fahrenheit to Celsius.
3. Release the button for 5 seconds to save. The machine will once again display the temperature.



Fill Type Selection: This setting determines how the machine will automatically refill.

- Heat Fill (H-F): The inlet valve lets in a small, fixed volume of water and the element turns on, heating the water to the set temperature. This process is repeated until the water has reached the high level probe and the machine is up to temperature.
- Continuous Fill (C-F): The inlet solenoid stays open until the water has reached the high level probe. Simultaneously, the element stays on until the machine is up to the programmed set temperature.

1. Hold the button for 20 seconds.
2. Press the button to toggle between Heat and Continuous fill.
3. Release button for 5 seconds to save.



TROUBLESHOOTING

The screen of the boiler indicates various errors or problems with the machine. See diagnostic table below for details.

Error	Description	Action
E-1	High level probe is detected but low level probe is not detected.	<ul style="list-style-type: none"> • Descale machine and low level probe. • If it persists call service agent. • Check low level probe is wired. • Check high and low levels are not switched.
E-2	Low level probe not detected.	<ul style="list-style-type: none"> • Wait for machine to fill. If water can be dispensed than probe may be covered in limescale-descale machine. If descaled and error persists then call service agent. • Check low level probe is wired.
E-3	Temperature sensor (thermistor) is faulty, missing, or not plugged in.	Call service agent. Thermistor has an open circuit.
E-4	Water is not heating.	<ul style="list-style-type: none"> • Element has failed. Call service agent. • Check element for resistance which should be approximately 19 Ohms
E-5	Temperature sensor (thermistor) is faulty.	Call service agent. Thermistor has a short circuit.
E-6	No incoming water.	<ul style="list-style-type: none"> • Check water supply is turned on and mains pressure is above 1 bar (14.5psi). • If water supply is ok, call service agent as the inlet valve has likely failed.

MAINTENANCE

Monthly Checks: Inspect for wear.

Purpose: To regularly check all components for signs of wear, tear, or damage, and replace as necessary.

1. Turn off and disconnect the machine from the power source.
2. Inspect the plug and cord for any indications of excessive wear, which may encompass discoloration, burn marks, cuts, and tears.
3. Inspect all seals, gaskets, and hoses for signs of wear or leakage.
4. Check the integrity of electrical cords and plug points. If any issues are detected, consult the troubleshooting section or service provider for recommended actions or replacements.

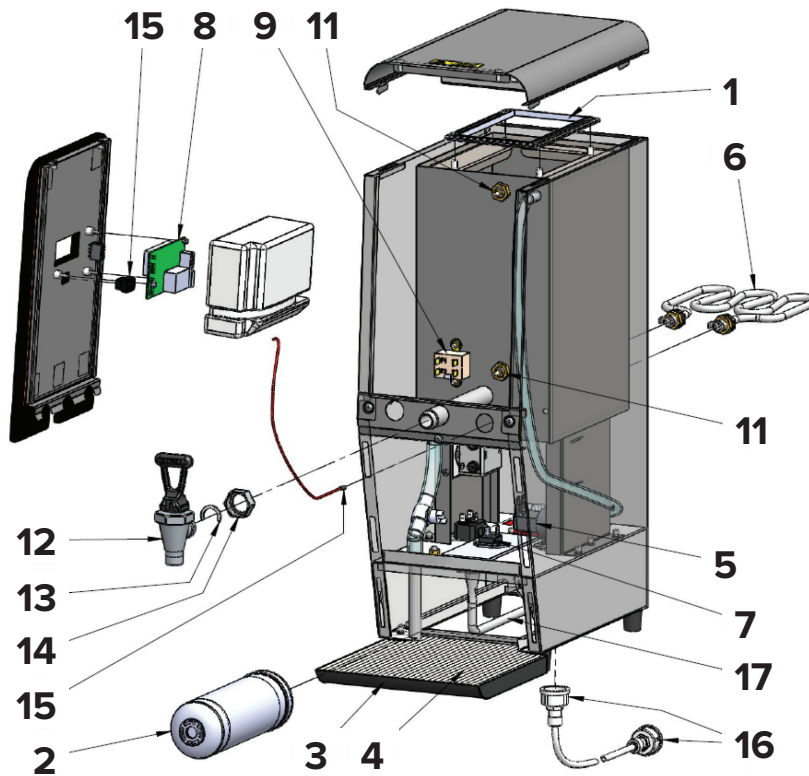
Annual Maintenance

Purpose: To ensure that specialized features like electrical components and temperature controls are working correctly.

- Schedule an annual service appointment with a certified technician who specializes in beverage equipment.
- The technician will perform a comprehensive inspection, checking electrical components, plumbing connections, and refrigeration units.
- Calibration tests may be performed to ensure optimal temperature levels.
- Any worn-out or damaged parts will be replaced.
- Obtain a detailed service report for your records, beneficial for both warranty claims and future troubleshooting.

PARTS DIAGRAM

236HWDD1 / 236HWDD2

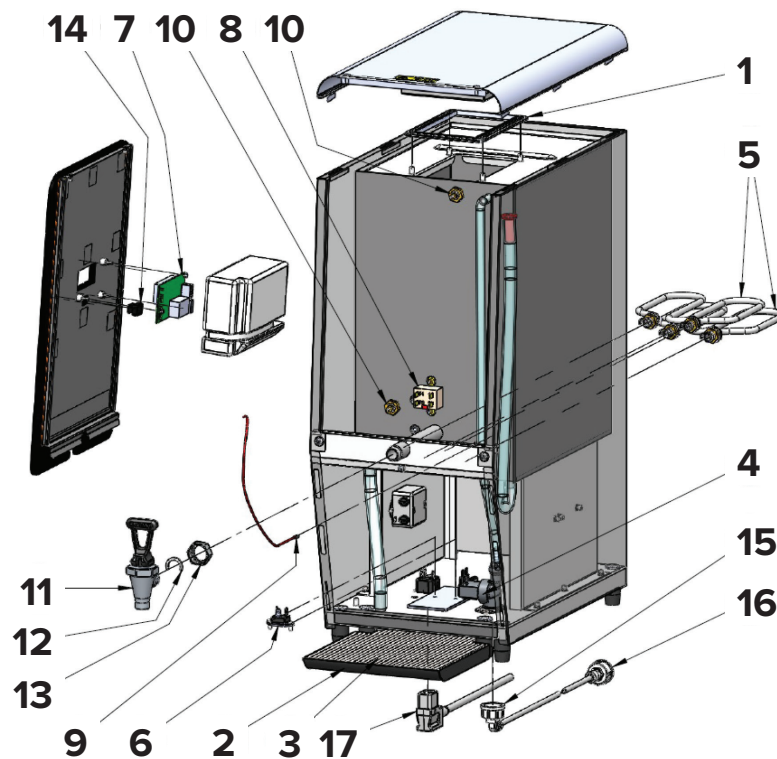


Item No.	Parts No.	Description	Qty.
1	183006	Gasket Inner Ecoboller	1
2	800781	Filter Microfilter M9	1
3	23000279	Plastic Driptray MT Boiler	1
4	2301516	Driptray Insert MT Boiler	1
5	1502196	Valve Inlet Solenoid ¼" Pushfit	1
	1502202	Valve Inlet Solenoid 120V, 1.2L/min, ¼" Pushfit	1
6	1500985	Element 2.8kW, 230V	1
	1500996	Element 1.4kW, 115V Marine Special	1
7	1600455	TRIAC JST41TE, 41A	1
8	1600396	PCB MT Boiler	1
9	1502075	Thermal Switch Dual Pole 125 Deg	1
10	1600681	Thermistor Assembly 2 Way Male	1
11	2301463	Probe Complete Assembly 40mm	2

Item No.	Parts No.	Description	Qty.
12	2100279	Tap Chr. Bonnet BlackHW Compl.	1
	2100279NSF	Tap Chr. Bonnet BlackHW Compl. Tom	1
13	1400550	Circlip for Spigot	1
14	1401170	Nut CP ¾" BSP Chromed	1
15	1860412	Button MT Boiler	1
16	1400836	¾" BSP Female (¾" G) x ¼" Pushfit	2 (1)
	1400838	⅝"-24 UNEF Female x ¼" Pushfit	(1)
17	1501489	Cord Set IEC C19 BS1363 UK	1
	1501488	Cord Set IEC C19 CEE7 EU	1
	1501506	Power Cord IEC C19 to NEMA 5-15, 15A/125V Rating	1
	1501487	Cord set IEC C19 NEMA L6-20P US 20AMP	1

PARTS DIAGRAM

236HWDD5 / 236HWDD5D



Item No.	Parts No.	Description	Qty.
1	183006	Gasket Inner Ecoboller	1
2	2300279	Plastic Drip tray MT Boiler	1
3	2301516	Drip tray Insert MT Boiler	1
4	1502196	Valve Inlet Solenoid 1/4" Pushfit	1
5	1500988	Element 2.8kW, 230V	2
6	1600455	TRIAC JST41TE, 41A	1
7	1600396	PCB MT Boiler	1
8	1502079	Thermal Switch Dual Pole 105 Deg	1
9	1600681	Thermistor Assembly 2 Way Male	1
10	2301463	Probe Complete Assembly 40mm	2
11	2100279	Tap Chr. Bonnet BlackHW compl.	1

Item No.	Parts No.	Description	Qty.
12	1400550	Gasket Inner Ecoboller	1
13	1401170	Plastic Drip tray MT Boiler	1
14	1860412	Drip tray Insert MT Boiler	1
15	1400829	Valve Inlet Solenoid 1/4" Pushfit	1
16	1400836	Element 2.8kW, 230V	2
17	1501488	Cord Set IEC C19 CEE7 EU	1
	1501489	Cord Set IEC C19 BS1363	1