

Verona 1000, 2000, cleaning, loading, filling

1. Check cup size, load cups	1 minute
2. Remove canisters to fill	2 minutes
3. Remove contact surface items	4 minutes
4. Clean whipper stations	1 minute
5. Remove whipper trays and waste buckets	30 seconds
6. Remove powder conveyors from the canisters	1 minute
7. Remove sugar tube and sugar chute	30 seconds
8. Remove ES brewer unit and rinse, dry top	2 minutes
9. Remove fresh brewer and rinse components	2 minutes
10. Clean and soak all hygiene parts	10 minutes
11. Reassemble all parts	10 minutes
12. Remove cup station assembly, clean and replace	4 minutes
13. Empty waste buckets, clean base of machine, Replace waste buckets	3 minutes
14. Test vend selections to ensure ingredient canisters are primed and ready to vend	4 minutes
Total time taken	45 minutes

In addition to the routine above, on a weekly basis, the fresh brewer and Espresso brewer filter plates should be destained as detailed separately

Fresh brewer destain	15 minutes
Espresso brewer destain	12 minutes

*N & W recommend the use of a de-tannin liquid cleaner such as “ND 20”
We also recommend the use of a vend cleaning agent such as “Vendkleen”*

TROUBLE-SHOOTING

Problem <small>(and/or indication on the display)</small>	Possible cause	Solution
<p>The machine does not go into the boiler heating phase, remaining in the “installation” phase</p>	<p>No water flow from the mains or insufficient pressure (5-85 N/cm²)</p> <p>The air-break microswitch is faulty</p> <p>Water inlet solenoid valve locked by the overflow tube and activated by the relevant relay</p> <p>The float microswitch is faulty, or the liquid waste container is full</p>	<p>Check the presence of one or more of situations indicated and once identified the cause do as follows:</p> <p style="padding-left: 40px;">Short-circuit the microswitch to check it functioning</p> <p style="padding-left: 40px;">Unlock the water inlet valve, undoing the threaded ring and emptying the overflow tube</p> <p style="padding-left: 40px;">Check for 230 V AC voltage at the solenoid valve power supply ends</p> <p style="padding-left: 40px;">Check the activation of relay K22</p>
<p>The display indicates the message “No coffee”</p>	<p>The grinder motor is locked because the pick-up capacitor is faulty</p> <p style="padding-left: 40px;">There is no coffee</p> <p>The grinder wheels are locked because of foreign matter in the coffee</p> <p style="padding-left: 40px;">Grinder motor overheating device triggered</p> <p>The coffee container shutter was not opened</p>	<p>When an espresso coffee selection is made the grinder is activated conveying coffee to the doser device, the motor lock is activated by the microswitch which is triggered when the set dose is reached. If such microswitch is not triggered within a set time, the system disables all espresso coffee selections, indicating the message “No coffee” on the display, once identified the cause:</p> <p>In the event of blockage, free the grinder wheels with the utmost care, as blocked wheels would have triggered the overheating protection, which is resettable. Open the shutter, add coffee, replace pick-up capacitor.</p>
<p>The display indicates the message “Coffee release failure”</p>	<p>Failure to the release magnet</p> <p>Failure to the coffee dose microswitch</p> <p>Failure to relay K02</p>	<p>After grinding and during the attempt of releasing the ground coffee, the doser device plate triggers a microswitch that signals the coffee release</p> <p>If such microswitch is not triggered, there could have been two causes:</p> <p style="padding-left: 40px;">Failure to the release magnet or overheating protection triggered (resetting is automatic, and after approximately 5 minutes it is reactivated, but the cause of such trigger must be identified).</p> <p style="padding-left: 40px;">Failure to the microswitch: replace with an identical one designed for the Colibri, in the event of using a microswitch with different characteristics considerable discrepancies in the ground coffee doses may occur, and also SW malfunctions.</p>

Problem <small>(and/or indication on the display)</small>	Possible cause	Solution
The display indicates the message “Mobile spouts”	Faulty positioning microswitch Interference from objects preventing free movement (tubes, cups etc.) Failure to the ratiomotor	Check the functioning of the microswitch and if necessary replace with an identical one. Check that the motor is able to move the spout assembly without any interferences (to prevent any possible injury the motor was designed to stop even with the slightest obstruction) The reducer mechanism of the motor is damaged because of tampering during its movements, replace.
The display indicates the message “Instant Boiler”	The boiler does not heat Dry operation protection system triggered. Anti-boiling protection system triggered. NOTE: The espresso boiler has always heating priority, therefore check that there is no such condition.	The machine is locked if after 10 minutes heating the set temperature is not reached. Check the correct operation of the heating element, the dry operation thermostat, the anti-boiling thermostat, the probe and of the actuation triac on the instant boiler control board. In the event of triggered safety thermostat, before resetting (manually) the cause MUST BE identified and corrected.
The display indicates the message “Espresso Boiler”	The boiler does not heat Dry operation protection system triggered.	The machine is locked if after 10 minutes heating the set temperature is not reached. The espresso boiler has heating priority. Check the correct operation of the heating element, the dry operation thermostat, the probe and of the actuation triac on the espresso boiler control board (located next to the boiler). In the event of triggered safety thermostat, before resetting (manually) the cause MUST BE identified and corrected.
The display indicates the message “No cups”	No cups in the dispenser Microswitch failure The cup column does not rotate Faulty ratiomotors	If no cups were loaded when starting the machine, the column rotation ratiomotor is activated to search for a full column and if no cups are found within a 60 sec “time-out”, indicated by the specific microswitch, the machine is locked. Excluding the fact of a real lack of cups, the correct microswitch functioning must be checked and in the event of failure they must be replaced with identical characteristic microswitches. In the event of locked ratiomotor, check for the correct actuation of relays K21 and K23 or for the correct operation of the ratiomotors.
The display indicates the message “Espresso unit”	The espresso unit failed to reposition. Faulty positioning microswitches Ratiomotor overheating device	Check that the unit is positioned correctly. Check the functioning of the positioning microswitch and for correct connections. Check if due to possible interferences the overheating protection was not triggered (self-

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	<p>triggered Failure to relay K04 Faulty unit detection microswitch</p>	<p>resetting type) and check the functioning of relay K04 Check that the unit is free to rotate completely and without interferences.</p>
<p>The display indicates the message “Espresso unit 2”</p>	<p>The espresso unit failed to reposition. Faulty positioning microswitches Ratiomotor overheating device triggered Failure to relay K-04 Faulty unit detection microswitch</p>	<p>Check that the unit is positioned correctly. Check the functioning of the positioning microswitch and for correct connections. Check if due to possible interferences the overheating protection was not triggered (self-resetting type) and check the functioning of relay K04 Check that the unit is free to rotate completely and without interferences.</p>
<p>The display indicates the message “Volumetric counter” (flow-meter)</p>	<p>This failure can occur only in espresso selections, since the counter computes only the water for espresso selections. The water dose for coffee is not reached within 60 sec.</p>	<p>The water amount for both espresso coffee and instant drink selections is ensured by a volumetric counter; with the water flow a wheel rotates and through a sensors sends a number of pulses corresponding to the water dose programmed in the SW. If such dose is not reached within 60 sec it means that there is a problem: Check for the correct functioning of the volumetric counter; there must be 5 V AC on the terminals during the counter operation. Check that coffee is not ground too fine and the dose excessive. Check for clogging in the coffee filters.</p>
<p>The display indicates the message “Air-break failure”</p>	<p>No water from the mains. Faulty air-break microswitch Failure to the float actuation system.</p>	<p>If in the period taken to make 6 selections with any dose the microswitch controlled by the air-break float is not triggered (i.e. the correct level is not restored) the vending machine is locked for air-break failure. The malfunction could occur for lack of water from the mains, or because of a failure to float microswitch system. Replace the microswitch with one having the same characteristics, otherwise other malfunctions may occur.</p>
<p>The display indicates the message “Coin mech. failure”</p>	<p>No coin mechanism installed. The coin mechanism installed is not compatible with the protocol settings. The coin mechanism does not communicate with the SW</p>	<p>Install a compatible coin mechanism. Set the correct communication protocol. Check to see if the failed communication is due to a faulty coin mechanism or to a wrong connection.</p>

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The display indicates the message “RAM data”	Wrong RAM data which must be retrieved by initialising the EPROM.	SW problems due to intense electromagnetic interference. Initialise the EPROM Electronic failure - Replace board.
The display indicates the message “Machine board”	The board fails the start-up routine	Switch off the vending machine and attempt initialising. Faulty board: replace.
The display indicates the message “Water failure”	Models with water supply from the mains: If the air-break microswitch is closed for more than a minute.	Check the water inlet solenoid valve. Check the correct actuation of relay K 12. Check the air-break microswitch. Check the tank float microswitch.
The coffee lacks body and cream and is dispensed too quickly	Excessively coarse grinding. Insufficient ground coffee dose. Blocked by-pass	Inspect the grade of grinding, keeping in mind that it takes between 15 and 20 seconds to dispense optimum espresso coffee. (Pump starting time) A shorter time means that the grade of grinding is too coarse. With wear the grinding wheels must be adjusted regularly. Check the coffee dose, weighing it at least 5 consecutive doses; the average weight must be between 6.5 and 7 grams. Check the by-pass efficiency.
Coffee is dispensed too slowly and it tastes burnt	Excessive coffee dose. Grinding too fine. Faulty pump by-pass. Clogged coffee filters.	Inspect the grade of grinding, keeping in mind that it takes between 15 and 20 seconds to dispense optimum espresso coffee. (Pump starting time) A longer time means that the grade of grinding is too fine. Adjust the grinding wheels. Check the coffee dose, weighing it at least 5 consecutive doses; the average weight must be between 6.5 and 7 grams. The by-pass is set from the factory to trigger at 12 bar. Lower settings will lengthen the dispensing time with resulting burnt taste. Replace the coffee filters.
The mixers clog up	The whipper failed to rotate. Powder removal drawer full. Insufficient water to powder ratio.	Check for the motor overheat protection trigger, if necessary check the cause of such trigger. Empty the powder removal drawer. Check / adjust the water to powder ratio.

N&W Fresh brewer cleaning instruction

The following procedure should be carried out on a weekly basis, the procedures should be carried out more frequently for machines having above average drink throughput or if heavy tannin build up is experienced.

- 1. Remove the brewer extraction hood**
- 2. Remove the mixer bowl and diffuser insert**
- 3. Remove the brewer chamber feeding pipe from the cover**
- 4. Remove the brewer cover plate**
- 5. Remove the brewer chamber & piston by pulling the lever across to the right and pulling the chamber forward**
- 6. Separate the chamber and piston ready for cleaning**
- 7. Remove filter plate assembly by pressing the lever below the holder**
- 8. Remove the scraper by pulling forward and out from the brewer assy.**
- 9. Remove the gasket and filter from the filter plate assembly**
- 10. Soak the filter plate in de-tannin solution for the recommended time**
- 11. Soak the brewer chamber, piston and scraper in vend cleaning solution**
- 12. Replace the scraper, assemble the brew chamber and piston**
- 13. Replace the brewer chamber, push the lever to the right to relocate and push home the chamber**
- 14. Pull the chamber forward to make sure that it is located securely**
- 15. Rinse and replace the filter to the filter holder, lift the “T” bar to meet the holder, which should snap into place.**
- 16. Lift the filter plate assembly to check that it is in line with the chamber**
- 17. Make sure that the filter outlet pipe is running from the side not the front**
- 18. Refit the brewer cover plate**
- 19. Fit the mixer tube that runs from mix chamber to brewer**
- 20. Refit the mixing chamber to the mixer tube**
- 21. Make sure to fit the diffuser to the mixing bowl**
- 22. Refit the extraction hood**

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N&W Espresso brewer Z 2000 cleaning instruction

The following procedure should be carried out on a weekly basis, the procedures should be carried out more frequently for machines having above average drink throughput or if heavy tannin build up is experienced.

- 23. Remove the brewer from the machine**
- 24. Remove the brewer cover plate from the right hand side of the brewer**
- 25. Make sure you retain the sealing washer on the water inlet pipe**
- 26. Remove the top filter from the brewer by releasing the snap ring**
- 27. Soak the upper filter assembly in de-staining solution and hot water**
- 28. Take the brewer outlet pipe and bend it over, so as to prevent water running through it.**
- 29. Push the pipe through the retaining loop to hold the pipe in a kinked position**
- 30. Prepare a solution of destain solution and hot water at a 50 / 50 ratio**
- 31. Pour the capful of the prepared cleaning solution into the lower filter holder**
- 32. Leave upper and lower filters to soak for the recommended time**
- 33. Release the kinked pipe to allow the solution to drain away**
- 34. Rinse thoroughly, both the upper and lower filters in clean water**
- 35. Rinse the complete brewer assembly in clean water to remove any residue**
- 36. Re-fit the upper filter using the snap ring**
- 37. Make sure to fit the upper filter into the highest position**
- 38. Replace the brewer unit into the machine, aligning the two arrows on the body and cam**
- 39. Turn the cam to make sure that it is located securely, it should not rotate**
- 40. Refit the brewer cover plate to the right hand side of the brewer**

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CODICE DOSE DOSE CODE	DOSE ACQUA WATER DOSE		DOSE POLVERE POWDER DOSE	
	dec.	cc	d.s.	gr.
Z1 sugar	60	60	26	
Z2 extra sugar	60	60	32	
C1 coffee black no sug	80	80	20	
C2 coffee black sug	45	45	20	
C3 coffee white	45	45	20	
C4 coffee extra white	45	45	20	
C5 cappuccino	65	65	20	
C6 espresso choc	40	40	10	
C7 espresso no sug	60	60	20	
C8 espresso sugar	55	55	20	
D1 decaf. black no sug	80	80	22	
D2 decaf. black sug	45	45	22	
D3 decaf. white	45	45	22	
D4 decaf. extra white	45	45	22	
L1 milk x coffee white	60	60	8	
L2 milk x coffee ex w.	60	60	12	
L3 milk x dec. white	60	60	8	
L4 milk x dec. ex. w.	60	60	12	
L5 milk x tea white	60	60	5	
L6 milk x tea ex.w	60	60	7	
L7 milk x cappuccino	50	50	15	
L8 milk x espressoch.	35	35	14	
L9				

milk x chocomilk	60	60	10	
K1 chocolate	90	90	60	
K2 chocomilk.	80	80	50	
K3 choc. x cappuccino	30	30	11	
K4 choc. x espressoch.	50	50	44	
T1 tea black no s.	80	80	20	
T2 tea black s.	50	50	20	
T3 tea white	50	50	20	
T4 tea extra white	50	50	20	
A1 hot water	150	150	0	
A2 add coffee black no sug	70	70	0	
A3 add x coffee black sug.	45	45	0	
A4 add x coffee white sug.	45	45	0	

A5 add cof. extra white sug	45	45	0	
A6 add x chocolate	60	60	0	
A7 add x decaf. black sug.	45	45	0	
A8 add decaf. black no sug	70	70	0	
A9 add x decaf. white sug.	45	45	0	
AA add decaf extra white sug	45	45	0	
AB add x tea white sug.	50	50	0	
AC add x tea white no sug	50	50	0	
AD add x tea black ex.sug.	50	50	0	
AE add x tea black no sug.	80	80	0	
AF add x espresso no sug.	55	55	0	
F1 not used	0	0	0	
F2 not used	0	0	0	
F3 not used	0	0	0	