A: Production

Industrialization

Time and method

Inner quality check

C.S.Q.

Test cycle :

TOTALLY BUILT-IN DISHWASHERS WITH LED AND TOUCH CONTROL

4TH GENERATION

code	Model index	model
19610 0181	**02**	**ST 5 LED + TOUCH 4° GEN**

modification	Written by	Date	Model index
1st version	Rossato	27/05/09	00
2nd version + touch control addition	Rossato	04/10/11	02

1 – introduction

The current document describe the execution of the test cycle for the 4th generation electronic timer , totally built in dishwasher with led.

2 – Test cycle

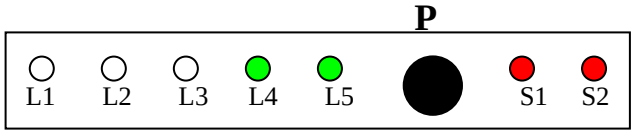
2.1 – Test cycle activation

Activation mode

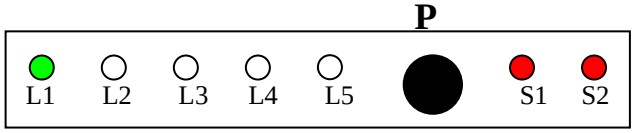
The test cycle activation can be done if the dishwasher is at the beginning status with empty chamber. To do this it's enough to recal the "program cancellation" mode described at point 2.2. The test cycle is then re-called as following described:

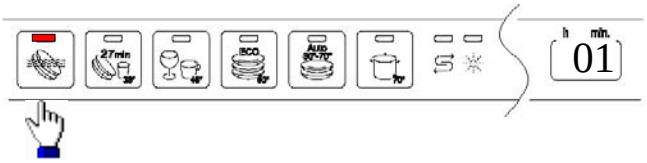
a) open the door, press and keep the P button pressed. For the touch versions, keep the soak button pressed. After 5 seconds, the "cycle cancellation" is shown on the display as follow:

:

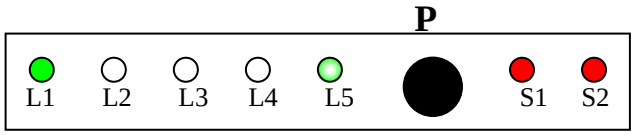


b) Keep the P button pressed (for the touch control version , is the soak button) till the program warning lights are as follow (only L1 switched on)





c) Release and then immediately press the P button (or soak button for the touch control versions- within 3 seconds).
The buzzer gives out an acoustic signal and all the warning lights switch on and the program lights are shown as follow:



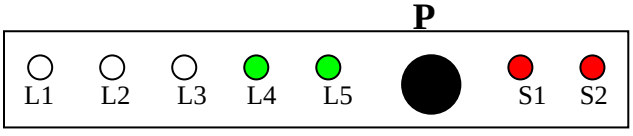
L1 fixed switched on - L5 blinking (L6 for the touch control versions)
If before entering into the test cycle, the salt and rinse aid warning lights are switched off, during the test cycle they blink.

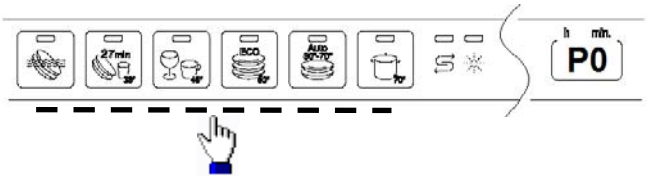
If the test cycle procedure isn't correctly done , it's necessary to repeat the procedure starting from the point (a).

2.2 – Program cancellation and/or end of the test cycle

To cancel the program and to restore the machine to the beginning status, follow the procedure here after described:

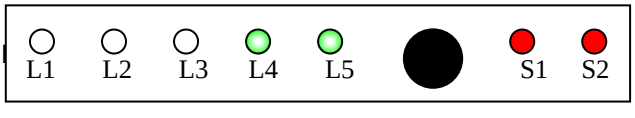
a) open the door and keep the P button pressed (for the touch control versions, press any button) till the following warning lights switch on (P0 su touch control):





L4 and L5 fixed switched on

b) close the door; the machine starts the drain and then after the cycle the control panel shows:



2.3 – Test cycle execution:

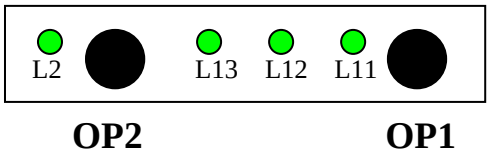
Phase	Description	Alternate valve position	warning light status
1)	**TEST CYCLE BEGINNING:** the machine is with the closed door ready for the test cycle execution	(if it is foreseen) -	/ C1
2)	**TEST CYCLE BEGINNING** Close the door. After some seconds the machine starts to fill (at first it starts with stopped motor, then with moving motor) It's could occur that the cycle starts with a drain.	Upper basket (upper washing , if it's foreseen)	/ C2
3)	**DETERGENT DISPENSER OPENING** After the pressure switch level has been reached, the machine ends the filling, the heating element is activated and the dispenser unit is being supplied.	Upper basket	/ C3
4)	**HEATING** The machine starts the heating till reaching 45°. (for some models , if the program selection button is pressed, the heating phase is eliminated, for the touch control versions if any button is pressed the heating phase is eliminated)	Upper basket 30" Lower basket 30"	/ C3
5)	**HEATING** The machine starts the heating till reaching 50°. (for some models , if the program selection button is pressed, the heating phase is eliminated, for the touch control versions if any button is pressed the heating phase is eliminated)	Lower basket	/ C3
6)	**WAITING THE OPERATOR INTERVENTION (it lasts max 30')** Once the temperature is reached, the machine continues to wash. During this phase , the regeneration coil works (it lasts max 30 minutes) To proceed the cycle, the operator has to lift the antiflood safety device up (polystyrene) or to press the program selection button.	Lower basket	/ C4
6)	**FINAL DRAIN** Once the antiflood safety device is activated , the machine drains.	(upper basket)	/ C4
7)	**DOOR OPENING/ WAITING THE OPERATOR INTERVENTION/TEST CYCLE END** At the end of the drain phase, the re generation electric valve is activated and possible door opening (max 3'). Once the machine is switched off, **the test cycle ends**. (see point 9). Once the program selection button is pressed, the automatic test proceeds (it lasts max 3+15 minutes)	(upper basket)	/ C5 & / C6 / C7
8)	**AUTOMATIC TEST CYCLE FOR THE FINAL LOAD** Once the program button is pressed, the water is filled in order to start the following automatic test cycle till reaching the pressure switch full condition (+ 2")	(UPPER BASKET)	
9)	**TEST CYCLE END** Once the final load is done, the display shows as described on the right. Switch the machine off and open the door to check the detergent dispenser opening. Switch the machine on and verify that the programs/options warning lights work.	(UPPER BASKET)	/ End

FLASHING LED LED ON

2.4 – Verification of the option board functioning (only for those models which are equipped with this board)

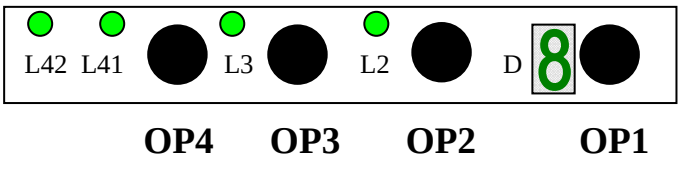
Select a program by pressing the P button or a any program button for the touch control versions (do not choose the soak program).
The options could not be all available for any program.
For the touch control versions , the lack of an option is reported by a quick led blinking and by a beep.

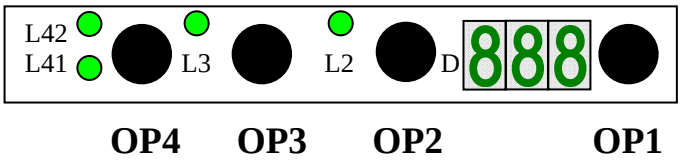
The possible option boards are here after listed.

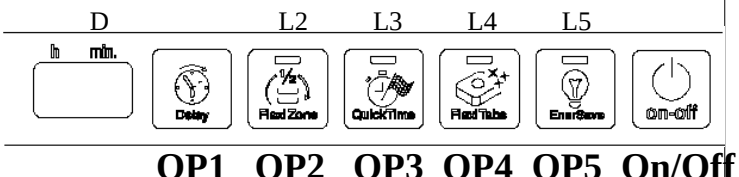


a) Press the OP1 button many times and verify that the L11,L12, L13 warning lights are sequently switched on.
b) Press the OP2 button and verify that the L2 warning light switches on.
c) Press the OP2 button once again and verify that the L2 warning light switches off.

Now restore the machine with all switched off warning lights.







a) Press the OP1 button many times and verify that the display shows -, 1,2,… etc..
b) Restore the machine to the beginning condition with switched off display
c) Press the OP1 button and verify that the L2 warning light switches on.
d) Press the OP2 button and verify that the L2 warning light switches on. Press once again the OP2 button et verify that the L2 warning light switches off.
e) Where it's foreseen, try the other option and warning lights following the instructions of the point b.
f) Press the button OP4 many times and verify that the L41 and L42 switch on.
g) For some versions the OP4 option and the L41 warning light work as explained at point b.
In this case, press at the same time the OP2+OP3 to switch the L42 warning light on.
Now restore the machine with all switched off warning lights.

GENERAL CHECKS TO CARRY OUT DURING THE CYCLE

1) veirfy possible water leakages as pointed out into I0 06
2) verify that the salt and rinse aid warning lights work (if foreseen)
3) upper washing functioning (if foreseen)

N.B.: the operative modes of these procedures are defined into the machine working cycle (done by T&M)

3) Alarms

The possible errors and the relative led displays are shown below. If an error is detected during the test cycle, rectify the error and then open and close the door to continue with the test.

ALARM	ANOMALY	WHAT THE DISPLAY SHOWS
E1	The flood prevention system has been activated (if included)	/ E1
E3	Does not heat up	/ E3
E4	Temperature probe disconnected	/ E4
E5	Does not fill	/ E5
E6	Does not drain	/ E6
E7	Malfunction of turbine water meter (flow meter only)	/ E7
E8	Malfunction of alternating valve (alternating wash only)	/ E8
E9	Fill level limit exceeded (flow meter only)	/ E9
E10	Malfunction of turbidity sensor (turbidity sensor only)	/ E10

FLASHING LED

LED ON