

TECHNICAL NOTE N. 804 LB – Sept. 30,2008 (Updated: July 5, 2010)

CANDY WASHING MACHINES - GRAND'O TXT (INFOTEXT) SERIES: AUTOTEST SEQUENCE AND ERROR CODES.

"CUORE" POWER MODULE BY INVENSYS

1) PRELIMINARY OPERATIONS TO THE AUTO-TEST CHECKING ROUTINE:

- Connect a 20A/AC reading scale 2 digits Digital Ammeter, in series to one of the phases of the mains current, on the mains wire of the appliance.

What above will allow the check of the good functionality of the electromechanical components, when fed during the carrying out of the Auto-test sequence.

- Carefully empty the drum of the washing machine, because during the carrying out of the Auto-test sequence, the anti-unbalancement safety is normally disabled.
- Set the Program Selector's Knob (Ref. **2** in Picture 1) on the OFF position.

2) STARTING THE AUTO-TEST CHECKING ROUTINE:



Picture 1

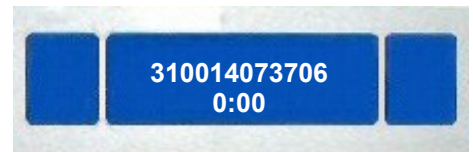
- Push and hold the SPIN SPEED ADJUSTMENT (Ref. n. 1 in Picture 1).

- Turn 2 steps in clockwise sense the Program's Knob, in order to set it to the Washing Program n. 2. It's displayed the "Welcome" message. Wait for the digital clock to be displayed. Next, ALL OPTIONS LED are turned ON.

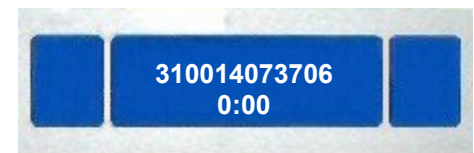


- After 5 seconds from the moment that ALL OPTION'S BUTTONS LEDs ARE TURNED ON, release the SPIN SPEED ADJUSTMENT (1) option's button.

- A BEEP is emitted. The display shows on the same line the product code of the machine and the current software version (in this case, it's the 3706). In this phase, the software is carrying out a self-test, to get the confirmation that the loaded software is correct, for the machine under test.

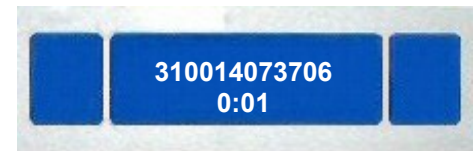


- Push the START/PAUSE button, or push again the SPIN SPEED ADJUSTMENT.

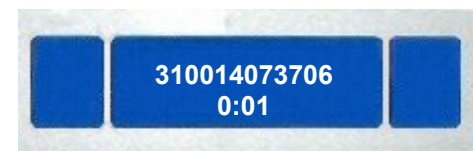


3) CARRYING OUT THE AUTOTEST CHECKING ROUTINE:

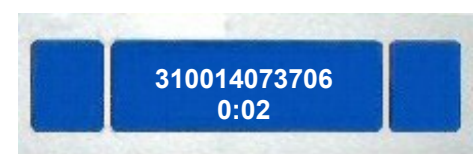
- After about 10/15", a Water Load Phase is started, until it's completed the basic level of 6 liters of water, through the pre-wash compartment. The display shows 4 minutes to the end and the digital ammeter shows a current value of about 0.16A.



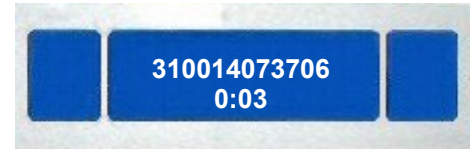
- As soon as the pressure switch has tripped to the "full tank" position, it's fed for about 16" the Water Heating Element. Ammeter now displays about 8A.



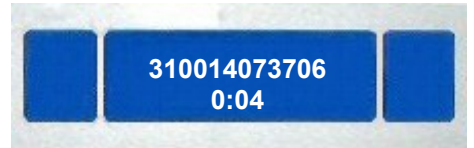
- Once are elapsed the 16", the Water Heating Element is switched off and are simultaneously fed both the Solenoid Valve (to carry out a "timed" water load through the washing compartment), the Recycling Pump and the Motor, for the tumbling of the drum at 55 rpm (about 13" in clockwise sense, 5" pause and 8" seconds counterclockwise). Timed water load ends through the softener's compartment. Ammeter displays a variable value, from 2A at start to about 1.30/1.50A while tumbling.



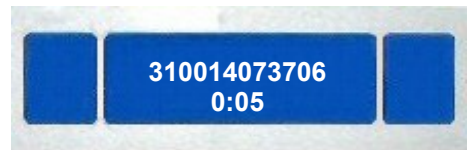
- Once the tumbling of the drum is ended, it's fed the **Drain Pump**, until it's obtained the "empty tank" condition of the pressure switch. Display now shows 2 minutes to the end and Ammeter displays a current value about 0.11A.



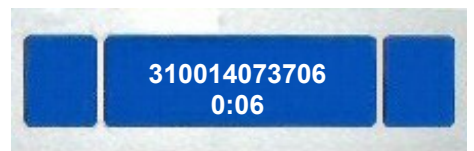
- When the Pressure Switch has tripped to the "empty tank" position, it's carried out **a short Spin Phase at low speed**, this lasting about 15". Ammeter displays a current value about 1.50A.



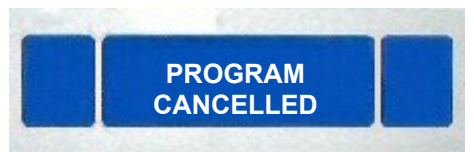
- Once the short Spin Phase is ended, **ALL LEDS OF ALL OPTIONS BUTTON FLASH TOGETHER** at the frequency of 0.5 Hz. **Door is still locked**, due to the activation of the Door Lock Safety Device.



- After an interval of time variable from 45" to about 60", a BEEP is emitted and the Door Lock Safety Device is deactivated. This allows the **opening of the door**. After about 15" it's emitted the first out of the sequence of 8 extended BEEPs, that are issued by the machine, to warn the User that the washing cycle has ended.



- The Autotest routine can be halted at will, simply by setting the Programs Selector's Knob back to the OFF position. Once the knob is moved again out of the OFF position, the display will show: PROGRAM CANCELLED and a new selection will then be possible.



4) LIST OF ALL PRESENTLY AVAILABLE ERROR CODES FOR INVENSYS POWER MODULES:

ERROR CODE	MOST PROBABLE REASON FOR THE ISSUING OF THE ERROR CODE:
ERROR 0	Defective "Cuore" Control Module - Not Programmed "Cuore" Control Module.
ERROR 1	Door Safety Lock Device/Drum's Braking device defective and/or Wiring.
ERROR 2	The Water Fill Phase was not completed within the designed limit time. Defective Solenoid Valve, Pressostat, Water Fill Hose, Low Water Pressure in the network and/or Wiring.
ERROR 3	The Water Drain Phase was not completed within the designed limit time. Clogged Filter, Drain Pump, Drain Hose, Wall Discharge and/or Wiring.
ERROR 4	Several (3) interventions by the Anti-flood Safety Contact of Pressostat. Solenoid Valve blocked opened, defective Pressostat and/or Wiring.
ERROR 5	NTC Temperature Reading Probe opened or shorted and/or Wiring.
ERROR 6	Eeprom - Defective "Cuore" Control Module and/or Wiring.
ERROR 7	Defective Door Safety Lock Device (blocked closed) and/or Wiring.
ERROR 8	Defective Tachometric Dynamo (opened or shorted) and/or Wiring. Óhmic Value of Tacho Dynamo for Motor by Ceset: 42 Ohm Óhmic Value of Tacho Dynamo for Motor by Selni: 90 Ohm Óhmic Value of Tacho Dynamo for Motor by Sole: 184 Ohm
ERROR 9	Defective "Cuore" Control Module (damaged Motor's TRIAC) and/or Wiring.
ERROR 10	Open Circuited/Defective Drum Positioning Device (only TOP Loaders).
ERROR 11	Open or Short Circuited NTC Probe for Drying and/or Electronic Module for Drying and/or Wiring.
ERROR 12	Missing Air Heating while Drying: defective NTC Probe for Drying and/or defective Air Heating Element and/or Wiring.
ERROR 13	No dialogue between "Cuore" Control Module and Display board and/or Wiring.
ERROR 14	Missing Water Heating: defective NTC Probe and/or defective Water Heating Element and/or Wiring.
ERROR 15	Defective "Cuore" Control Module - Not Programmed "Cuore" Control Module.
ERROR 16	Water Heating Element is short circuited or defective electrical insulation.
ERROR 17	Wrong signal from Tachometric Dynamo.
ERROR 18	Defective "Cuore" Control Module and/or Wiring - Wrong Network Frequency.

Best regards.

GIAS Italy