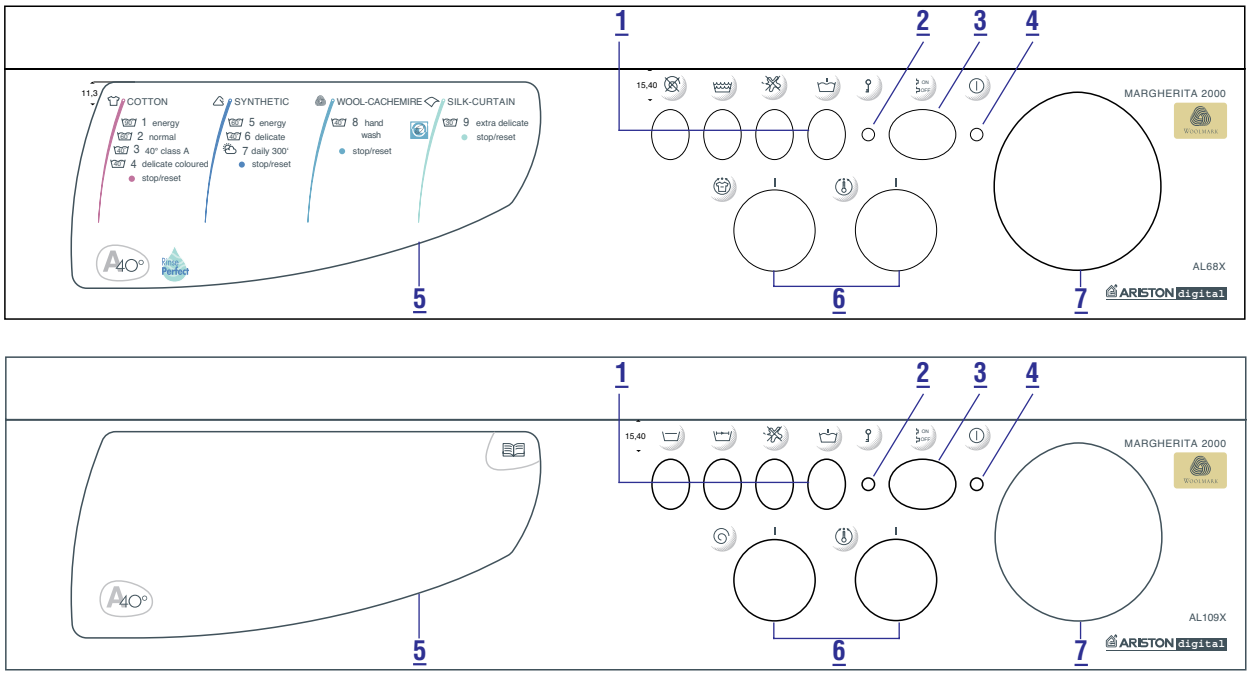
Service Manual

WASHING MACHINE 2000

Contents

1 CONTROL PANEL

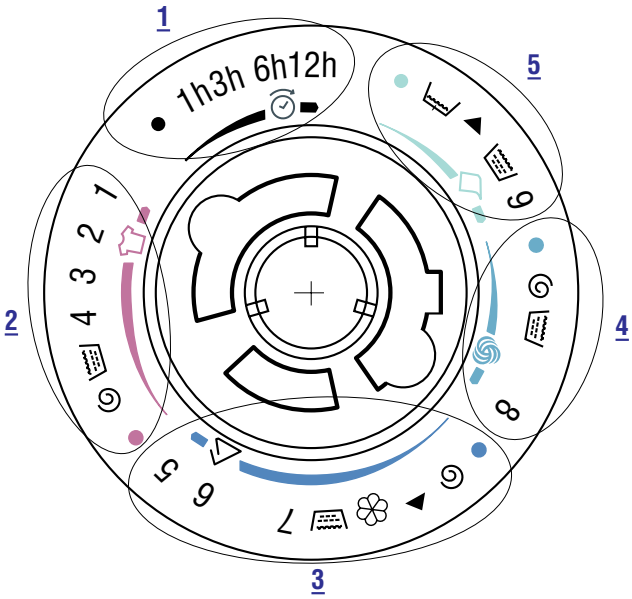
Fig. 1 **Model AL68XIT Control Panel and Model AL109XIT Control Panel**



1 Buttons Option
2 Door Lock Led
3 ON/OFF
4 StandBy/O Led
5 Detergent Drawer
6 Component Knobs
7 Programme Selector

1.1 Timer Selector

Fig. 2



1 Timer Delay
2 Cotton
3 Synthetic
4 Wool
5 Silk/Curtains

Led

There are three ON-StandBy led management modes:

A. StandBy mode: the user is informed when the machine is not carrying out a programme; this flashing mode is active after stopping and resetting. The led flashes at a frequency of about 1 Hz

B. Programme Acceptance Mode: the led flashes for about 3" at a frequency of 10 Hz

C. ON mode: the led is always alight

Programme Setting

Normal programme setting:

- The machine starts from a StandBy position (led in mode A)
- The user selects a programme
- If the selector remains in the same position for at least 5" the machine passes to the programme acceptance mode (led in mode B) and then to ON (led in mode C)
- At this point the programme starts
- It does not change if the selector position is modified
- The user can stop the cycle by moving to the Reset position (marked with a dot)

1.2 Timer Delay Setting

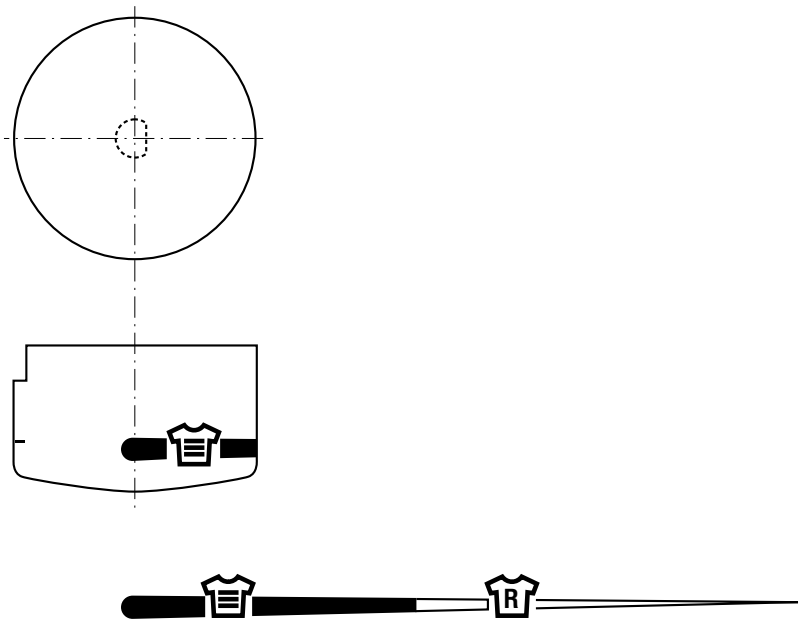
- The machine starts from a StandBy position (led in mode A)
- The user turns the selector to the desired delay
- If the selector remains in the same position for at least 5" the machine passes to the delay acceptance mode (led in mode B) and then to ON (led in mode C)
- The user selects a programme
- If the selector remains in the same position for at least 5" the machine passes to the programme acceptance mode (led in mode B) and then to ON (led in mode C)
- It is not changed if the selector position is modified
- The user can stop the delay count by moving to one of the Reset positions for at least 5" (marked with a dot on the programme disc)
- When the count down is completed the machine starts its cycle and passes to ON (led in mode C)
- It is not changed if the selector position is modified
- The user can stop the cycle by moving to one of the 5 Reset positions for at least 5"

By resetting a programme the machine returns to the StandBy position (led in mode A).
The Door Lock led is only a user feedback to know when it is possible to open the door.

N.B. Even if the power supply is interrupted the programme that has been selected remains.

1.2.1 Wash Intensity Knob

Fig. 3



This knob allows the characteristics of the selected wash programme to be changed. By turning it the wash becomes more intensive and the programme duration increases (Relative symbols).
By turning it ANTICLOCKWISE the wash becomes more delicate and the cycle duration decreases.

N.B. It can be used only with the programmes for resistant and synthetic fabrics, except 3 and 7 (see timer selector).

The total duration reduction specification regarding the IEC cycle is the following:

Location	Reduction %
1	30
2	20
3	17
4	13
5	10
6	6
7	3
8	0

The time variation set with the knob is the following:

IEC cycle 60°

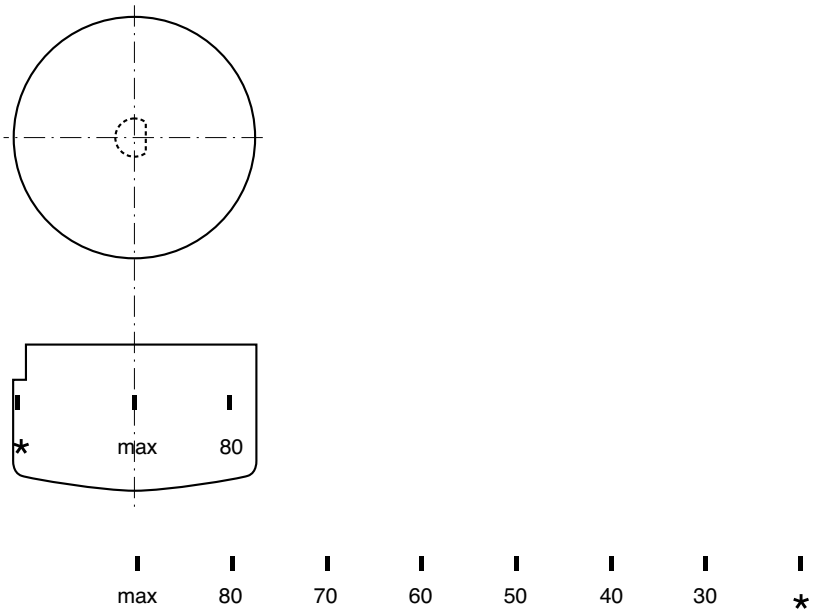
Location	Cycle		Steps		
	Time	Decrease %	Decrease %	Mech (Min)	Biol (Min)
1	**94**	**30**	73	12.2	2.7
2	**106**	**20**	50	22.5	5.0
3	**111**	**17**	41	26.6	5.9
4	**116**	**13**	32	30.6	6.8
5	**121**	**10**	24	34.2	7.6
6	**126**	**6**	15	38.3	8.5
7	**130**	**3**	7	41.9	9.3
8	**134**	**0**	0	45.0	10.0

In relation to the movements the knob action is the following (difference compared to standard setting):

Location	Handling Procedures	
	ON [s]	OFF [s]
1	–4	+4
2	–3	+3
3	–2	+2
4	–1	+1
5	0	0
6	0	0
7	0	0
8	0	0

1.2.2 Temperature Adjustment Knob

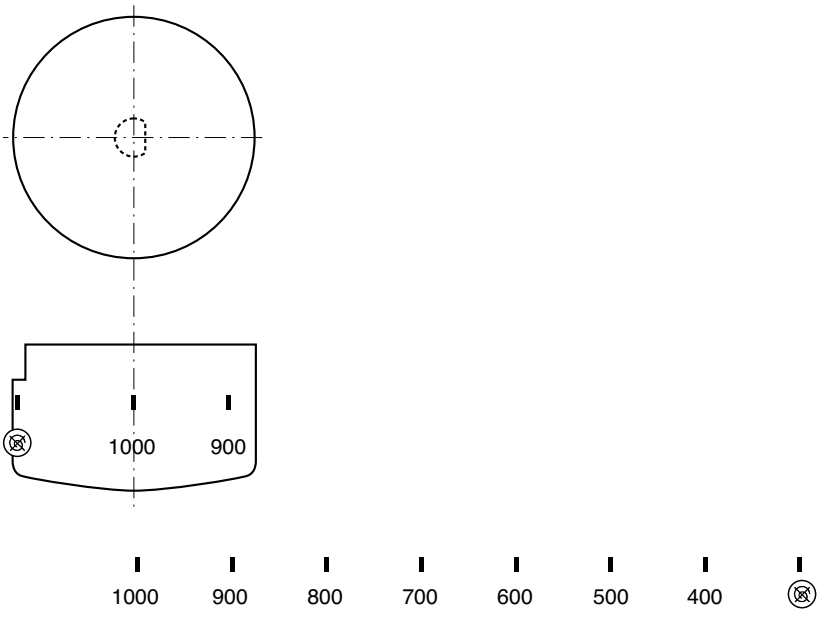
Fig. 4



This knob is used to reduce the programme recommended temperature until giving a cold wash.

1.2.3 Spin Speed Adjustment Knob

Fig. 5



This knob is used to reduce the spin speed, until reaching no spin.

1.3 Buttons

1.3.1 No spin button

By pressing this button the washing machine does not spin, but rotates the basket at moderate speed. It should be used when the garments that are being washed are difficult to iron.

1.3.2 Extra rinse button

This button is used to increase the number of rinses in the programmes for resistant fabrics. It is recommended that this should be used to improve the rinse when the machine has a full load and a lot of detergent.

1.3.3 Stain removal button

By pressing this button the washing machine performs a more intensive wash that improves the effectiveness of liquid additives (see chap. 5 BLEACH - STAIN REMOVAL BUTTON) thus allowing elimination of even the most resistant stains.

1.3.4 Prewash button

This button allows a prewash to be performed in all programmes EXCEPT wool.

N.B. When using this function the bleach cycle cannot be performed (Stain removal button).

1.3.5 Anti-crease button

When this button is combined with programmes for synthetic fabrics and silk/curtains it interrupts the wash programme leaving the garments to soak before draining.

This function is important as it avoids creasing delicate and synthetic fabrics (e.g. when it is not possible to take the laundry out at the end of the wash but only a few hours later). The programme can be completed by excluding the button.

N.B. If the machine is not provided with this button the programme can be completed by turning the selector knob one notch.

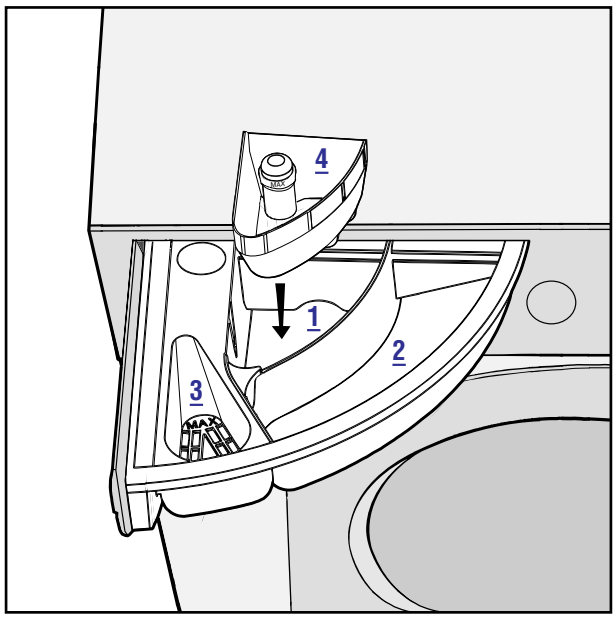
1.3.6 Rapid Button

Press this button to reduce the wash programme duration by about 30%. It cannot be used with special programmes and with those for wool and silk.

1.4 Detergent drawer

The detergent drawer can be opened by rotating it outwards. Pour the detergent and the additive, if any, following the detergent dosage indications.

Fig. 6



Compartment 1

Prewash detergent (powder).

Compartment 2

Wash detergent (powder or liquid).

Compartment 3

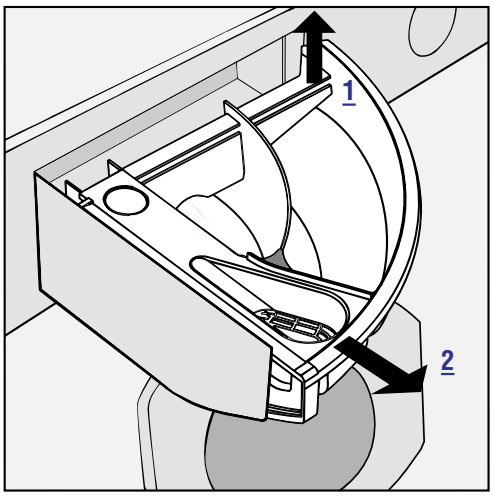
Softeners, …

Compartment 4

Bleach and delicate bleach.

The detergent drawer is extractable. To remove it pull it upwards and then outwards as shown in the following figure.

Fig. 7



2 SPECIAL PROGRAMMES

40° AS 60°

It is a special programme that allows very good washing results to be obtained even at low temperatures.
By setting programme 3 at 40 °C and thanks to a special action of the washing machine and an increase of the washing time, the results will be the same as washing at 60 °C.

N.B. When using this programme the Intensive/Delicate knob is not active.

Daily

This machine has a programme for daily washing.
By setting programme 7 at 30 °C it is possible to wash lightly soiled garments together, even if they are of different types and colours (max 3 KG).
This programme allows savings in time and energy because the cycle lasts about 30 minutes.

N.B. Liquid detergent is recommended.

3 WASH CYCLE PERFORMANCE AND DURATION

Tab. 1 **MODEL AL68XIT**

Performance summary of all the Standard wash cycles

Start Progr.	Cycle	Load kg	Detergent	Wash Dur.	Cycle Dur.	Soiled Garment Reflectance					Wash Water	Total Water	Ratio Wascator	Energy kWh	Wash Class	Energy Class
						Blood	Choc. Milk	Coal Oil	Wine	Total						
1	**90° Cotton**	5 (Cotton)	IEC (134 g)	87	**'147**	'67.4	57.0	39.0	79.4	60.7	15.3	**nd**	**1.09**	**1.57**	**A**	**E**
2	**60° Cotton**	5 (Cotton)	IEC (134 g)	82	**'134**	'62.4	55.8	37.9	76.1	58.1	15.2	**nd**	**1.05**	**0.95**	**A**	**A**
3	**40° = 60°**	5 (Cotton)	IEC (134 g)	108	**'163**	'60.8	56.8	39.0	76.1	58.2	15.4	**nd**	**1.05**	**0.74**	**A**	**A**
4	**40° Cotton**	5 (Cotton)	IEC (134 g)	39	**'95**	'47.1	47.8	31.5	69.3	48.9	15.4	**nd**	**0.88**	**0.50**	**F**	**A**
5	**60° Synth.**	2.5 (Ter/Cot)	IEC (94 g)	61	**'102**	'66.0	56.5	40.4	76.7	59.9	8.5	**35.1**	**1.08**	**0.68**	**A**	**D**
6	**40° Synth.**	2.5 (Ter/Cot)	IEC (94 g)	33	**'73**	'55.9	52.7	34.6	68.9	53.0	9.3	**36.7**	**0.95**	**0.37**	**D**	**A**
7	**30° Daily**	3 (Cotton)	IEC (102 g)	16	**'34**	'35.4	46.7	32.1	61.3	43.9	11.2	**31.2**	**0.80**	**0.21**	**G**	**A**
7	**30° Daily**	3 (Cotton)	Dash liq. (120 g)	16	**'34**	'47.1	48.6	31.6	56.8	46.0	11.2	**31.2**	**0.84**	**0.20**	**G**	**A**
9	**30° Silk**	1 (Ter/Cot)	IEC (120 g)	31	**'54**	'47.5	47.8	32.5	62.0	47.5	20.1	**72.4**	**0.86**	**0.39**	**G**	**F**

Wash cycle performance using the stain button

Start Progr.	Cycle	Load kg	Additive	Wash Duration	Cycle Duration	Soiled Garment Reflectance					Wash Water	Total Water
						Blood	Choc. Milk	Coal Oil	Wine	Total		
1	**90° Cotton**	5 (Cotton)	Ace (150 cc)	96	**'175**	'70.1	68.4	40.3	80.7	64.8	16.2	**74.0**
2	**60° Cotton**	5 (Cotton)	Ace (150 cc)	86	**'160**	'60.7	68.2	37.5	80.1	61.6	14.9	**74.0**
4	**40° Cotton**	5 (Cotton)	Ace (150 cc)	52	**'125**	'50.6	49.4	31.9	78.4	52.6	16.3	**72.4**
5	**60° Synthetics**	2.5 (Ter/Cot)	Ace gent. (150 g)	76	**'134**	'70.1	61.3	41.8	77.1	62.6	9.7	**48.5**
6	**40° Synthetics**	2.5 (Ter/Cot)	Ace gent. (150 g)	47	**'100**	'58.3	55.6	37.0	73.5	56.1	9.4	**47.8**

Wash intensity knob functionality

Start Progr.	Cycle	Load kg	Knob Position	Wash Duration	Cycle Duration	Wash Water	Total Water	Energy kWh
1	**60° Cotton**	5 (Cotton)	1 - Minimum	42	**'94**	'15.0	**nd**	**0.80**
2	**60° Cotton**	5 (Cotton)	5 - Recommended	61	**'113**	'14.3	**nd**	**0.85**
4	**40° Cotton**	5 (Cotton)	1 - Minimum	22	**'74**	'14.5	**nd**	**0.51**
4	**40° Cotton**	5 (Cotton)	5 - Recommended	34	**'107**	'14.5	**nd**	**0.57**
5	**60° Synthetics**	2.5 (Ter/Cot)	1 - Minimum	34	**'70**	'9.1	**38.1**	**0.66**
5	**60° Synthetics**	2.5 (Ter/Cot)	5 - Recommended	51	**'86**	'8.4	**38.3**	**0.70**
6	**40° Synthetics**	2.5 (Ter/Cot)	1 - Minimum	20	**'53**	'7.2	**38.9**	**0.34**
6	**40° Synthetics**	2.5 (Ter/Cot)	5 - Recommended	30	**'65**	'8.5	**38.9**	**0.39**

N.B. In the other models duration of the cycle corresponding to the rapid button is the same as that obtained with the wash intensity knob in position 1.

4 PARTICULAR PHASES

Antishock

In the event that the machine goes to a draining phase (e.g. Spin) and the water temperature is higher than the set limit (e.g. 60°), the machine performs a particular cycle before draining:

e.g.

1. Load 5 litres from Wash SV
2. Move 5" ON, 5" OFF, 25 rpm per 4'
3. If Temperature > Limit go to 1 otherwise go to 4
4. Drain + Spin

Antifoam

If there is too much foam in the machine during the spin it will carry out the following cycle:

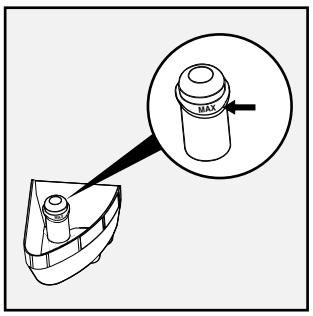
1. Stop for 2'
2. Load 10 litres from Wash SV
3. Move 5" ON, 5" OFF, 25 rpm per 2'
4. Restart the Spin that was interrupted at the beginning

This procedure is repeated until the foam problem is solved.

5 BLEACH - STAIN REMOVAL BUTTON

In case of bleaching it is necessary to insert an extra chamber **4** in the detergent drawer compartment **1**; when pouring the bleach be careful not to exceed the max level indicated in the following figure.

Fig. 8



This washing machine is provided with a special function TO BE USED FOR BLEACHING (Stain removal button).

When bleaching is carried out **separately** pour the bleach into the supplementary chamber **4**, press the stain removal button, switch the machine on and turn the selector to the rinse position after programme 4.

When bleaching is carried out **during a normal washing cycle**, pour the detergent and the additives into the appropriate compartments, press the stain removal button, switch the machine on and select the desired washing cycle.

N.B. Bleaching is not possible with the silk programme.
When the bleach chamber is used it is not possible to use the prewash function.

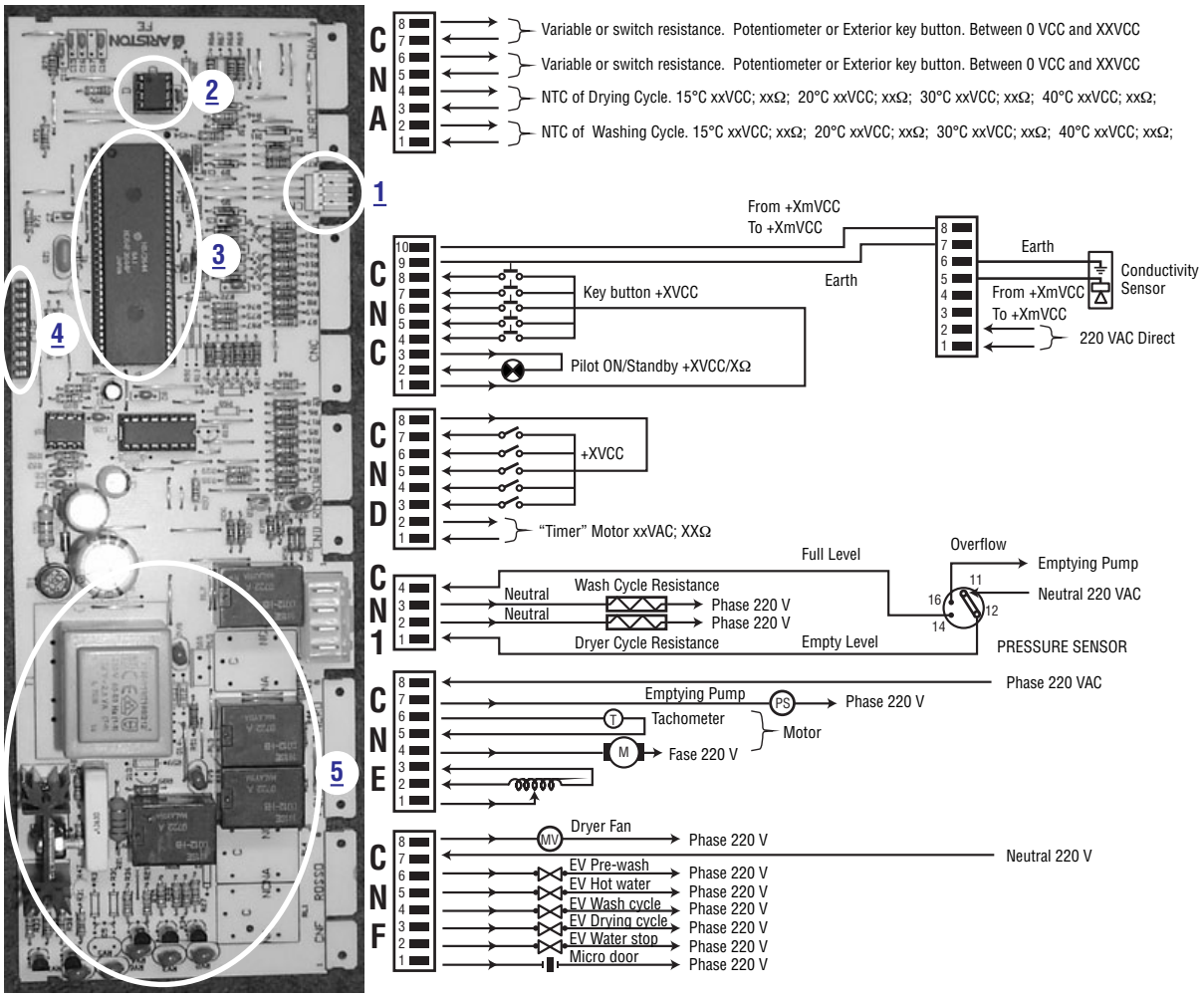
6 ELECTRONIC CARD

The card inside the machine:

Fig. 9

1 The position of the card inside the machine is the usual electronic module position

Fig. 10



1 Digital Connection WRAP
2 EEPROM
3 Microprocessor
4 Serial Connection
5 Power Zone

Tab. 2 **NTC temperature positioned in tub valid for washing cycle and wash dry cycle**

CHARACTERISTICS		
T° (°C) Agitated Water	R (Ω)	
	Min B = 4263	Max B = 4200
25	18.80 K	20.00 K
80	2.03 M	2.23 K

Tab. 3 **NTC temperature positioned on the washing cycle resistance**

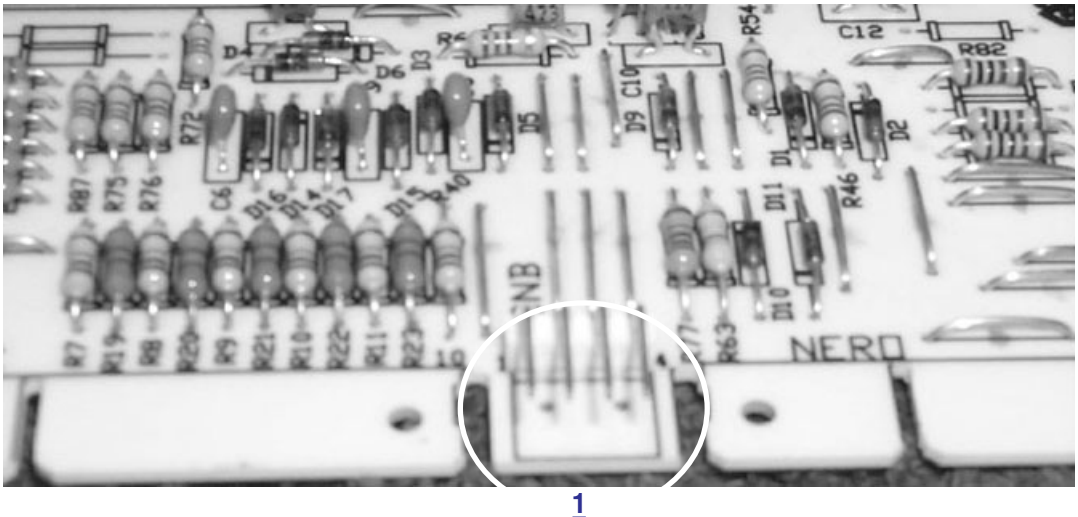
T° (°C) Agitated Water	R (Ω)	
	R. min	R. max
25 °C	19600	20400
30 °C	15710	16470
60 °C	4737	5149
80 °C	2362	2622
90 °C	1713	1919
100 °C	1261	1427

Card Replacement

The card is a neutral element, in the sense that the component is not tied to a particular line graph or a particular machine.

The card is customised using the EEProm, so that should it be necessary to replace the card, the EEProm must be removed from the old card and the same EEProm will have to be fitted on the new card before remounting it in the machine.

Fig. 11



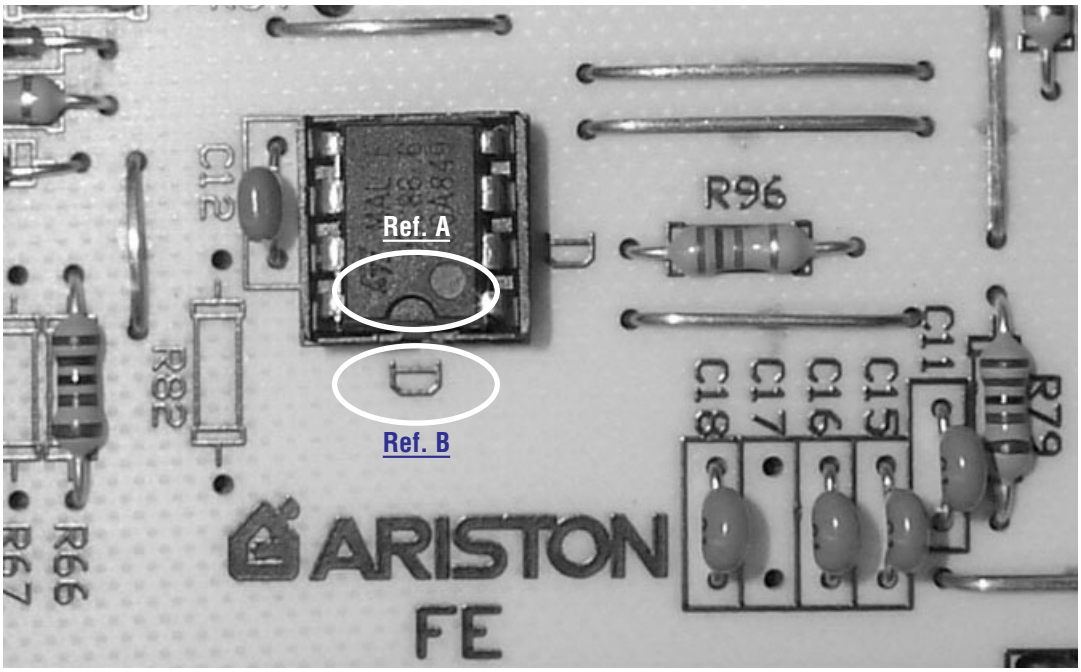
1

1 Digital Connection

6.1 Removing the EEprom

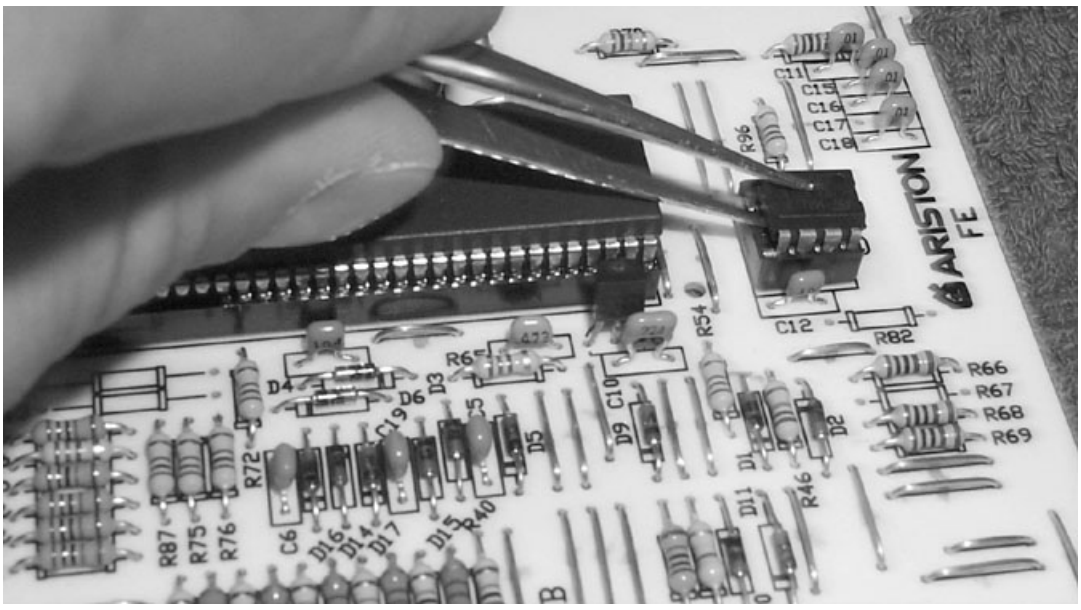
First of all, pay attention to which side the EEProm is mounted. There are two reference marks, **Ref. A** and **Ref. B**, that must be aligned when the EEProm is re-mounted.

Fig. 12



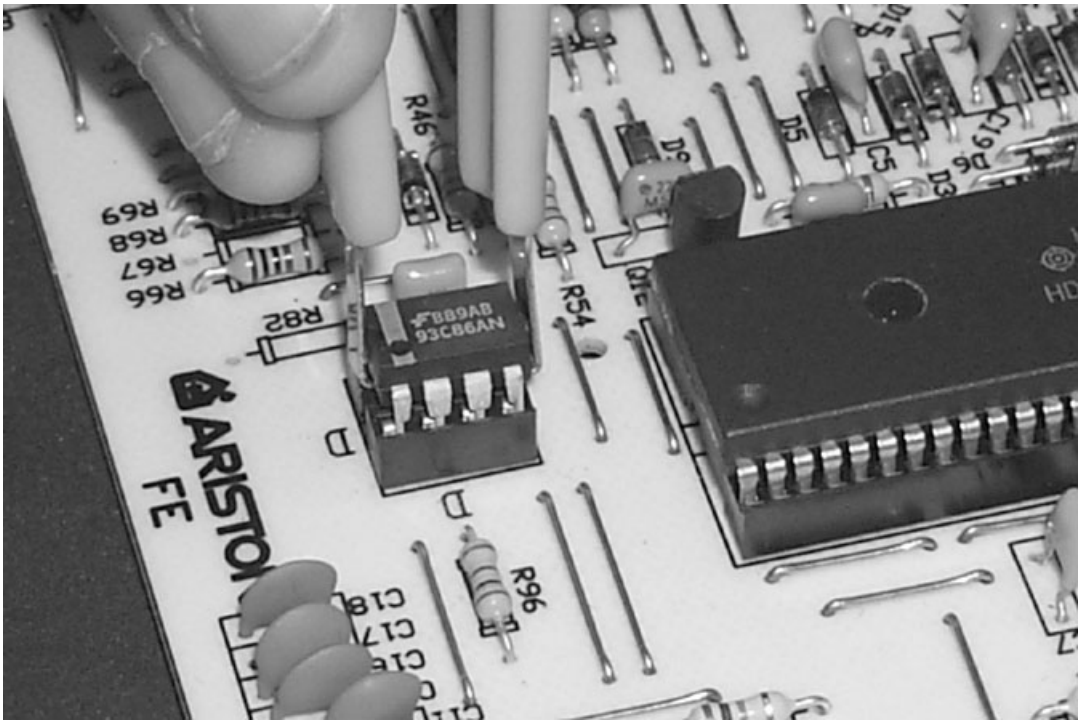
The EEProm is extracted with a specific device. The EEProm must be extracted as shown in the figure.

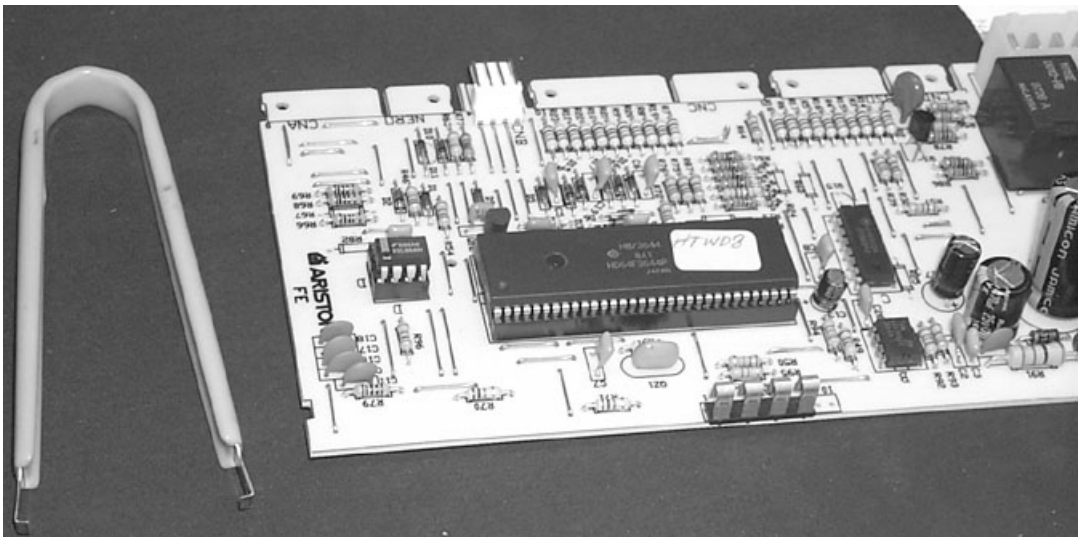
Fig. 13



The extracted EEProm must be remounted as shown in the figure, always using the specific device.

Fig. 14

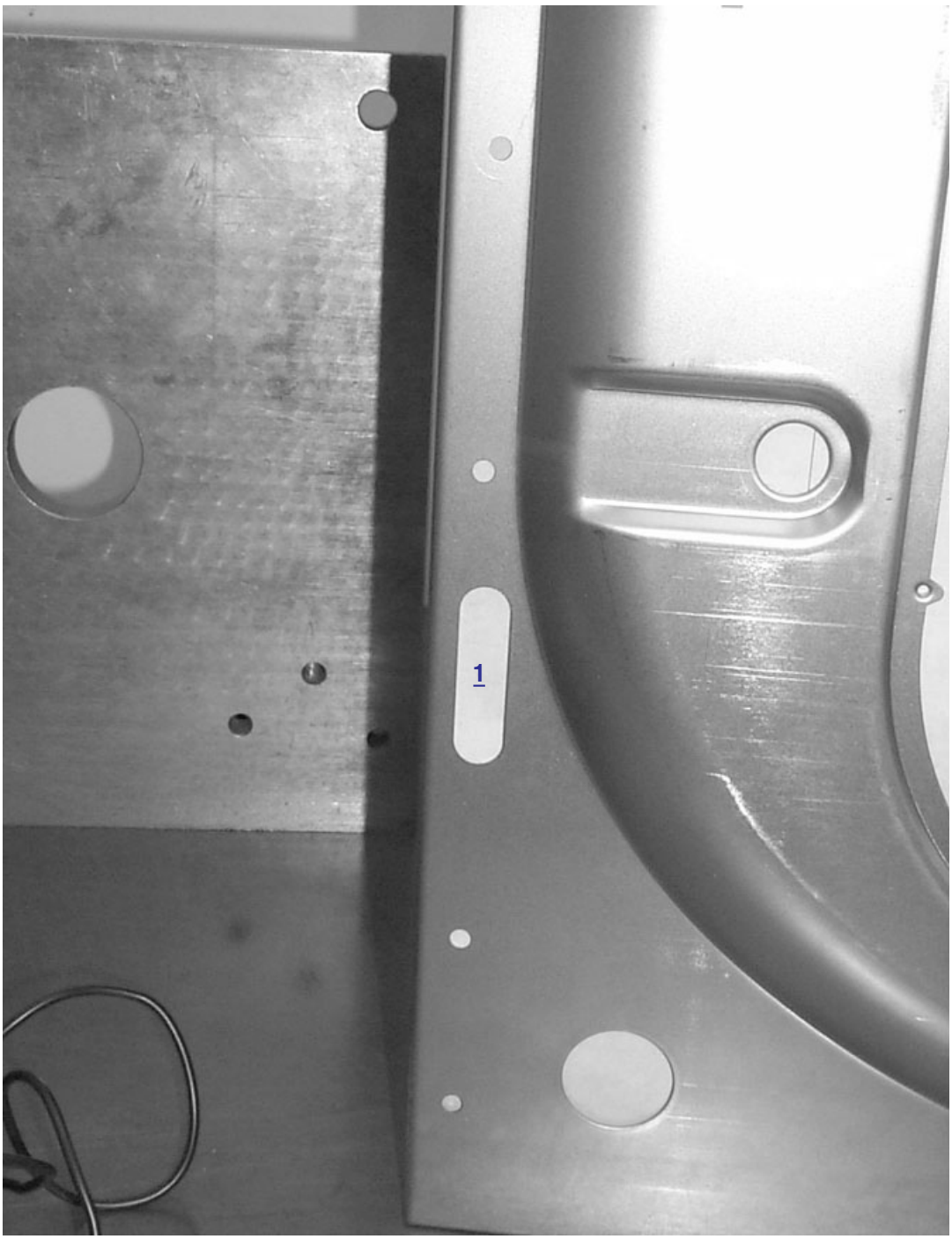




6.2 The Hardware key

The hardware key is a tool that puts the pc into contact with the machine or that forces the machine to perform the self-test cycle (the operation must be performed by turning the small switch on the device to TEST for at least 5"; the machine carries out a set cycle described in position 35 of the line graph).

Fig. 15



1 Slot for introduction of the HW key

Fig. 16

Fig. 17

6.3 Autotest

Should the washing machine not be found to be in error, it is possibile to check by means of a Hardware key and using a specific autotest cycle, activated as follows:

1. Take LB to reset (coloured ball) for at least 5" and wait for the led to flash in reset mode
2. Insert the hardware key through the serial socket
3. Turn the switch on the serial key to Test
4. Wait for the hatch to lock and the switch to start turning.
5. Turn the switch on the serial key to PC

The machine will carry out the following cycle:

- The switch will turn to position 0 (12h if the machine has a delay, programme 1 if the machine does not have a delay)
- Wash solenoid valve loads for approx. 10"
- Pre-wash solenoid valve loads for approx. 10"
- Wash and pre-wash solenoid valves load at the same time until the pressure switch is complete
- Heats up to 30° and moves the motor in both directions
- Moves the switch forward by 9 turns
- Unloads and spins
- The switch will turn to one of the reset positions
- STOP

The test cycle can be repeated as many times as necessary using the same method.

The test cycle can be stopped by turning the switch to one of the reset positions.

6.4 List of Faults LVB 2000 and procedures to follow to solve the problems

For each fault the procedure must be followed step by step in order; obviously once the problem has been solved, the procedure must be stopped.

F01: Triac Short Circuit

1. Check effectiveness of contacts on the CNE connector card
2. Check for any water leaks that could reach the CNE contact
3. Check motor terminal board(for any problems due to attacks by chemical work residues on the contacts)
4. Replace card

F02: Motor shutdown, Tachymeter in Short/Open

1. Check the effectiveness of contacts on CNE connector card
2. Overhaul motor connector
3. Check continuity of CNE/Motor connector
4. Check motor winding
5. Check Tachymeter winding
6. Replace card

F03: Detection of NTC Open/Short Circuit

1. Check the effectiveness of contacts on CAN connector card
2. Check NTC wiring
3. Check continuity of wiring in CNA/NTC connectors
4. Replace NTC
5. Replace card

F04: Detection of Overflow and Pressure Switch Vacuum at the same time (Pressure Switch blocked on Vacuum)

1. Check the effectiveness of contacts on CN1 connector card
2. Overhaul Pressure Switch contacts
3. Check continuity of CN1 wiring/Pressure switch
4. Replace pressure switch
5. Replace card

F05: detection of Blocked Pump or Pressure Switch stuck on Vacuum

1. Check the effectiveness of contacts on the CNF connecter card (pump connector)
2. Overhaul the Pump Connector
3. Check Pump Filter
4. Check Pump winding
5. Change pump
6. Replace card

F06: Switch error (no code is found)

1. Check the effectiveness of contacts on the CND connector card(switch connector)
2. Check effectiveness of Switch connector
3. Check continuity of Switch/CND
4. Check motor switch
5. Replace switch
6. Replace card

F07: Stuck resistance relay

1. Check effectiveness of contacts on CN1 connector card
2. Overhaul CN1
3. Overhaul resistance connection
4. Replace card
5. Overhaul resistance connection
6. Replace Card

F08: Detection of Lack of Resistance or Pressure Switch Stuck on Full

1. Check effectiveness of contacts on CN1 connector card
2. Overhaul Resistance Connector
3. Overhaul Pressure Switch Connector
4. Replace resistance
5. Replace Pressure Switch
6. Replace Card

F09: Detection of Machine Setup Error

1. Check Microprocessore Version
2. Request Eeprom Spare Part stating Microprocessor version

F10: Detection of Pressure Switch Vacuum and Full or Pressure Switch neither Vacuum nor Full

1. Check the effectiveness of contacts on CN1 Connector Card
2. Overhaul Pressure Switch Wiring
3. Check continuity of CN1/Pressure Switch
4. Replace Pressure Switch
5. Replace card

F11: Detection of Absence of Pump Feedback

1. Check the effectiveness of contacts on the CN1 Connector Card
2. Check the effectiveness of contacts on the CNF Connector Card
3. Overhaul Pump Connector
4. Overhaul Pressure Switch Connector
5. Check pump Winding
6. Replace pump
7. Replace Card

F12: Lack of Display card-Main Card Communication

1. Check the effectiveness of contacts on CNC Connector Card
2. Overhaul 8-way connector on Display card
3. Check continuity of CNC-CN 8 way connector
4. Replace Main Card
5. Replace Display Card

F13: NTC wiring harness disconnected from the dryer system

1. Check the efficiency of the terminals on the CNA connector board
2. Check NTC wiring harness
3. Check the wiring harness continuity of the CNA / NTC connectors
4. Replace NTC
5. Replace terminal board

F14: Dryer connector open or not connected

1. Check the efficiency of the terminals on the CNI connector board
2. Overhaul CN1
3. Overhaul connector connection
4. Replace the board

F15: Dryer connector is always active

1. Check the efficiency of the terminals on the CNI connector board
2. Overhaul connector connection
3. Overhaul the pressure sensor connection
4. Replace the connector
5. Replace pressure sensor
6. Replace the board

N.B. From Fault F01 to fault F11
These are shown by LEDs in stand by/on in LVB2000 machines Ariston/Indesit.

From fault F01 to fault F12
These are shown in a display located on the instrument panel of LVB2000 machines Evolution Indesit.

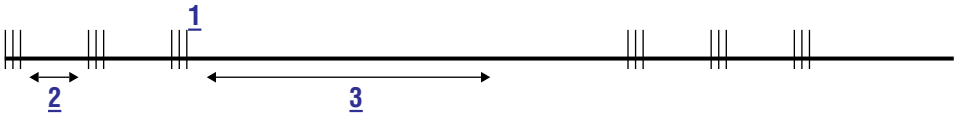
From fault F01 to fault F15
Are those that are indicated according to the version via LED stand by/on or display positioned on the Wash Dry machine Ariston/Indesit panel.

6.4.1 Reading the Fault

The fault on the machine is shown by:

1. The continuous rotation of the switch
2. The activation for the first 4", of the solenoid valve and discharge pump
3. The hatch is blocked
4. The LED flashes:
   the number of flashes is equal to the fault code; l code must be read as follows:
   - Each rapid flash (2/3 very rapid flashes of the LED) represents a code value.
   - The fault code is assessed counting the number of flashes in a time of _ seconds one from the other.
   - The count is stopped when the LB waits for approx. 8/9" between two flashes.
   - The procedure is repeated cyclically by the machine.

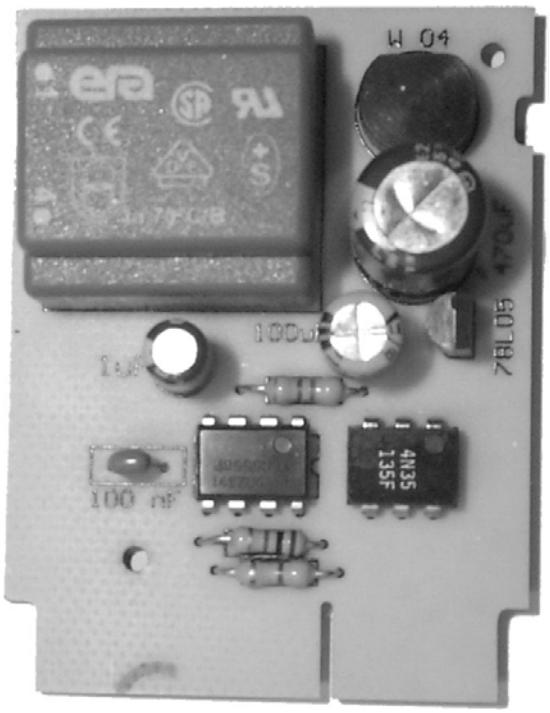
Fig. 18 **Esp. F03**



1 2/3 Rapid Flashes = 1 code
2 Approx. 4"
3 Approx. 8/9"

7 CONDUCTIVITY SENSOR

Fig. 19



8 DISMANTLING AND REPLACING COMPONENTS

CAUTION

When dismantling/replacing the tub components be careful not to lever on the plate tub as it could be damaged irreparably.

8.1 Top

The top is snap fitted to the control panel at the front and is secured to the back of machine with two screws from behind.

Fig. 20

To dismantle the top remove the screws and then slide it horizontally backwards.

8.2 Microdelayer

1. Using a screwdriver, remove the ring fixing the gasket to the casing

Fig. 21

2. Detach the door seal

Fig. 22

3. And with a Phillips screwdriver remove the two screws and replace the component

Fig. 23

4. Refit the door seal on the machine and replace the ring fixing the gasket to the casing

8.3 Control panel

1. Remove the top
2. Extract the component knobs and the programme selector knob lid
3. Remove the internal screw of the programme selector knob
4. Extract the programme selector push-push mechanism
5. Open the detergent drawer and press on the point indicated in the photo to release it

Fig. 24

and then extract the detergent drawer

Fig. 25

6. Remove the two hopper screws and the two control panel screws

Fig. 26

7. With a Phillips screwdriver dismantle the potentiometers

8. With a screwdriver lever to release the switch

Fig. 27

By pulling the switch release it from the button
Then remove the ON/OFF indicator and the micro opening indicator

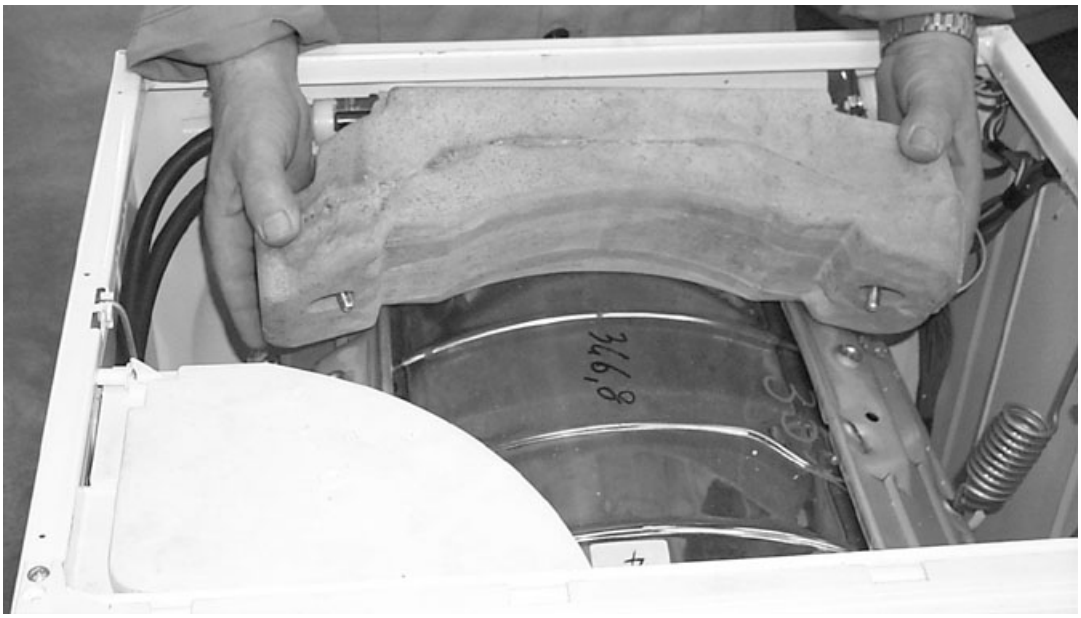
9. Extract the programme selector by removing the three screws that secure the bracket to the control panel, and recover the buttons that will be used in the new control panel

To reassemble, perform the above operations in reverse order.

8.4 Top Counterweight

With a 13 mm hexagonal wrench remove the two screws and extract the counterweight.

Fig. 28



8.5 Front counterweight

After extracting the swing element from the casing (see dismantling the TUB CROSS) remove the 8 screws.

Fig. 29

and extract the counterweight.

Fig. 30

Should it be difficult to extract, lever it with a screwdriver in correspondence with the anchor points of the counterweight to the tub.

8.6 Driven Pulley

1. Remove the back panel
2. Remove the drive belt
3. Remove the screw on the pulley with a TORX T40 wrench, by blocking the pulley rotation movement

Fig. 31

Bearing in mind that the screw was fixed originally using a sealing material, it might be difficult to release it.

4. Lever with two screwdrivers and extract the pulley

Fig. 32

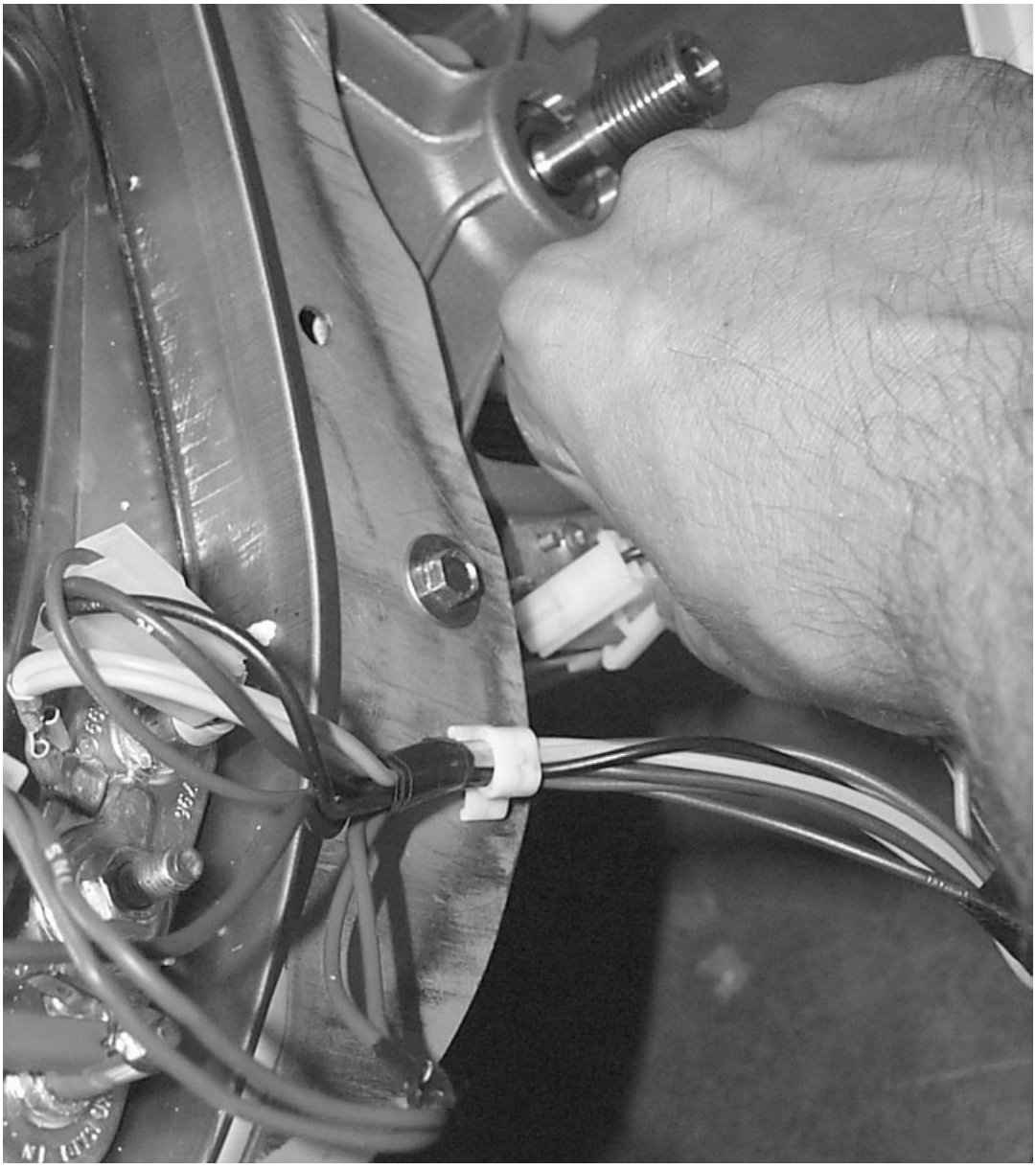
In order to ensure that the screw is properly locked it is advisable to apply a drop of Loctite 270 (cod. 001109) on the thread.

Once it is fixed thoroughly wait for 3 hours before using the washing machine.

8.7 Engine

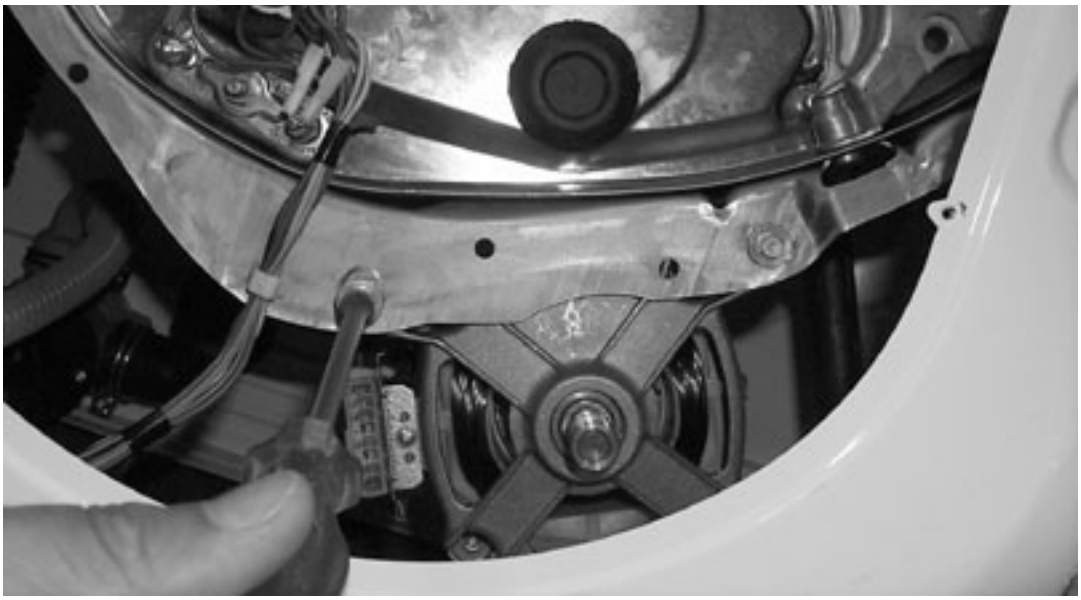
1. Remove the back panel
2. Tilt the machine forwards and lean it in a stable manner. Be careful not to damage the electrical components on the control panel or the microdelayers
3. Dismantle the drive belt
4. Disconnect the motor from the wiring by extracting the terminal board and disconnect the earth wire

Fig. 33



5. Remove the two 8 mm self-threading hexagonal screws.

Fig. 34



6. Lower the motor and push it towards the back of the machine to extract it

Fig. 35

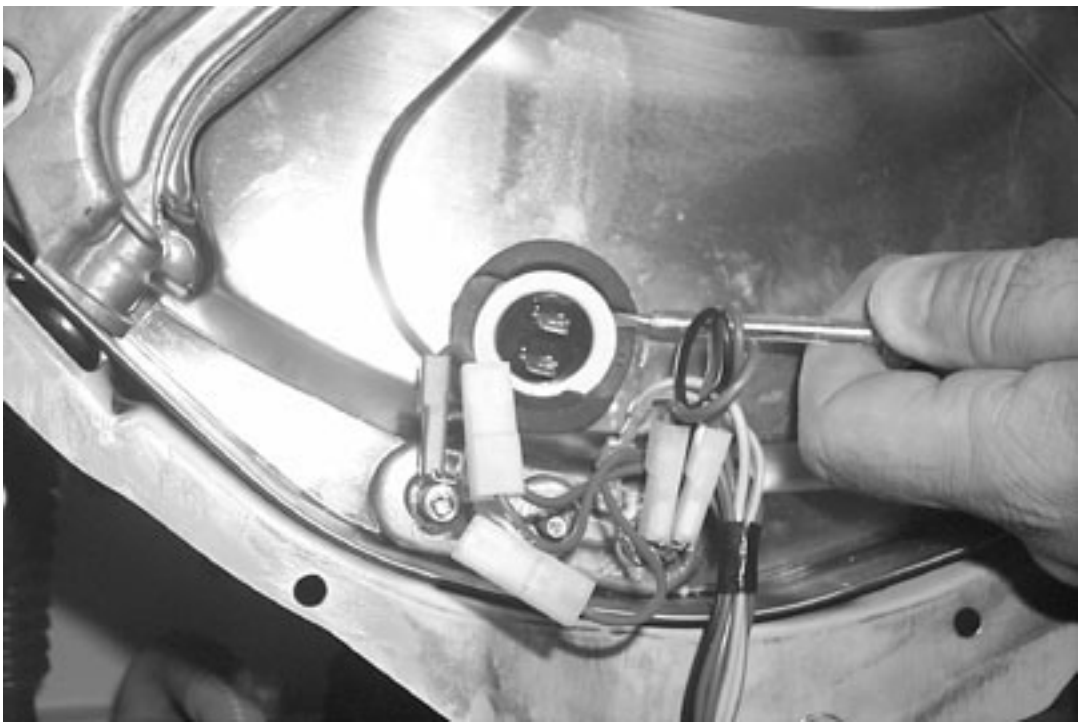
Recover the three rubber elements and the 2 plastic supports that will be used for the new motor.

To reassemble, perform the above operations in reverse order.

8.8 Temperature Probe

1. Remove the back panel
2. Extract the faston
3. Extract the probe with a screwdriver

Fig. 36



8.9 Programme Selector

1. Remove the TOP
2. Dismantle the knob and the push-push mechanism by following the operations in paragraph 8.3 Control panel
3. Disconnect the programme selector terminal board
4. Locate the programme disk as shown in the photo

Fig. 37

and press the clamp as shown in the photo, then slide the selector upwards.

5. Finally, extract the selector by pulling it towards the inside of the machine

   When remounting the selector make sure that the clamping guides are correctly aligned with the programme selector plate support as shown in the following photo.

Fig. 38

To complete assembly perform the above operations in reverse order.

8.10 Door Seal

1. Prize off the front seal ring by inserting a small screwdriver between the ring and the seal and using it as a lever

Fig. 39

2. Free the seal from the machine and push it towards the inside of the basket
3. Tilt the machine backwards and lean it on a stable support
4. Release the door ring from the door opening on the casing, using the usual thin-nose pliers (cod. 57902) (see Fig. 40 and Fig. 41)

Fig. 40

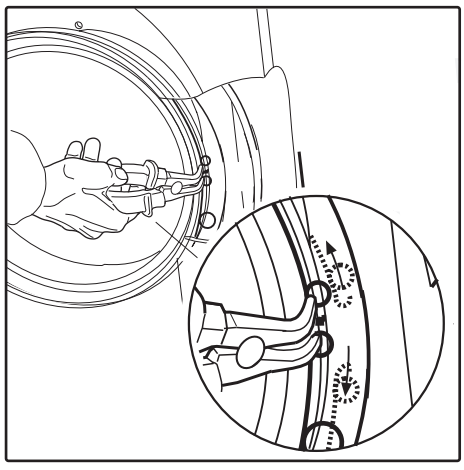
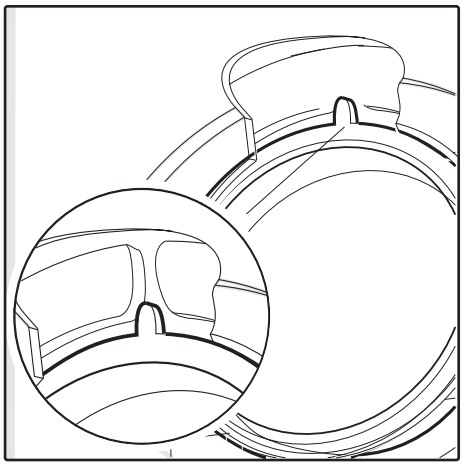


Fig. 41



5. Remove the seal

To mount fit the seal onto the lip of the tub lid, checking that the seal is located correctly. In particular the small tongue must be located vertically at the top.

8.11 Module

1. Remove the back panel
2. Remove the screws fastening the module to the casing and extract the module
3. Disconnect all connectors

8.12 Door Handle

1. Remove the screws fixing the door frame and counterframe and separate them.
2. Extract the handle support from its housing
3. Replace the handle

To replace, perform the above operations in reverse order.

8.13 Drainage Pump

1. Lever off the base using a screwdriver on the three fixing points as shown in the following photo

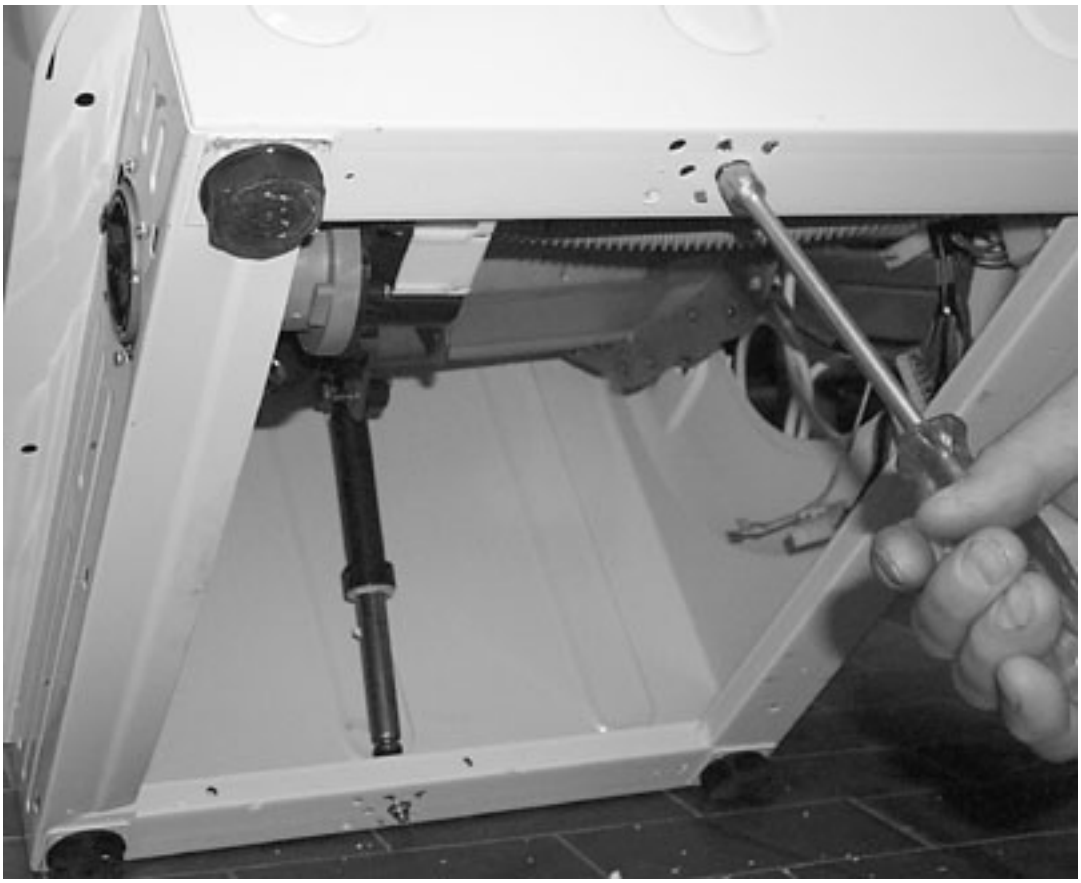
Fig. 42

2. Remove the 4 screws (or if only 1 screw is fitted, remove it and then rotate the pump body)
3. Unhook the pipes
4. Replace the pump

8.14 Shock absorbers

1. Lean the machine on one side with care
2. With a 10 mm wrench completely unfasten the nut that fixes the shock absorber to the casing

Fig. 43



3. Push the shock absorber on the rod until it comes out of the casing
4. With 17 mm and 15 mm wrenches, remove the screw securing the shock absorber to the group and extract it.

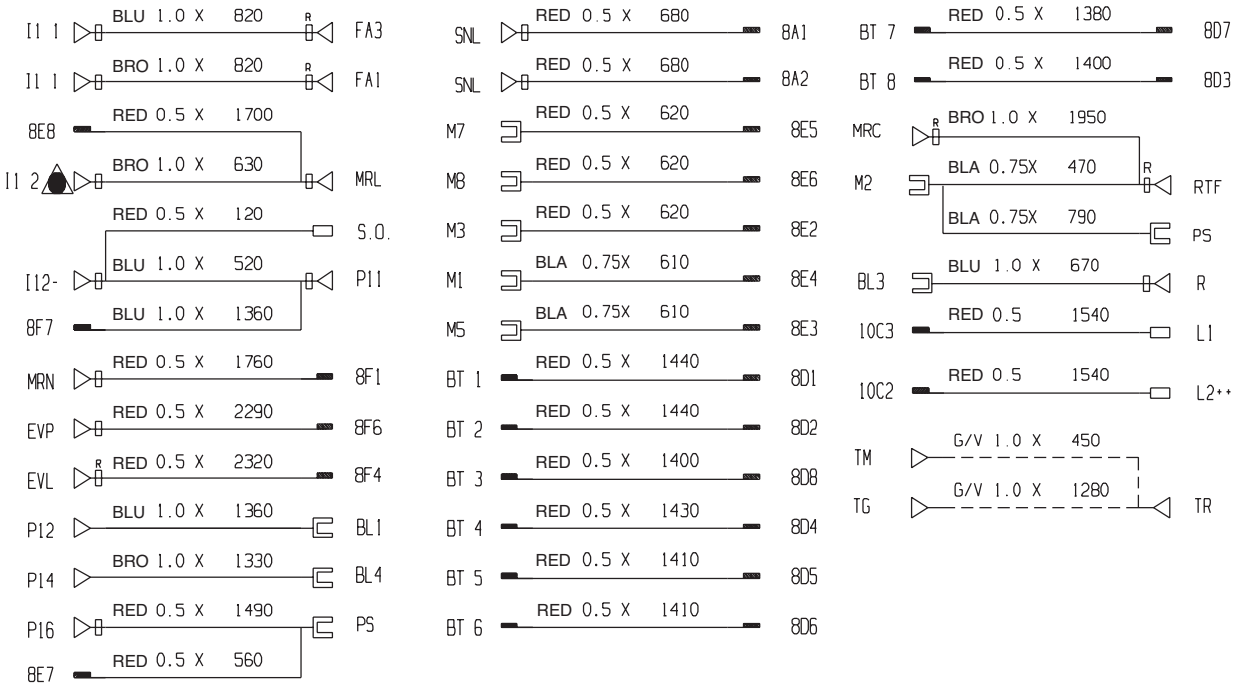
To mount the new shock absorber perform the above operations in reverse order.

8.15 Enlarged Wash Dry

N.B. The new W&D has been importantly modified in relation to the positioning of the vapour filter, that in the preceding model was positioned inside the tub and therefore difficult to reach in servicing, whereas in the new models the vapour filter has been positioned between the tub and the condenser, thereby simplifying maintenance and servicing interventions.

Fig. 44 **Electrical Connections Models AL68XIT, AL89XIT and AL109XIT**

CE006000



Key to Wiring Diagram Models AL68XIT, AL89XIT and AL109XIT

AQS	Water Stop Solenoid Valve
B	Buzzer or Door Lock
BF	Terminal Board Contacts, fan motor and Drying Resistance
BP	Door locking
C	Capacitor
CA	Capacitor
DV	Two-way switch
EF/CL	Cold water/bleach solenoid valve
EF/L	Cold water/wash solenoid valve
EF/P	Cold water/prewash solenoid valve
ER	No heating element
ET	No Thermostat
EV	Solenoid valve
EVA	Drying solenoid valve
EVC	Warm water solenoid valve
EVF	Cold water solenoid valve
EVL	Wash solenoid valve
EVP	Prewash solenoid valve
FA	Radio interference suppressor
FD	Delicate drying thermostat
FE	Energetic drying thermostat
FRT	Thermofuse heating element
I	Reverser
I1..2..3..	Switches/two-way switches
IA	ON/OFF
IC	NC switch / 1/2 load
ID	No Spin switch
IE	Hydro-eco or NC switch
IF	Spin reduction switch
IP	Door switch
IR	Line switch
IS	Hydro-stop
L	Line or Indicator
LB	Low level
LN	Normal level
LS	Indicator light
M	Mass-earth symbol or drying Motor
MC	Spin Motor or Spin Winding
MI	Induction motor
ML	Wash Motor or Wash winding
MO	Junction block
MP	Door Microswitch
MR	Microdelayer
MT	Timer Motor
MV	Fan Motor
MV -Ras	Drying Fan Motor (RA)
Mzbn/M	zbn timer motor
N	Neutral or Terminal board
NC	No spin

P	Pressure switch
P1	1st level pressure switch
P2	2nd level pressure switch
PA	High speed potentiometer
PB	Low speed potentiometer
PL	Pure wool
PM	Motor thermal protection
PR	Timer programmer or Pressure switch
PS	Drainage pump
R	Heating resistor
Ras/RA	Drying resistor
RE	Relay
RR	Heating Element
RV	Fan-coil speed regulator
S	Indicator lamp
SL	Line indicator
SO	Door indicator
SR	Heating indicator
ST	Temperature selector or Stop with water
SV	Spin speed selector
T	Timer contacts
TA	Drying timer contacts
TB	Low temperature thermostat
TC	Cross earth
TFL	Flange earth
TG	Main earth
TH	Thermostat
TH1	1st temperature thermostat
TH2	2nd temperature thermostat
TH3	3rd temperature thermostat
THF	Operation thermostat
THR	Adjustable thermostat
TM	Motor earth
TMB	Base unit earth
TMP	Motor thermoprotection
TMS	Thermostop
TP	Thermoprotetion or Pump earth
TPS	Drainage pump earth
TR	Heater element earth
TS	Safety thermostat or Support earth
TT	Earth Timer
TTH	Thermostat earth
TV	Tub earth
ZBN	Timer

Fig. 45 **Functional Diagram Model AL68XIT**

SE025800

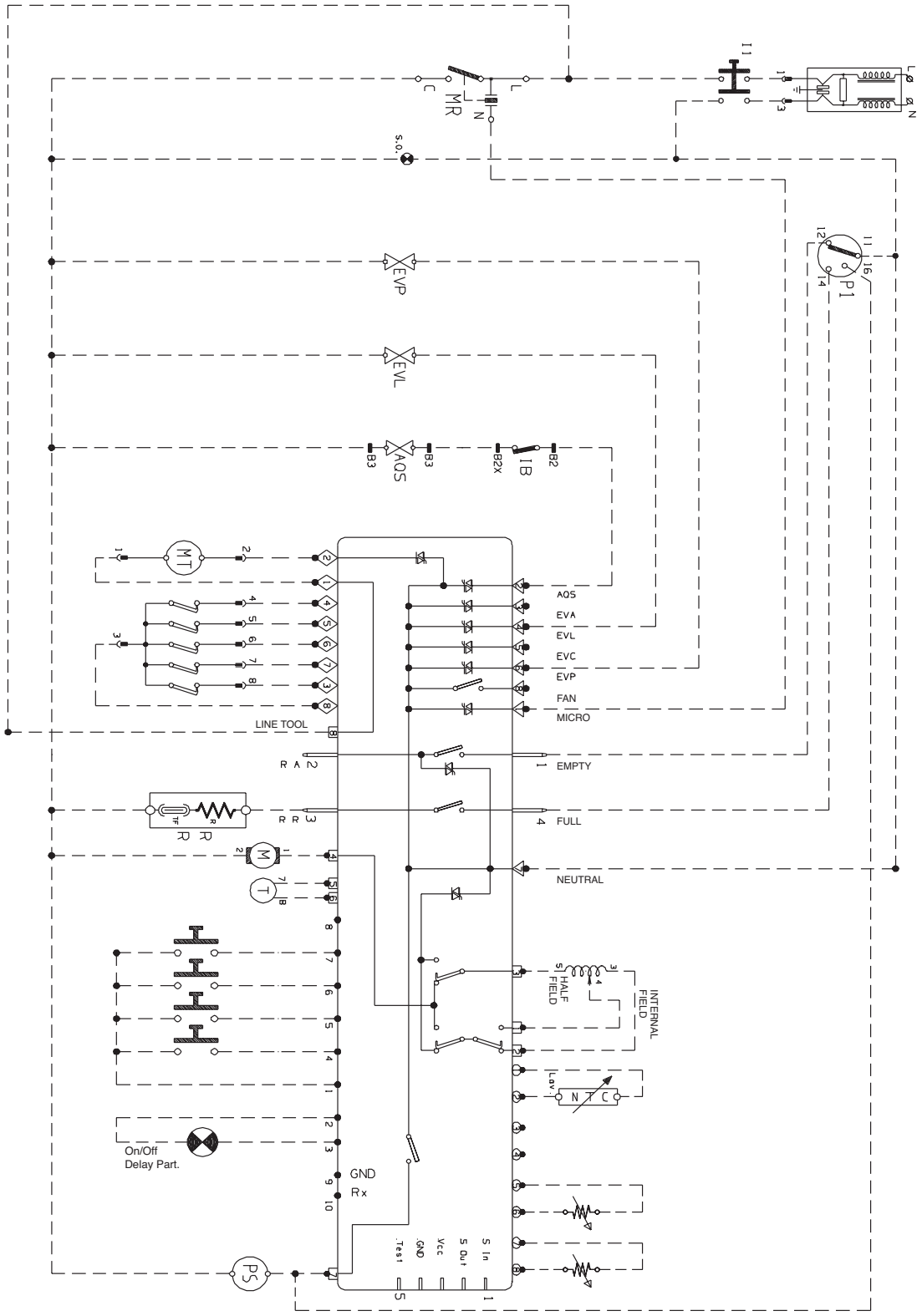


Fig. 46 **Functional Diagram Models AL89XIT and AL109XIT**

SE025900

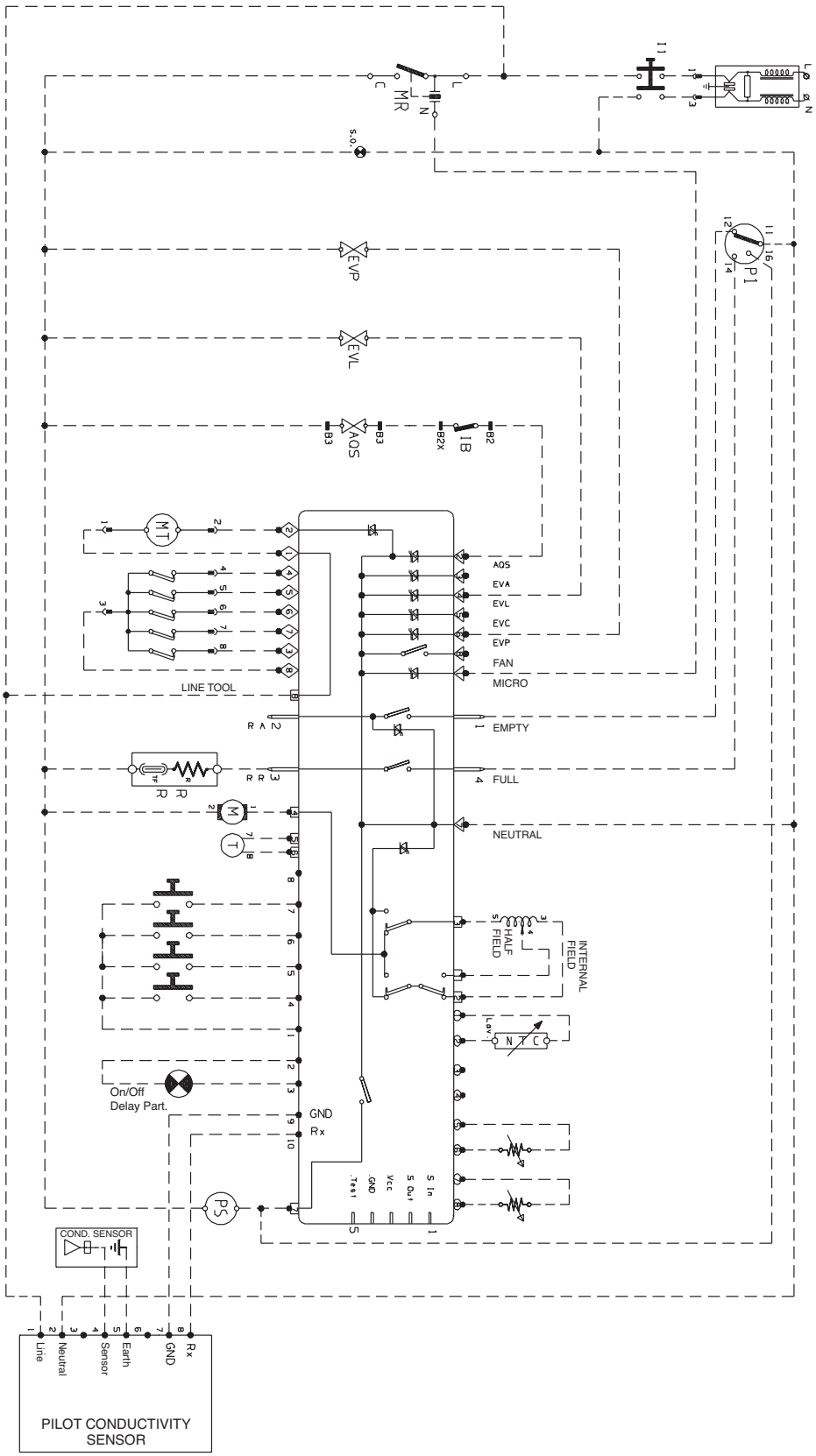
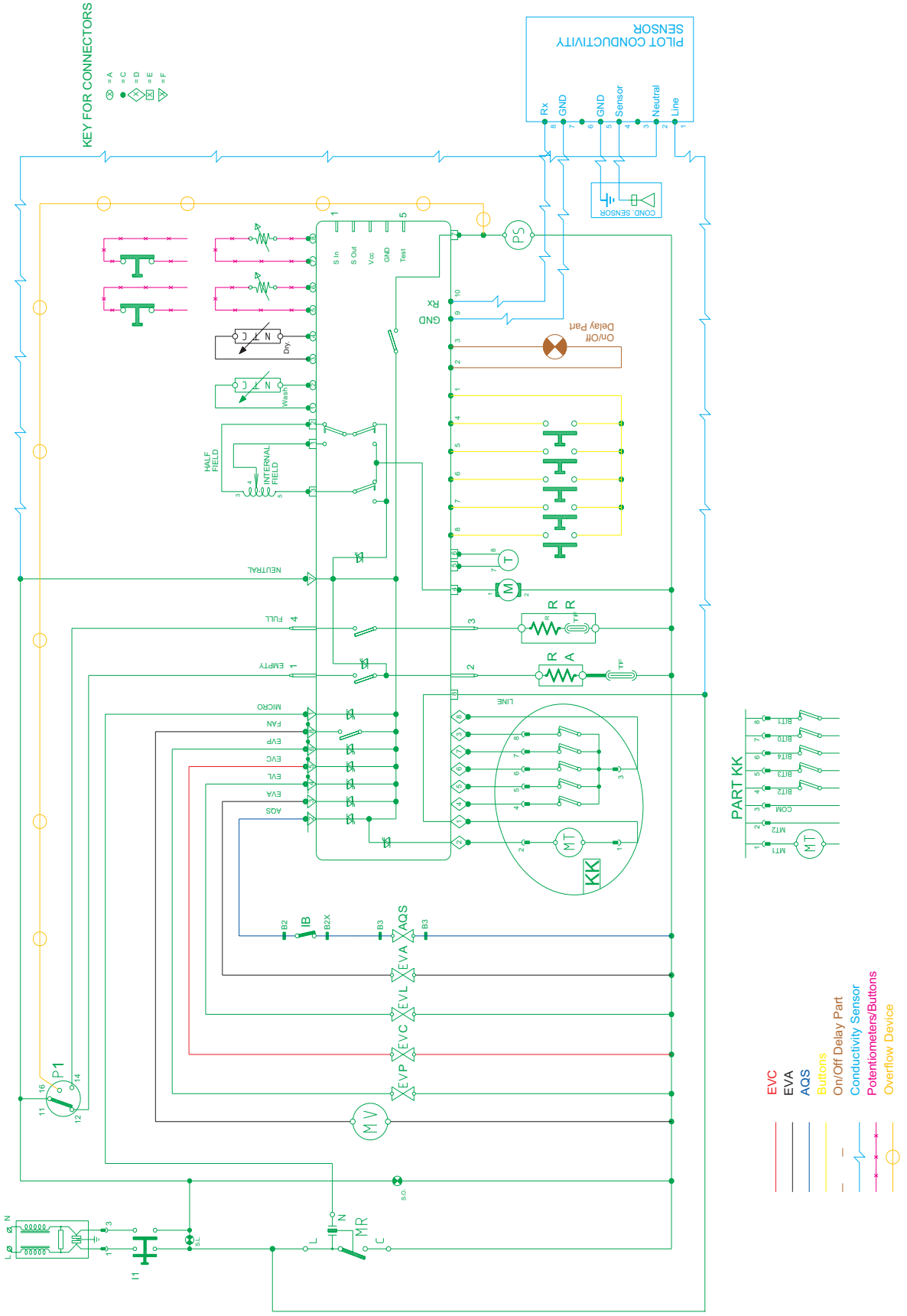


Fig. 47 **Operation Chart LVB2000 Models with Hybrid Timer**



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