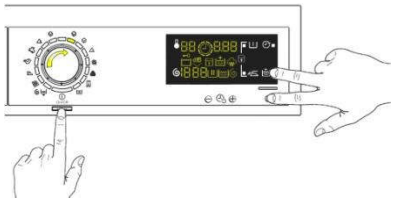
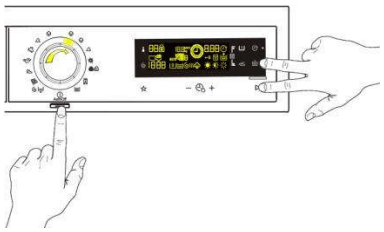
5 DIAGNOSTICS SYSTEM

A special cycle is designed to demonstrate the operation of these appliances in shops, without connecting them to the water mains. In this way it is possible to select one of the programmes and, once the start button (START/PAUSE) has been pressed, the appliance will only perform some of the phases of the programme, skipping those which cannot be performed (water fill, drain, heating).
The cycle takes place as follows:

- the door lock is enabled as usual (door locked during operation, possibility of opening it at the end of the cycle or when paused).
- motor: all low speed movements are enabled, the pulses and spin are disabled,
- the water fill solenoid valves and the drain pump are disabled.
- display: as the cycle phases are very fast (one second in the demo cycle corresponds to approximately one minute in the actual cycle) the end time decreases by 1 unit per second. Bear in mind that the end time does not always correspond to the actual cycle time.

5.1 Access to DEMO settings for TC3 and TC2 stylings

The operations listed below must be carried out within 7 seconds.

TC3	TC2
	

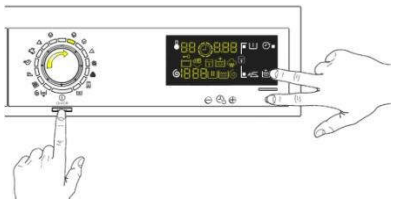
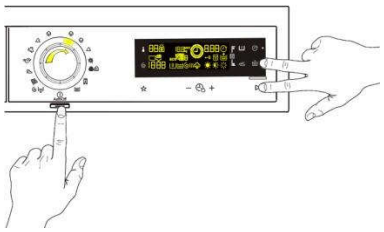
Do not start the procedure with your fingers over the combination sensors

1. Switch on the appliance using the ON/OFF button.
2. Turn the selector clockwise until the third LED lights up.
3. Simultaneously press the **START/PAUSE** button and the nearest **option sensor** (as shown in the figure).
4. Hold your fingers over the sensors (approximately three or five seconds) until “dEM” flashes for a short time.

6 DIAGNOSTICS SYSTEM

6.1 Accessing diagnostics

The operations listed below must be carried out within 7 seconds.

TC3	TC2
	

Do not start the procedure with your fingers over the combination sensors

5. Switch on the appliance using the ON/OFF button. The first LED lights up.
6. Touch the **START/PAUSE** and the nearest **option sensor** simultaneously (as shown in the figure).
7. Hold your fingers over the sensors until the LEDs and symbols begin to flash in sequence (approximately 3 seconds).

In the first position, the operation of the sensors, the LEDs and the groups of symbols shown on the LCD display is checked;

For the TC3 and TC2 styling:
When the programme selector is turned in a **clockwise direction**, operation of the various components is diagnosed and the alarms are read (see diagnostic test on the next page).

6.2 Quitting the diagnostics system

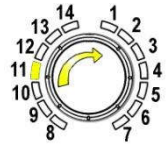
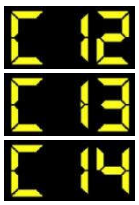
→ To exit the diagnostic cycle, switch the appliance off, then back on and then off again.

6.3 Phases of the diagnostics test

6.3.1 TC3 – TC2 styling

Irrespective of the type of PCB and the configuration of the programme selector, after entering the diagnostic mode, turn the programme selector dial **clockwise** to perform the diagnostic cycle for the operation of the various components and to read any alarms.
Concurrently, a selector control code is shown on the LCD display, which indicates for **two** seconds the description in the last column of the table below.
(All alarms are enabled in the diagnostic cycle.)

Selector position		Components activated	Working conditions	Function tested	LCD display
1		- The LEDs, groups of symbols in the LCD screen and the backlight of the display are turned on in sequence - Touch a sensor to turn on the group of icons in the LCD screen or the corresponding LED and the buzzer sounds at the same time	Always active	User interface functioning	
2		- Door safety interlock - Wash solenoid valve	Door closed Water level below anti-flooding level Maximum time 5 min.	Water fill to wash compartment	 Water level in the tub (mm)
3		- Door safety interlock - Pre-wash solenoid valve	Door closed Water level below anti-flooding level Maximum time 5 min.	Water fill to pre-wash compartment	 Water level in the tub (mm)
4		- Door safety interlock - Solenoid valve pre-wash and wash	Door closed Water level below anti-flooding level Maximum time 5 min.	Water fill to conditioner compartment	 Water level in the tub (mm)
5		- Door safety interlock - Third solenoid valve	Door closed Water level below anti-flooding level Maximum time 5 min.	Water fill to third solenoid valve compartment	 Water level in the tub is displayed (mm)
6		- Door safety interlock - Fourth solenoid valve (hot water where featured)	Door closed Water level below anti-flooding level Maximum time 5 min.	Water fill to fourth solenoid valve compartment	 Water level in the tub is displayed (mm)
7		- Door safety interlock - Wash solenoid valve, if the water in the tub is not enough to cover the heating element - Heating element - Weight sensor (if there is one, an extra litre of water is loaded) - Circulation pump	Door closed Water level above the heating element. Maximum time 10 min. or up to 90°C **(*)**	Reheating Circulation	 Temperature in °C measured using the NTC probe

8		- Door safety interlock - Wash solenoid valve, if the water in the tub is not enough to cover the heating element - Motor (55 rpm clockwise, 55 rpm anti-clockwise, 250 rpm pulse)	Door closed Water level above the heating element	Check for leaks from the tub	 Drum speed in rpm/10
9		- Door safety interlock - Drain pump - Motor up to 650 rpm then at maximum spin speed (**)	Door closed Water level lower than anti-boiling level for spinning	Drain, calibration of analogue pressure switch and spin	 Drum speed in rpm/10
10		- Drum rotation motor - door fastening device - Drum position sensor DSP	Door closed	Check the correct position of the drum via DSP	
11		- Reading/deleting the last alarm	-----	----	
12 ÷ 14		- The LEDs, groups of symbols in the LCD screen and the backlight of the display are turned on in sequence - Touch a sensor to turn on the group of icons in the LCD screen or the corresponding LED and the buzzer sounds at the same time	Always active	User interface functioning	

(*) In most cases, the established time is sufficient to check the heating. However, the time can be increased by repeating the phase without draining the water: pass for a moment to a different phase of the diagnostic cycle and then back to the heating control phase (if the temperature is higher than 80°C, heating does not take place).
(**) The check at the maximum speed occurs without control of the A.G.S. and no garments must be inside the appliance.