

New Moffat Front Load Washer **MCCH6110H**

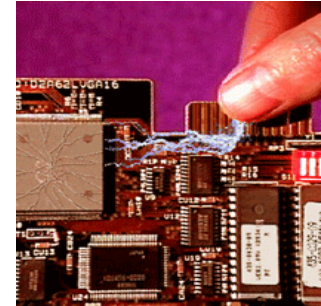


mabe

O7-MAN-AW-02



SAFETY FIRST



IMPORTANT SAFETY NOTICE

The information in this presentation is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING



ELECTRIC SHOCK HAZARD

**Disconnect the electrical power before servicing any components.
Failure to do so can result in death or electrical shock.**

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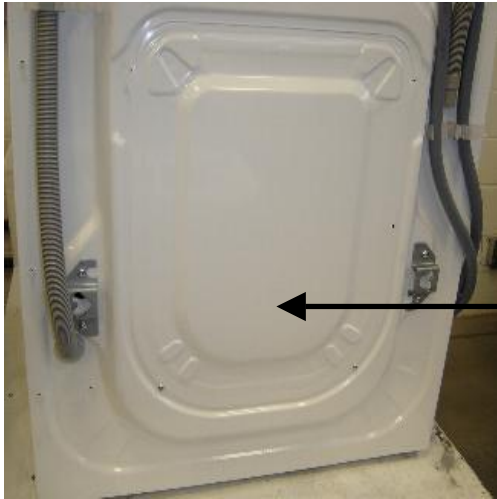
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Features

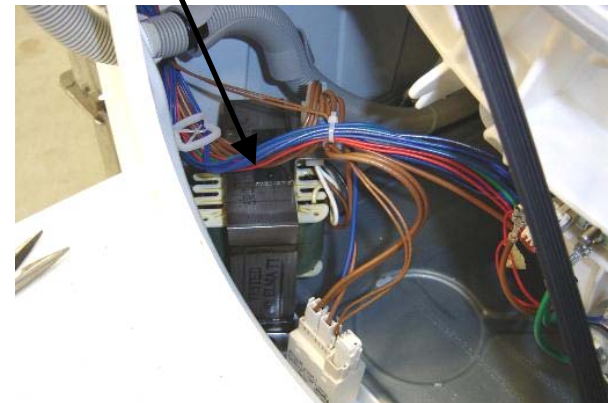
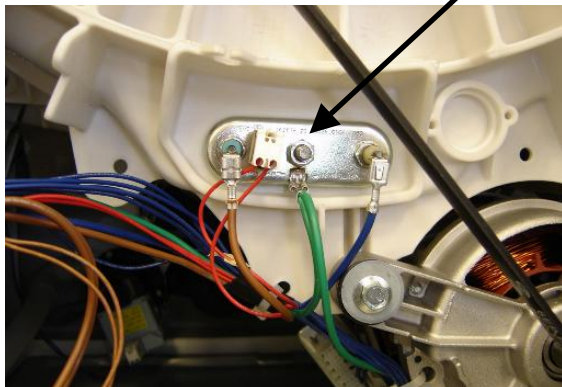
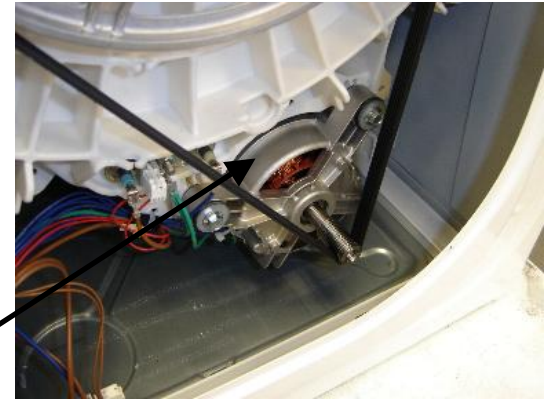
- 2.4 cubic foot capacity (11 cycles)
- Automatic end of program warning
- Short wash cycle
- 1300 W heater
- 13 inch door opening

All electrical components operate on 240 volts, there is a 120 volts transformer which increases to 240 volts.

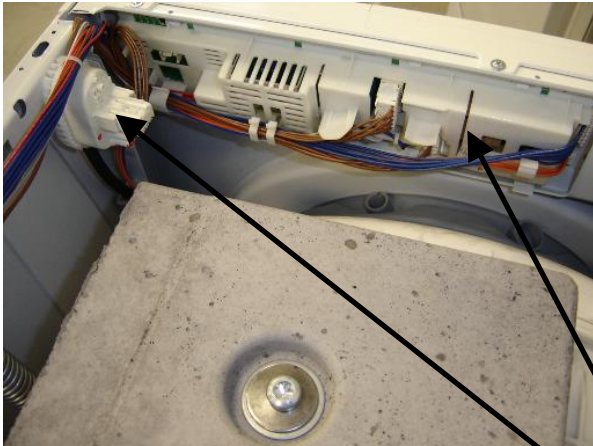
Rear access panel



When the **rear access panel** has been removed, you can access the **motor**, the **heater** and the **transformer**.

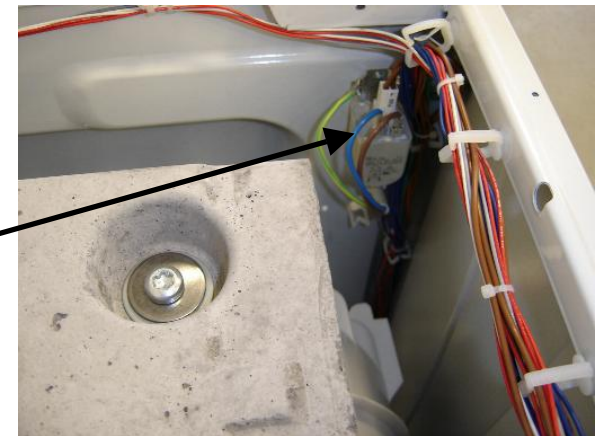
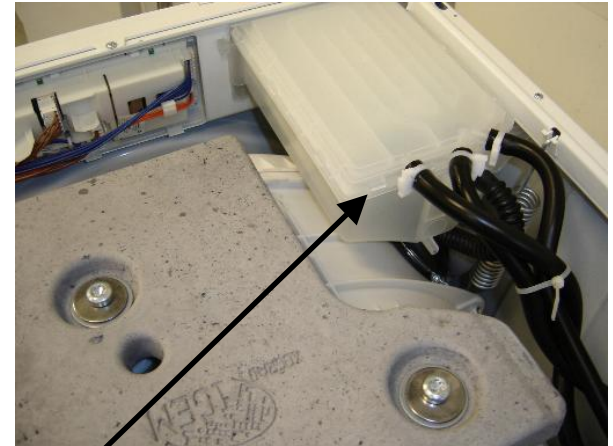


Top access panel



The top is held by two screws at the rear and once it is removed you have access to the

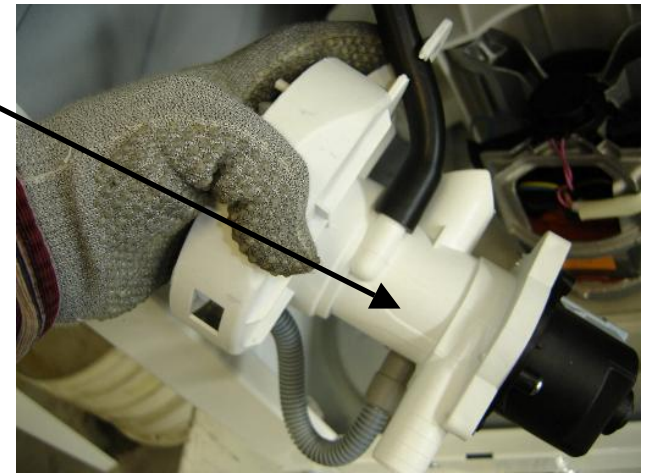
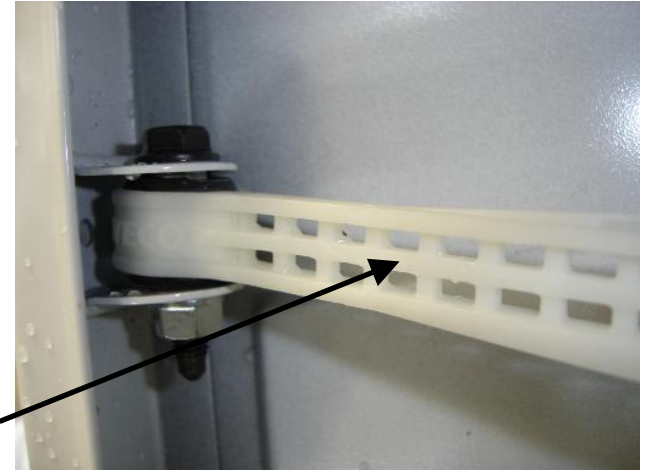
electronic control, to the **pressure switch**, to the **detergent dispenser**, to the **water valves** and to the **electrical entrance filter**.



Bottom access panel

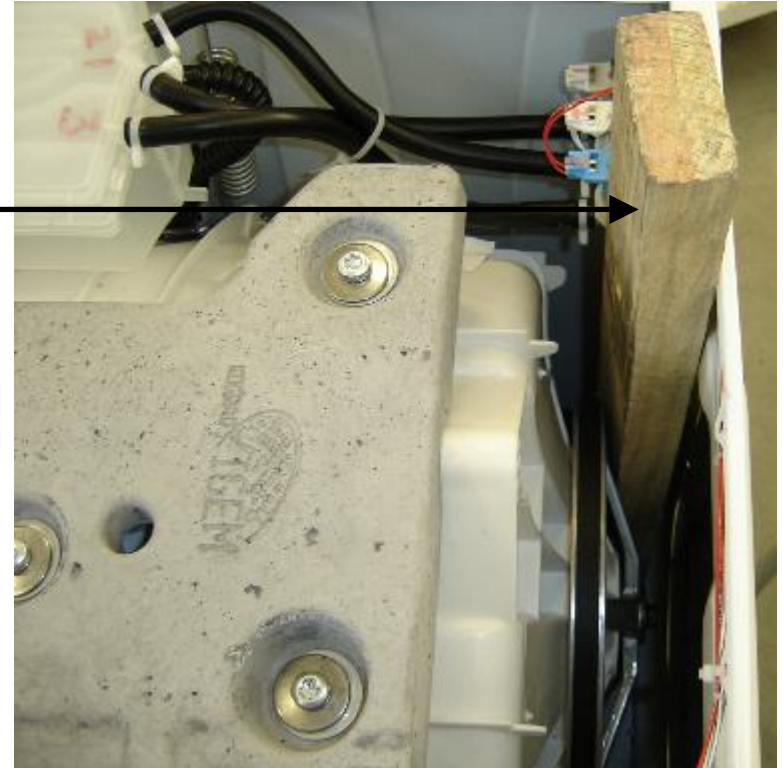


Once the bottom access panel is removed, you have access to the **shock absorbers**, to the **motor** and to the **water pump**.



Safety measures

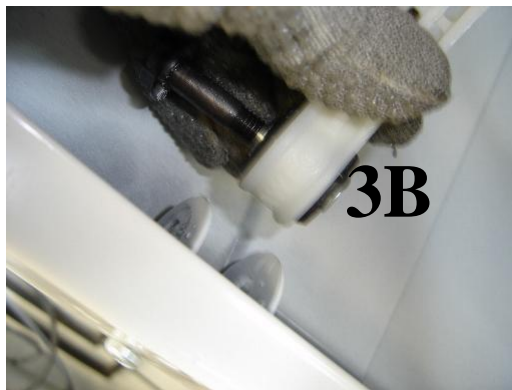
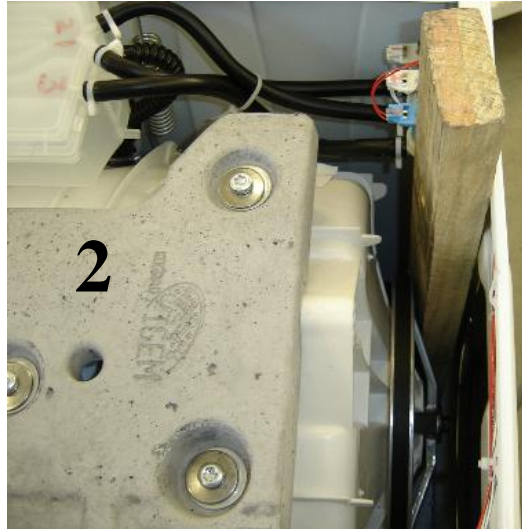
If you must lay the washer on its back, it is recommended to **put a piece of wood between the rear panel and the pulley** to avoid damaging the cabinet and the shock absorbers. It will be easier to remove the shock absorbers because they will stay in the right position.



The piece of wood can be 2x4 or 2x3 measuring 33 inches.

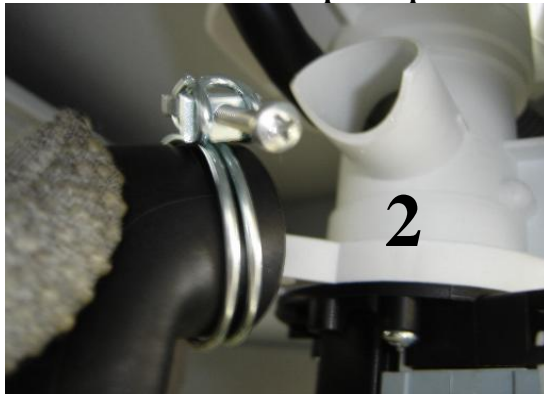
How to remove the shock absorbers

1. Remove the top.
2. Put a piece of wood between the pulley and the cabinet.
3. Remove the lower bolt.
4. Remove the top pin.
5. Remove the shock absorber.



How to remove the water pump

- Remove the top.
 - Put a piece of wood between the pulley and the cabinet and lay the washer on its back.
 - Remove the bottom panel.
1. Remove the two screws under the pump cover which are accessible on the front panel.
 2. Remove the hoses at the water pump and remove the electrical connection.
 3. Remove the water pump.



How to remove the motor



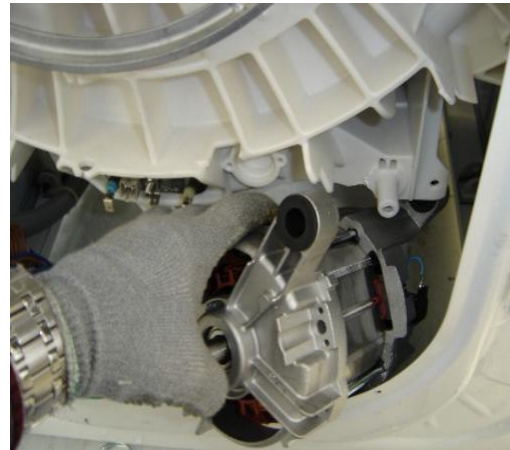
Remove the rear panel.



Remove the belt.

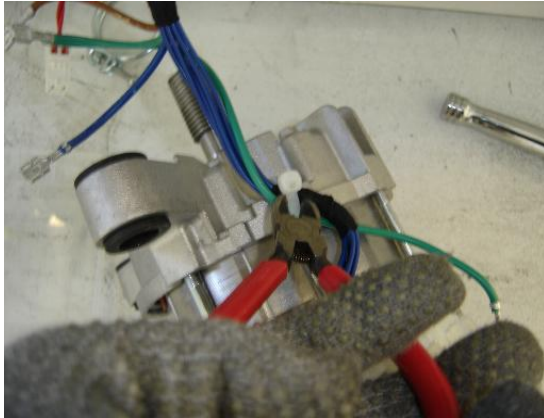


Remove the two bolts holding the motor.

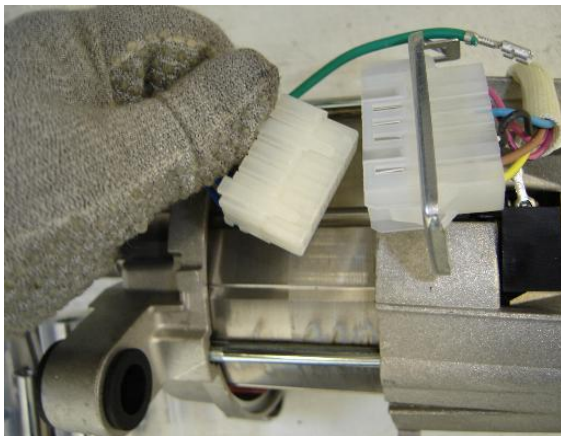


Remove the motor from its position.

How to remove the motor (cont.)



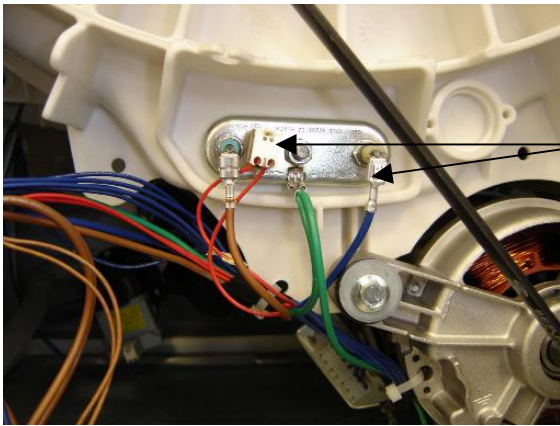
Cut the tie wrap at the motor.



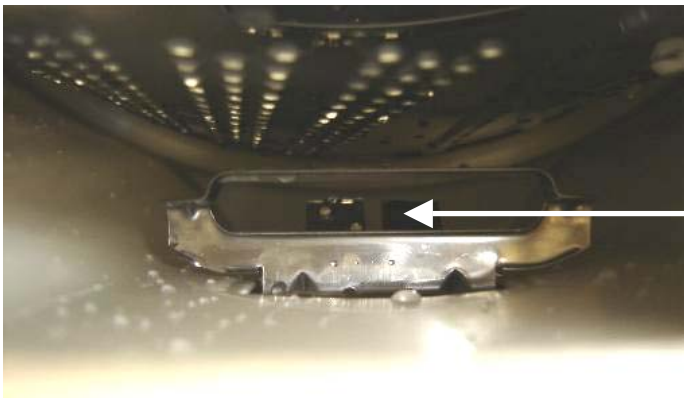
Disconnect the motor plug and the ground wire.

How to remove the heater

1. Remove the bottom access panel, do not forget to place a piece of wood to secure the tub before laying the washer down.

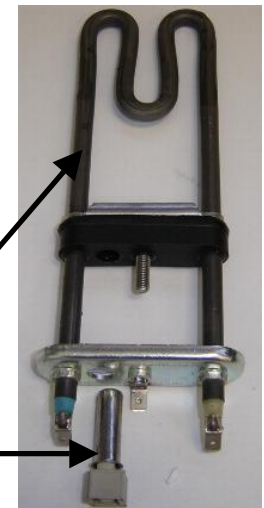


2. Disconnect the heater and the sensor.
3. Remove the bolt that holds the heater and remove the heater.



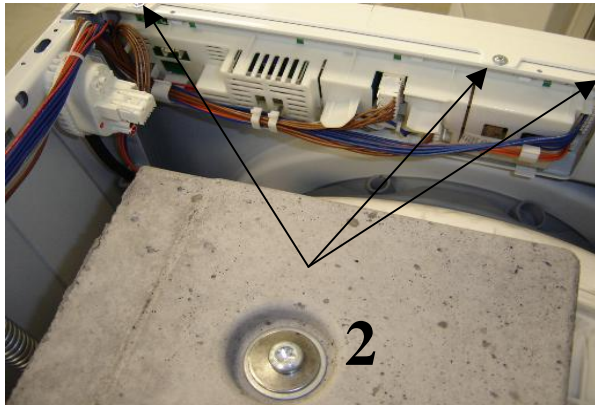
When you install the heater, make sure to position it correctly inside the tub.

HEATER
SENSOR

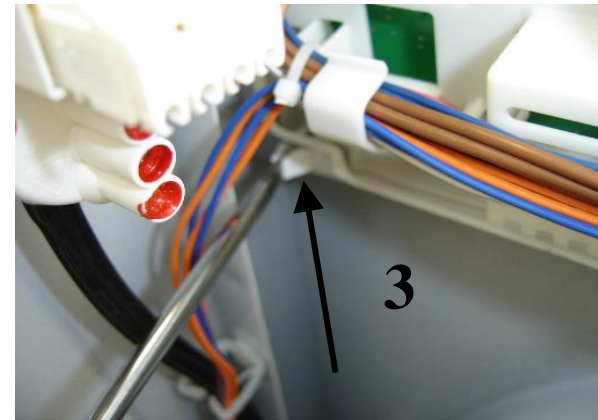


How to remove the electronic control

1. Remove the top.
2. Remove the screws from the top of the control panel.

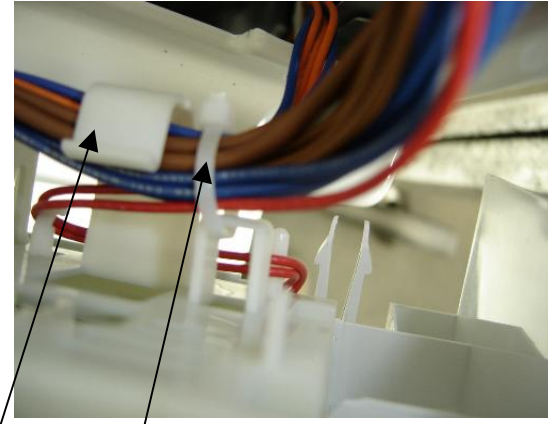
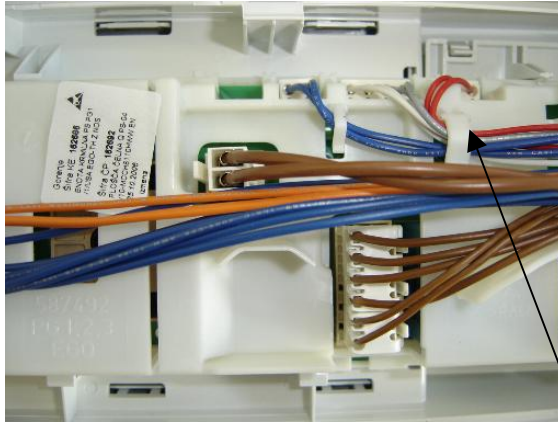


3. Release the left and the right plastic retainers.

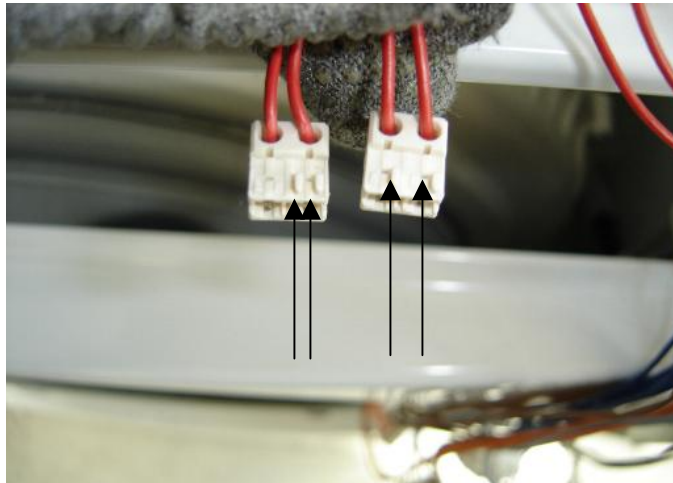


4. Tilt the panel forward.

How to remove the electronic control (cont.)



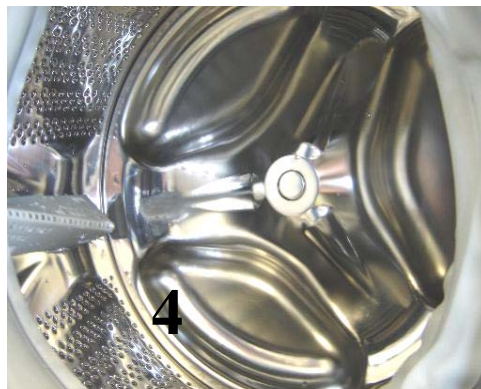
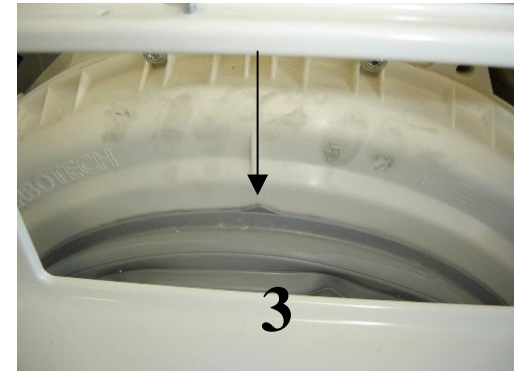
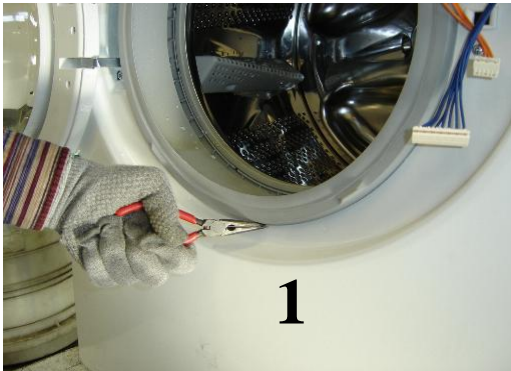
Remove the wiring from the retainers at the electronic control.



You cannot confuse the electrical plugs that plug into the electronic control because each plug has a unique connection. Refer to the photo on the left to see the difference between the two plugs.

How to remove the door gasket (boot)

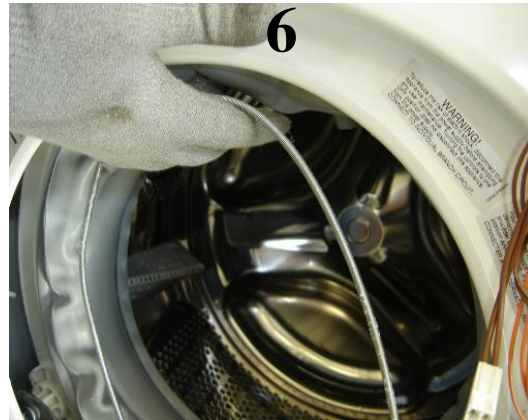
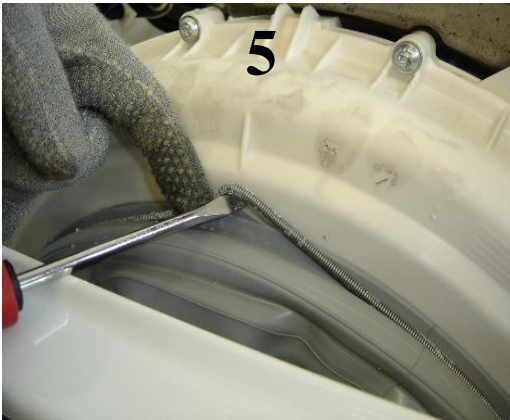
1. Remove the top of the washer.
2. Remove the wire from the door gasket (boot).
3. There is an arrow pointing up on the door gasket (boot).



- 4. Once the wire is removed, you must push the door gasket (boot) toward the inside of the tub.**

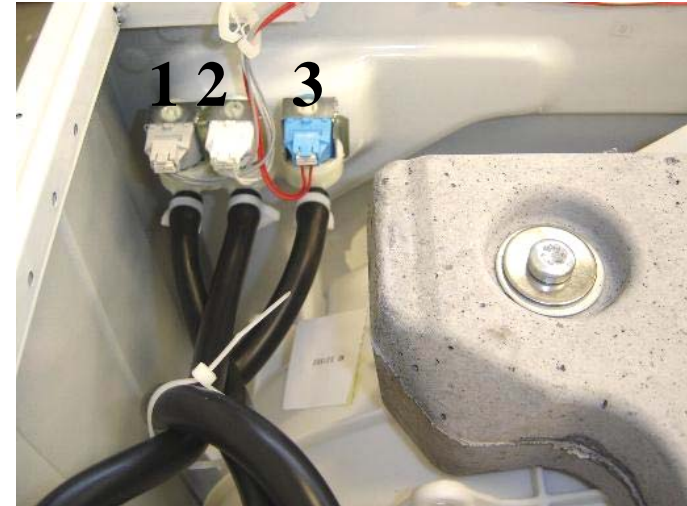
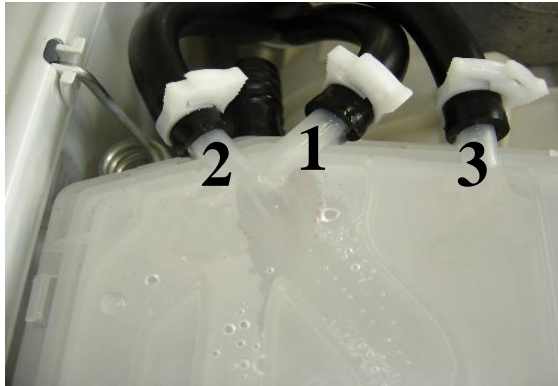
How to remove door gasket (boot) (cont.)

5. Remove the spring from the door gasket (boot).
6. Start to disengage the door gasket (boot).
7. You can use a little bit of soap to install the door gasket (boot).



How to remove the detergent dispenser

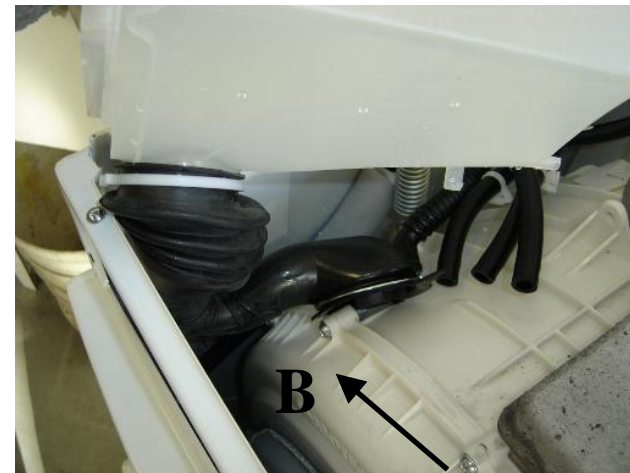
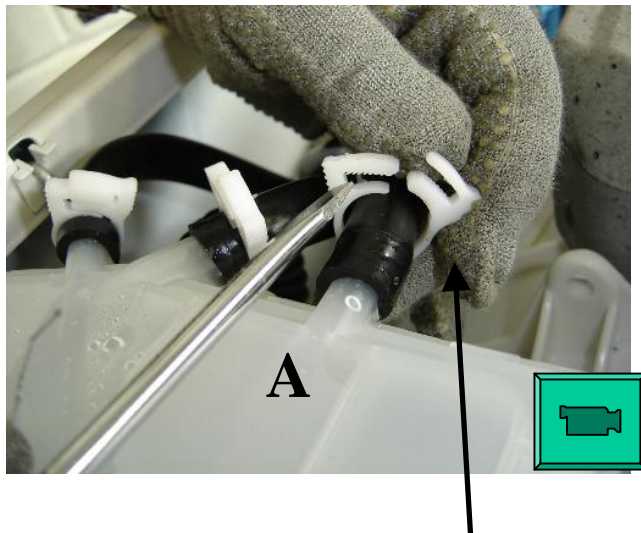
1. Remove the top.
2. Remove the control panel, see page 14.
3. Identify the hose positions between the dispenser and the water valves.



4. Remove the screws at the dispenser.

How to remove the detergent dispenser (cont.)

5. Remove the clamps from the hoses. Using a small screwdriver, open the top part of the clamp to release it to open it. (figure A)
6. Lift the dispenser to have access to remove the other clamp, you will need a Phillips screwdriver. (figure B)



How to remove the tub

1. Remove the top panel.
2. Remove the rear panel.
3. Remove the bottom panel.
4. Remove the motor. (see page 11)
5. Remove the top pins from the shock absorbers. (see page 9)
6. Disconnect the wiring from the heater. (see page 13)
7. Remove the hose between the pump and the tub. (see page 10)
8. Remove the door gasket (boot). (see pages 16 and 17)
9. Remove the detergent dispenser. (see pages 18 and 19)
10. Remove the water valves.
11. Remove the pressure switch.

How to remove the tub (cont.)



12. Remove the cement block on the tub.



13. Remove the two tub springs.



How to remove the tub (cont.)

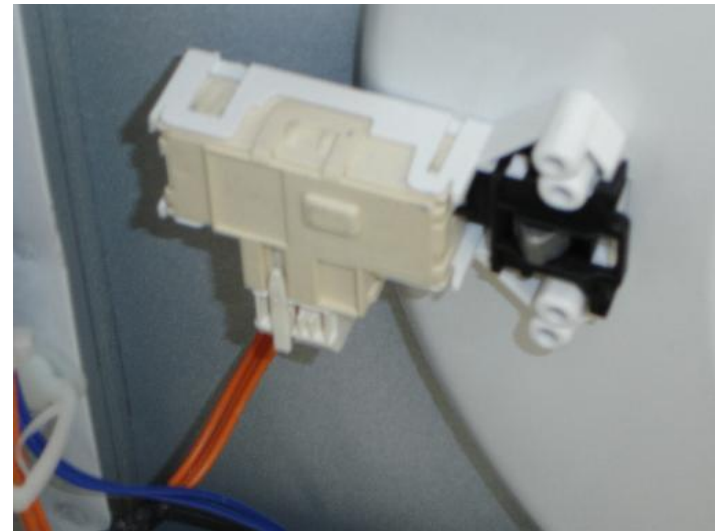
14. You can now remove the tub from its location and service it. Two men are required to remove the tub from its location.



How to remove the door switch

To check or replace the door switch you only need to remove the wire from the door gasket (boot).

Remove the two screws that hold the switch and remove the door switch through the opening at the door gasket (boot).



How to remove the transformer

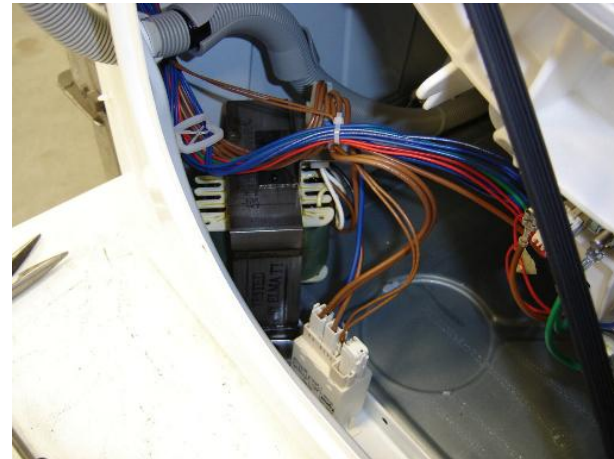
You can remove the transformer through the rear or from under the washer.

You must remove the two bolts located under the washer, at the rear.

UNDER

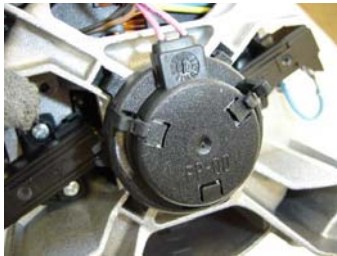


AT THE REAR



Component values

Tacheometer



283 ohms



At the motor plug

Between the black and the brown = 1.6 ohms

Between the black and the yellow = 0.8 ohms

Between the brown and the yellow = 0.8 ohms



10 K ohms at the heater

22 K ohms at the sensor



Water pump

240 VAC

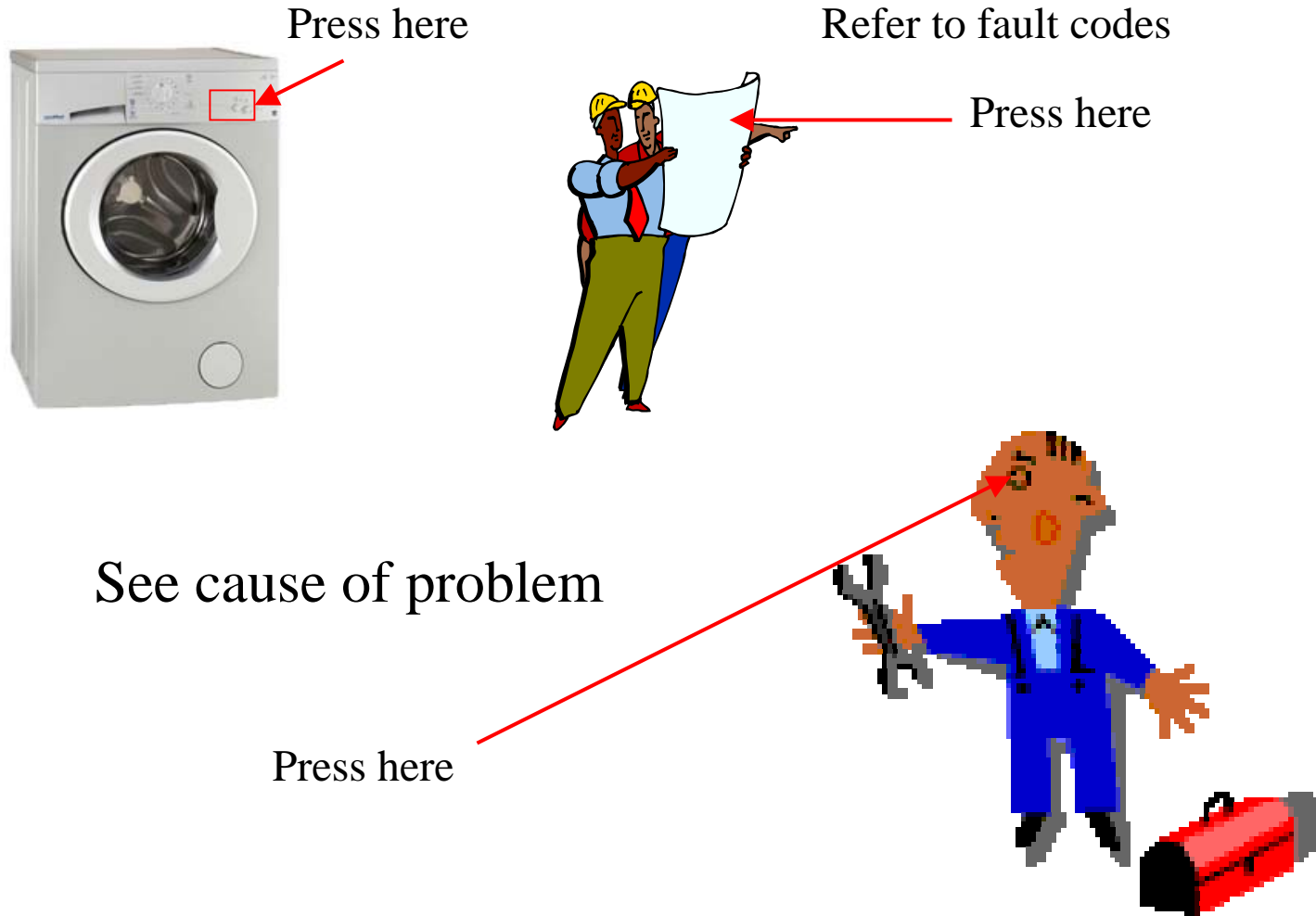
34 watts

96 ohms



Water valve solenoids: 3.60 K ohms

Example of fault code



Fault codes

	The LEDs indicate the problem.	
All LEDs repeatedly pulsate: 1x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause) .	The failure is set if the connection to the temperature sensor is open or if there is a short circuit between the two terminals of the sensor. The wash program ends without heating. The failure is indicated at the end of the wash program. This must be checked at the beginning of the program and again before the heating step.	The connection to the temperature sensor is open or short-circuited.
All LEDs repeatedly pulsate: 2 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if the connection to the door lock is open. The wash program stops. The failure is indicated by the LEDs. Supply of door lock will be ON. To start the wash program, the user has to close the door (program starts at once). To continue the program (if failure happens between wash programs), the user has to check if the door is closed and press the START button. If the failure occurs again, the wash program stops. Supply of door lock will be OFF. If water is in the machine, the pump will operate 2 minutes. Failure will be indicated by the LEDs again and it is not possible to restart the wash program.	The connection with the door lock is open.

Fault codes (cont.)

	The LEDs indicate the problem.	
All LEDs repeatedly pulsate: 3 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if within the filling or heating steps the water level is below level 1 for the filling time or 4 minutes in heating time. If the failure occurs the first time within a wash program, the current step starts again. If the failure occurs the second time (twice in succession), the wash program stops, and the failure is indicated by the LEDs. To continue the wash program, the user has to press the START button. If the failure occurs the third time, the wash program stops, the failure is indicated, and it is not possible to start the wash program again.	The water level was not reached. - water tap closed - leak in the machine - valve defect
All LEDs repeatedly pulsate: 4 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	If the wash program is active and the motor control unit gets no signal from the tacho generator the first time the failure occurs, a pause of 1 minute is executed. This is repeated 3 times. When the failure is detected the 4th time the wash program stops immediately. If the temperature is higher than 60 °C there is a 30 second cool down period with cold water. The pump will then pump water 2 minutes. The program STOPS. The failure is indicated.	The connection to the tacho generator is open or short-circuited.

Fault codes (cont.)

	The LEDs indicate the problem.	
All LEDs repeatedly pulsate: 5 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if the wash program is active and the motor is working without control of triac. The wash program stops immediately. After 2 minutes, it tries again. If the failure is not present, then forget the first failure and continue to work. If it is the same failure again, then the program stops completely. If the temperature is higher than 60 °C, there is a 30 second cool down period with cold water. Then the pump will pump water 2 minutes. The program stops. The failure is indicated.	The triac is short-circuited.
All LEDs repeatedly pulsate: 6 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if after a heating step the temperature is more than 15 °C lower than the rated temperature. The wash program ends normally. The failure is indicated at the end of the wash program.	The temperature is not reached - heater defect

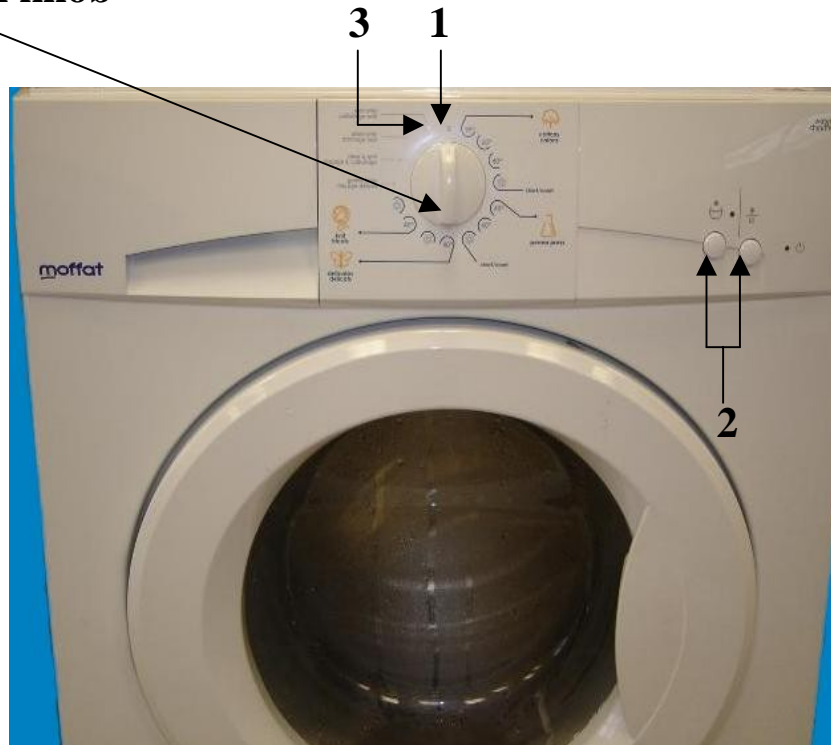
Fault codes (cont.)

	The LEDs indicate the problem.	
All LEDs repeatedly pulsate: 7 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if after a pumping step the water level did not fall below level 1. If the failure occurs the first time within a wash program, the current step starts again. If the failure occurs the second time (twice in succession), the wash program stops and the failure is indicated. To continue the wash program, the user has to press the START button. If the failure occurs the third time, the wash program stops and the failure is indicated. It is not possible to start the wash program again.	The water level does not fall below level 1. - pump clogged - pump defect
All LEDs repeatedly pulsate: 8 x (¼ sec. ON, ¼ sec. OFF) then 5 sec. OFF (pause).	The failure is set if at the end of the spin cycle of the test program the spin is more than 100 RPM lower than the rated speed. The failure is indicated after the end of the test program.	If the tachometer does not reach the maximum spin speed, the relay does not switch.

Test program

1) Start with the timer control knob on the off position.

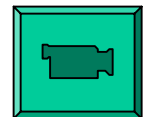
Timer control knob



2) Press and hold the **START/PAUSE** and **RINSE HOLD** buttons.

3) Keep holding the **START/PAUSE** and **RINSE HOLD** buttons and turn the timer control knob one notch to the left until the start light turns green.

•The washer will go through a test sequence on it's own.

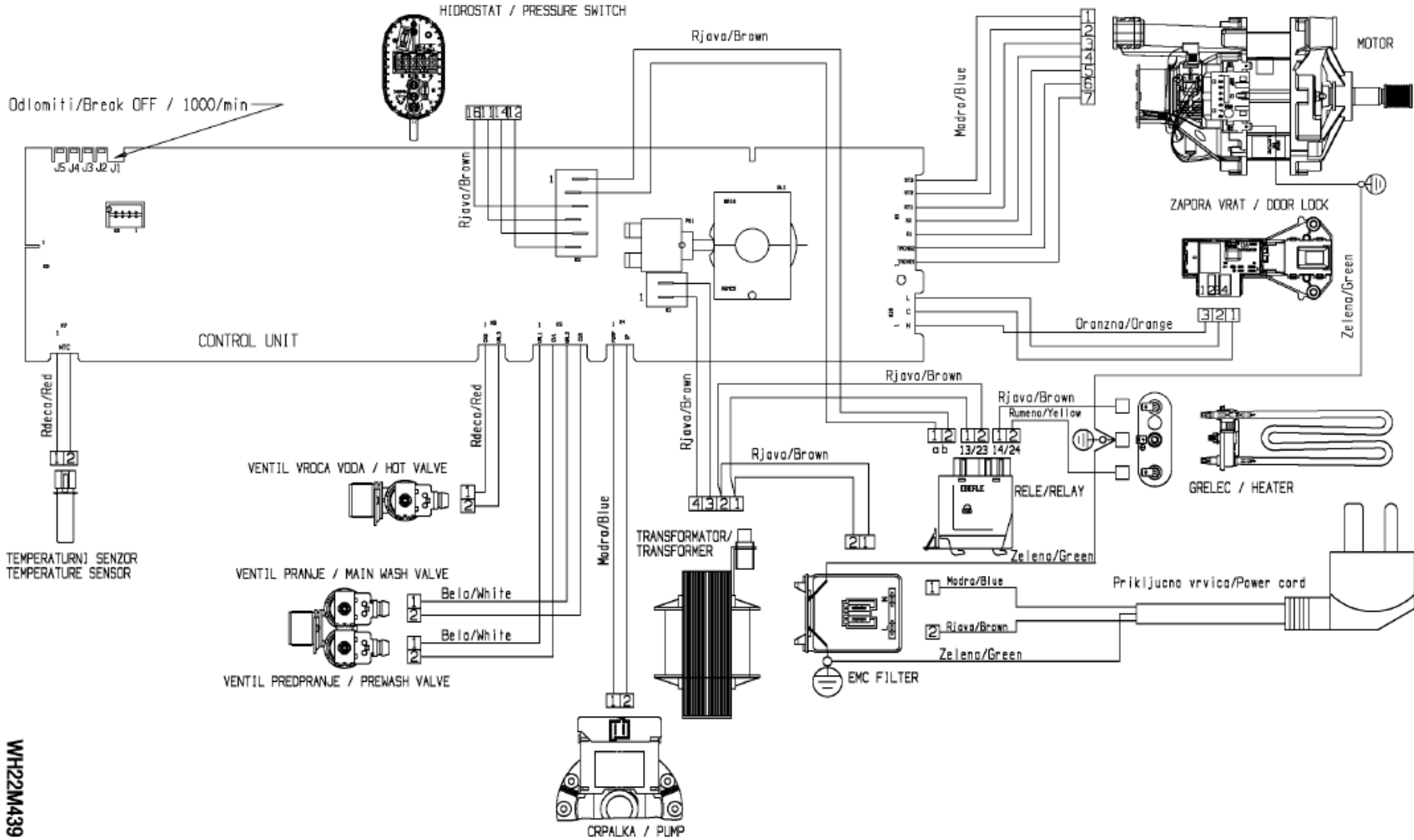


Test program (cont.)

Steps:

1. Enter the test mode. The indicator lights will turn on for 5 seconds. **If they do not turn on, they will flash**, you must refer to pages 27, 28, 29 and 30 for the fault codes.
2. The door will lock. The indicator lights will turn on. If they do not turn on, they will flash, you must refer to pages 27, 28, 29 and 30 for the fault codes.
3. Water will enter, hot water, cold water and pre-wash. **If ok the indicator lights will be on.**
4. The tumble cycle starts and the heater will function. **If ok the indicator lights will be off.**
5. Spins with water in the tub. Speed of 0 RPM to 500 RPM.
6. Water pump eliminates water. **If ok the indicator lights will be on.**
7. End of spin. Speed of 0 RPM to 1000 RPM. **If ok the indicator lights will be off.**
8. End of test cycle.
9. You must put the timer control knob to the off position.

Wiring diagram



WH22MA39