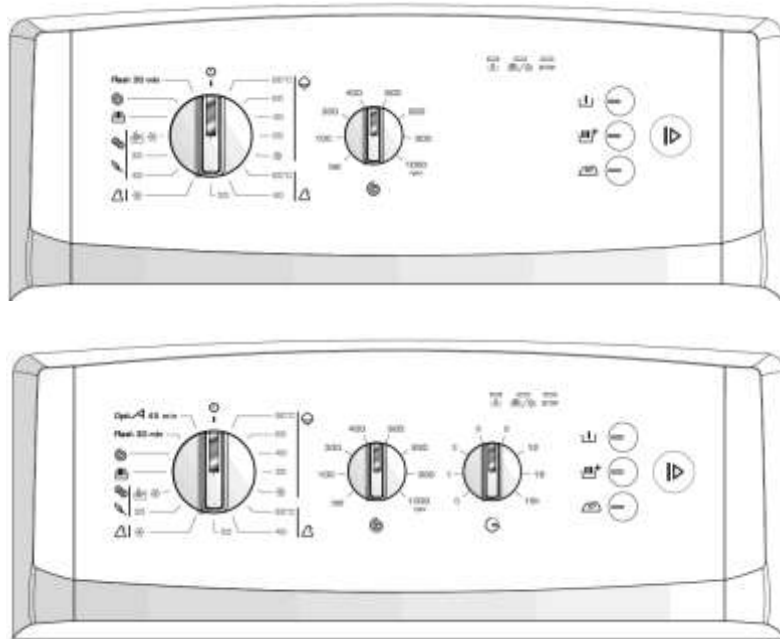
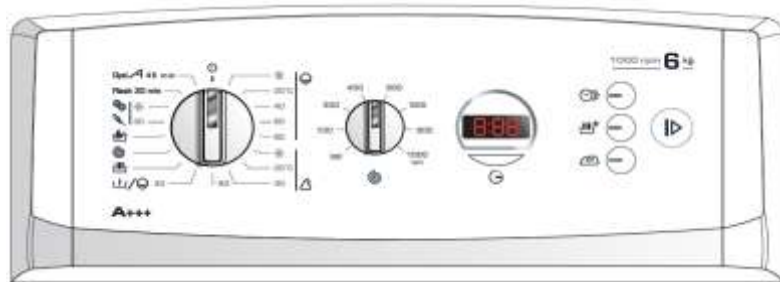


PANEL BOARDS

-E1 & AT1: Electronic programming , program selector, speed spin selector, 3 option keys, 3 cycle keys, start key.



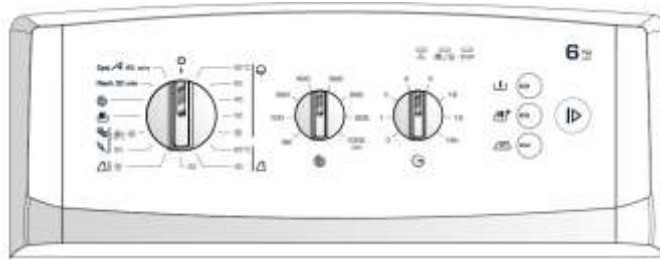
- E3 & AT2 : Electronic programming, program selector, speed spin selector, display LCD (E3), Digits (AT2), 3 option keys, 3 cycle keys, start key



- E4+ : Electronic programming, program selector, display, sensitive touches.



## TEST PROGRAM E1 & AT1



### Entry conditions:

Before starting the test., it may be necessary to cancel the current cycle, check that the drum is empty and that there is no more water in the tank, and then turn off the "On / Off" key.

Press the 2 extreme option keys and set the selector switch to the 1<sup>st</sup> position on the right of

"STOP". **Test program: cancellation and restart:**

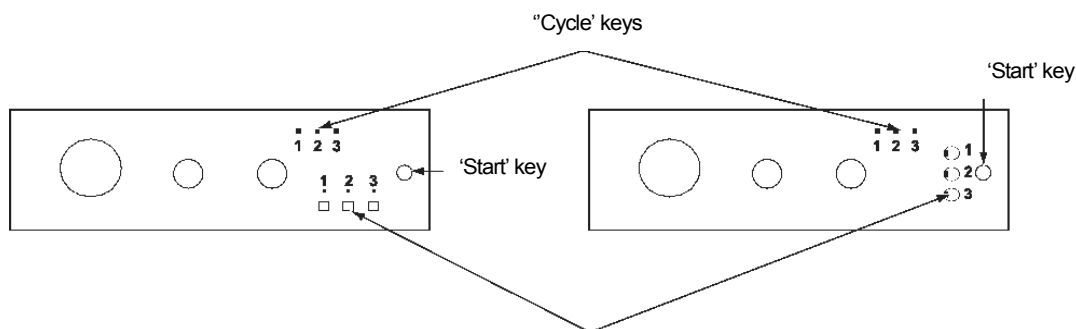
It is possible to cancel the current test by a long pressure (1") on "Start" and then to restart a test by shortly pressing the same key.

### Definite exit from test program.:

To definitely exit from the test program, you have just to release the "On / Off" key or cut off the mains. **Test development:**

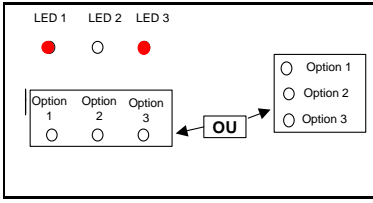
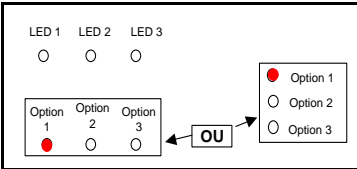
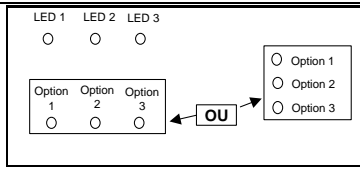
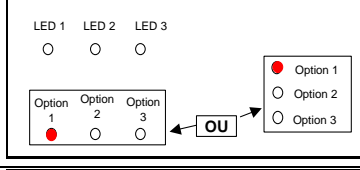
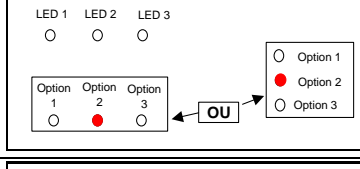
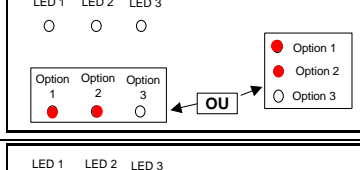
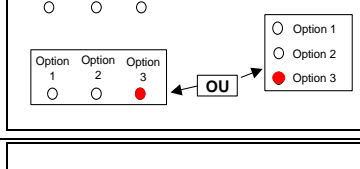
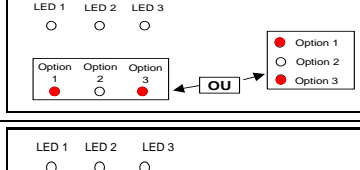
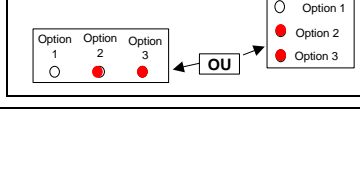
Presentation of E1 – AT1 aesthetics: Positions of LEDs and keys are different depending on the brand.

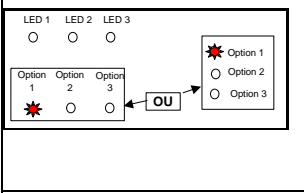
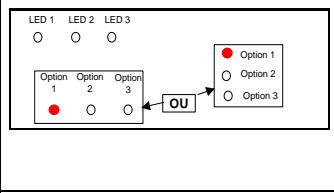
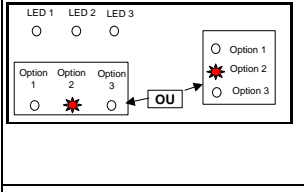
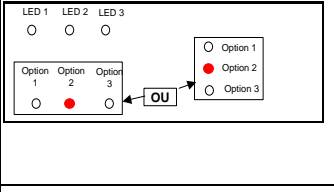
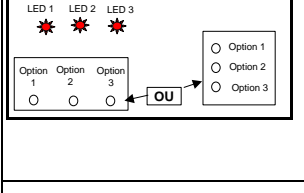
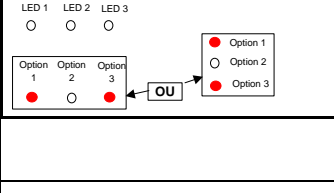
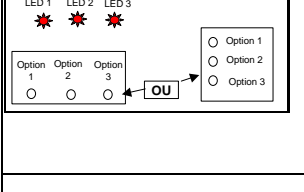
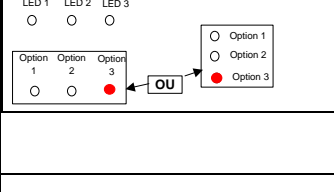
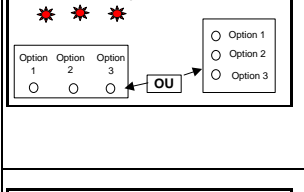
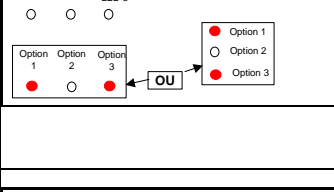
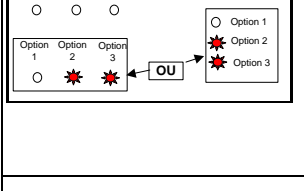
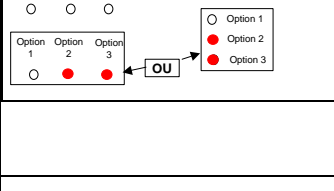
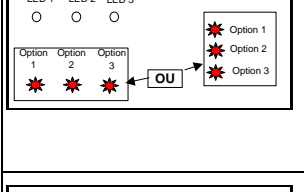
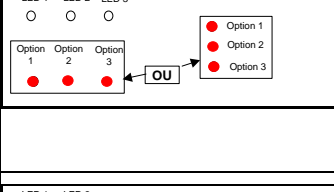
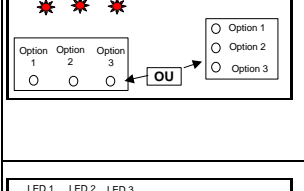
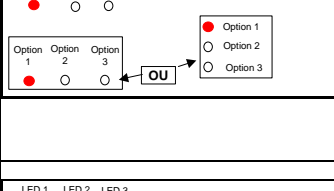
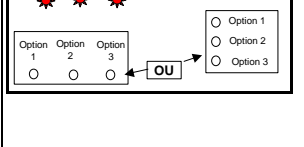
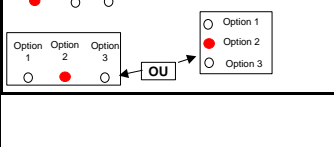
Design A Design B



### Speed code table :

Speed	LEDs lit
600 rpm	None
700 rpm	Option led 1
800 rpm	Option led 2
900 rpm	Option leds 1 and 2
1000 rpm	Option led 3
1100 rpm	Option leds 1 and 3
1200 rpm	Option leds 2 and 3
1300 rpm	Option leds 1, 2 and 3

E1 – AT1 TEST		Positions selector		
		E1 – AT1		
Step	Action(s)			Checkings
Access test	- long pressure on the 2 extreme option keys - Selector switch in the first position on the right of STOP (or Arrêt)	- Position 1		Display of fault code(s), in event of fault(s).  Option LEDs indicate the washing machine speed (see table of speeds)
Access test	1 short pressure on Start or "Départ"	- Position 1		Checking :  - keys  - adjustment knob  - LEDs  - display unit + buzzer according to model
faults ?	- long pressure on the 2 extreme option keys	- Position 1		** Display of fault code(s), in event of fault(s).
1	- Selector switch in the 1 <sup>st</sup> position on the right of STOP	- Position 1		- <b>Locking</b> - Motor rotation
2	- Selector switch in the 2 <sup>nd</sup> position on the right of STOP	- Position 2		- Locking - Filling → L1 - <b>Heating</b> → 34°C
3	- Selector switch in the 3 <sup>rd</sup> position on the right of STOP	- Position 3		- Locking - <b>Motor rotation + inversions</b> - Draining 30"
4	- Selector switch in the 4 <sup>th</sup> position on the right of STOP	- Position 4		- Locking - <b>Recirculation 30"</b>
5	- Selector switch in the 5 <sup>th</sup> position on the right of STOP	- Position 5		- Locking - Draining - <b>Spin 1'</b>
6	- Selector switch in the 6 <sup>th</sup> position on the right of STOP	- Position 6		- Locking  - Draining → NO if full - <b>SV (3 times)</b>

Display visible by the user (led blinking)	Display visible by the technician during ADP	Wording	Causes
		<b>No filling</b>	L1 not attained after 6' of SV power supply. Tap closed – Pressure switch or cabling out of order.
		<b>No draining</b>	N0 not attained after 6' of power supply to pump. Pump - Pressure switch or Cabling out of order or Filter clogged.
		<b>No heating</b>	T° not attained on completion of the heating sequence (40 to 120'). Resistor or cabling out of order.
		<b>Motor triac shorted</b>	Tacho signal although the motor triac is not controlled or high speed. Card out of order.
		<b>N.T.C out of order</b>	-5°C < T° > 95°C NTC cut, shorted. or cabling out of order
		<b>No motor rotation</b>	No tacho signal while the motor triac is controlled rotor or drum blocked tachometer or motor cabling out of order
		<b>Locking or Motor out of order</b>	Locking not detected after 30' of P.S. PTC power supply. Inter door safety devices door open, door safety device or cabling out of order Motor or motor/card link out of order
		<b>Selection fault</b>	Inconsistent position of the selector switch during programming of a cycle
		<b>Overflow</b>	OVERFLOW pressure switch detected. SV powered or blocked open Pressure switch out of order

		<p><b>Maxi speed not attained</b></p>	<p>Motor or cabling out of order</p>
		<p><b>No shutdown positioned</b></p>	<p>No posistop state change during motor rotations.</p> <ul style="list-style-type: none"> <li>- Posistop or cabling out of order</li> <li>- Belt cut</li> <li>- Drum blocked</li> </ul>
		<p><b>Water distributor RS30 fault</b></p>	<p>Wrong positioning of micro-motor distributor RS30, contact, cabling out of order or mechanical blocking.</p>
		<p><b>Card out of order</b></p>	<p>Card out of order</p>
		<p><b>Interference</b></p>	<p>Electromagnetic interference</p>












## TEST PROGRAM E3 & AT2


• **Entry conditions:** Before starting the test., it may be necessary to cancel the current cycle, check that the drum is empty and that there is no more water in the tank, and then turn off the "On / Off" key.

• **Test program: cancellation and restart:** It is possible to cancel the current test. by a long pressure (1") on "Start" and then to restart a test by shortly pressing the same key.









**Definite exit from test program:** To definitely exit from the test program, you just have to release the "On / Off" key or cut off the mains.











• **Test working. :** With the selector, it is possible to move between the different steps.

Steps	Action(s)	Selector position	Displays(s)	Control(s)
Entry in the test	- Set the WM on "Stop" position - Keep pressing on both middle option keys - Set the selector on the 1 <sup>st</sup> program (Cotton) or press the 'Start' button (according to the model)	Cotton  1 <sup>st</sup> program	<b>According to the model, display :</b> - Kind of access (Cx) - Spin speed - Overspeed relay presence (TF) - Eventual default message	<b>If there is a default</b>  (Triac in short-circuit)  (N.T.C in shortt-circuit)  (Overflow) ou invalid position of selector, then the D.A.P freezes here.
Test access	- 1 short press on "Start"  - Press the keys and turn the selectors	-	<b>Display changes :</b> -  - All segments are lit - Associated leds are lit - lighting or extinction of all the leds - Display of a number btw 0 and 9999	<b>Checking of :</b> - keys - selectors - leds - LCD display - buzzer
Defaults ?	- 1 <u>long</u> press on « start » 	Cotton  1 <sup>er</sup> programme	 if one or different defaults present - <b>How to see the different default :</b> 1 short press on "Start" - <b>How to cancel de default code :</b> 1 long press on both central keys	Please, note the default message(s)
1	- Selector must be on the 1 <sup>st</sup> program (Cotton)			- <b>Locking</b> - Motor rotation
2	- Turn the selector to the 2nd program	2 <sup>em</sup> programme		- Locking - <b>Filling</b>  → Until L1 reached - <b>Heating</b> → 34°C
3	- Turn the selector to the 2nd program	3 <sup>rd</sup> program		- Locking - <b>Motor rotation + inversions</b> - <b>Draining 30"</b>

<b>4</b>	- Turn the selector to the 4th program	4 <sup>th</sup> program	<b>E04</b>	- Locking - <b>Spraying</b> 30" (if present)
<b>5</b>	- Turn the selector to the 5th program	5 <sup>th</sup> program	<b>E05</b>	- Locking - <b>Draining</b> L0 reached + 30" - <b>Sensor test</b> (if present)
<b>6</b>	- Turn the selector to the 6th program	6 <sup>th</sup> program	<b>E06</b> then <b>YES</b> after 15"	- Locking - draining - <b>1' spinning at speed max</b> -
<b>7</b>	- Turn the selector to the 7th program	7 <sup>th</sup> program	<b>E07</b>	- Locking - draining → L0 - <b>EV</b> (3 x 1,5" work + 2" stop )
<b>8</b>	- Turn the selector to the 8th program	8 <sup>th</sup> program	<b>E08</b> then <b>YES</b> if position OK	- Locking - RS30 micro - motor works → softener  - EV 3" - <b>Unlocking</b>

### - Default codes on E3 & AT2

Display		Kind of default	Cause(s)
default	User messages on LCD 1		
 + <b>Bip ! *</b>	 <b>Open the water Tap</b> + <b>Bip ! *</b>	<b>No filling</b>	<b>L1 is not reached after 6' of EV supply</b> - Tap turned off - EV, pressure switch or wiring out of order
 + <b>Bip ! *</b>	 <b>Draining default</b> Clean the filter and press start + <b>Bip ! *</b>	<b>No draining</b>	<b>L0 is not reached after 6' of pump supply</b> - Pump, pressure switch or wiring out of order - Filter or draining blocked (Restart the cycle by pressing "Start")
 + <b>Bip ! *</b>	 <b>Problem dXX detected</b> Call the after-sales service + <b>Bip ! *</b>	<b>No heating</b>	<b>T°C not reached after the heating step (40 to 120')</b> - Heater or wiring out of order - Siphoning (bad connection, draining hose in water)
 + <b>Bip ! *</b>		<b>Motor triac in short circuit</b>	<b>Tacho signal is read without motor supply or overspeed</b> - Electronic board out of order
 + <b>Bip ! *</b>		<b>N.T.C out of order</b>	<b>5°C &gt; T°C read &gt; à 95°C</b> - NTC probe is cut or in short circuit - NTC wiring out of order

<p> <b>d06</b> + Bip ! *</p>		<p><b>No motor rotation</b></p>	<p><b>No tachometer signal whereas the triac must work</b></p> <ul style="list-style-type: none"> <li>- Rotor or drum are blocked</li> <li>- Tacho or motor wiring out of order</li> </ul>
<p> <b>d07</b> + Bip ! *</p>	<p> Shut the door and press start + Bip ! *</p>	<p><b>Locking or motor out of order</b></p>	<p><b>Locking is not detected after 30' of PTC supply</b></p> <ul style="list-style-type: none"> <li>- Door opened (shut the door and press "Start") - Lock or wiring out of order</li> <li>- Motor or wiring between motor and board cut</li> </ul>
<p> - - - + Bip ! *</p>	<p> Selector in bad position + Bip ! *</p>	<p><b>Default of selection</b></p>	<p><b>Incoherent position of the selector during the programming</b></p>
<p> <b>d10</b> + Bip ! *</p>		<p><b>Overflow</b></p>	<p><b>OVERFLOW pressure switch</b></p> <ul style="list-style-type: none"> <li>- EV supplied or open</li> <li>- Pressure switch out of order</li> </ul>
<p> <b>d13</b> + Bip ! *</p>	<p> Problem dXX detected Call the after-sales service + Bip ! *</p>	<p><b>Maximum speed not reached</b></p>	<ul style="list-style-type: none"> <li>- Motor or its wiring out of order</li> <li>- Posistop or its wiring out of order</li> </ul>
<p> <b>d17</b> + Bip ! *</p>		<p><b>Posistop out of order</b></p>	<p><b>Posistop doesn't switch</b></p> <ul style="list-style-type: none"> <li>- Posistop or its wiring out of order - Belt cut</li> <li>- Drum blocked</li> </ul>
<p> <b>d20</b> + Bip ! *</p>		<p><b>Default of the RS30 water distributor</b></p>	<p><b>Bad position of the water distributor</b></p> <ul style="list-style-type: none"> <li>- RS30 micro-motor, RS30 switch, Wiring out of order or mechanical blocage</li> </ul>



- Default codes on E3 & AT2

Display		Kind of default	Causes
default	User messages on display		
▲ d21 ou d24 ou d25 + Bip ! *	▲ Problem dXX detected call for assistance + Bip ! *	<b>Board out of order</b> - Board out of order	<b>Bad reading of the sensor information</b> - Sensor or its wiring cut - Board out of order
▲ d26 + Bip ! *		<b>Water sensor with open circuit</b> - Sensor or its wiring cut - Board out of order	
▲ d27 + Bip ! *		<b>Water sensor with short circuit</b> - Sensor or its wiring in short circuit - Board out of order	
▲ d28 ou d29 ou d30 ou d31 ou d32 + Bip ! *		<b>Interference</b> Electromagnetic interference - Unplug / plug again and restart the cycle	
-	... detergent overdose ...	<b>Too much detergent</b> - Reduce the quantity of detergent	

\* **Bip !** : According to the model and the different cases.

Some of the code doesn't appear in details to the end-user. The user manual includes a single table giving the meaning of the main codes

## TEST PROGRAMME E4+

**Start in test mode:**



**Check that the drum is empty.**

To start in test mode, starting in **P0** position, put the selector in **P1** and push simultaneously the first three buttons (red arrows) during 3 seg. Because of security reasons, the button combination is deactivated after 10s



### EXIT FROM TEST MODE

Disconnect the machine

Step	Selector position	Display		
		<b>D7 a D10</b>	Test	In case of failure, stop the test (see failure code table).
	-		Test program	Alternative movements between motor speed: F / xxxx and machine cycles CYCL / xxxxx
Push Start T01	-	<b>T00</b>	Test interface: Push in a row all the buttons	.
Selector in P2 + Push simultaneously: 	<b>P2</b>	<b>Dxx</b>	Check the recent failures (movement with START button). Delete failures: Push at the same time:  See failure code table	
Selector in position	<b>P1</b>	<b>T01</b>	Activation of the lock (and motor)	<ul style="list-style-type: none"> <li>- door lock and wirings</li> <li>- motor wirings</li> <li>- motor</li> <li>- without water leak in tachymeter</li> <li>- wirings of Posistop</li> </ul>
Selector in position	<b>P2</b>	<b>T02</b>	EV knob for the admission of the water through bleach box Heater activation ( 34° C)	<ul style="list-style-type: none"> <li>- Heating element and wirings</li> <li>- Thermistor and wirings</li> <li>- open main tap</li> <li>- pressure switch and wirings</li> <li>- EV and wirings</li> <li>- anti-leakage system</li> <li>- distributor micro-motor and wirings</li> <li>- door lock and wirings</li> </ul>

Selector in position	P3	T03	<b>Motor with cadence 4/4-50 (with inversion) and draining during 30 s</b>	<ul style="list-style-type: none"> <li>- Motor wirings</li> <li>- Motor</li> <li>- Without water leak in tachymeter</li> <li>- Door lock and wirings</li> </ul>
Selector in position	P4	T04	(First do T02 test to fill the tub with water) <b>Recirculation pump (control of the noise)</b>	<b>If option</b>
Selector in position	P6	T06	Pump draining command <b>high speed with pump activation.</b> After 15 s, visualization of "YES" 1 mn at máx.	<ul style="list-style-type: none"> <li>- net tension</li> <li>- motor wirings</li> <li>- motor</li> <li>- door lock and wirings</li> <li>- draining pump and wirings</li> <li>- Without water leak in tachymeter</li> <li>- wirings of Posistop</li> </ul>
Selector in position	P7	T07	Draining pump command till low level <b>Electrovalve command for water admission through bleach box.</b> [1,5 s ON + 2 s OFF] * n	
			<i>RMQ: The door is blocked at the beginning of each test and unblocked at the end. In machines higher than 1.200 rpm, the failure D13 (motor wiring failure) can be detected in this step.</i>	<i>In case of failure in one of the test, if whole checking points are OK, check electronic module.</i>

**FAILURE DETECTION:** draining starts automatically, except in D07 failure.

After a failure **RESTART THE TEST:** The activation of selector allows to start another test .

		<b>FAILURE CODES E4+</b>	
<i>Indicator</i>			
<b>LCD</b>	<b>FAILURES</b>	<b>Visible by the client</b>	<b>Stop Program</b>
<b>d01</b>	Filling failure or incorrect wirings or pressure switch failure or main tap closed	YES	NO
<b>d02</b>	Drain failure or incorrect wirings or pressure switch failure or clogged filter	YES	NO
<b>d03</b>	Incorrect wirings or heating failure (heating element)	NO	NO
<b>d04</b>	Failure in triac motor or in short-circuit	NO	YES
<b>d05</b>	Incorrect wirings and NTC sensor failure	NO	NO
<b>d06</b>	Rotor failure or incorrect wirings or without return speed (tachymeter)	NO	YES
<b>d07</b>	Door lock failure or door opened or motor in open circuit (disconnect) or return speed failure (as a D06)	YES	NO
<b>d08</b>	Recirculation pump failure	NO	NO
<b>---</b>	Invalid selector position or failure in program switch	YES	NO
<b>d10</b>	Overflow level of the pressure switch activated	NO	YES
<b>d13</b>	Failure in motor speed or no Posistop or disconnected or incorrect wirings	NO	NO
<b>d17</b>	Wrong position of Posistop or disconnected or drum blocked or wrong belt	NO	YES
<b>d18</b>	To not take into account (manufacturer use).	NO	NO
<b>d20</b>	Incorrect wirings or water distributor failure	NO	YES
<b>d21 d24</b>	Wrong programming of module: replace the electronic module.	YES	NO
<b>d25</b>	Card Failure	NO	NO
<b>d26</b>	Conductivity sensor Failure or disconnected	NO	NO
<b>d27</b>	Conductivity sensor in short circuit	NO	NO
<b>d28 - d32</b>	Electromagnetic disruption: disconnect the machine and try it again → if the problem continues: replace the electronic module	NO	NO