WL6511XXL WASHER TRAINING PROGRAM

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Distributor of Fine Appliances

ASKO

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WL6511XXL Washer Training Program

- Product Description & Features
- Warranty
- Installation
- Operation
- Testing From Board
- Disassembly
- Door Reversal
- Wiring Diagram
- Service Tips
- Teardown

Product Description & Features

- Extra Large Capacity – 3.8 cu ft
- Easy Control ™ System with LineConcept ™ programming, multiple option buttons and LED display window
- 10 programs are printed around the dial on control panel
- Option features: 5 Temperature settings (extra hot – extra cold), 5 soil level settings, Delay Start, End-of program Signal, Prewash, Extend Wash, Extra Rinse, Rinse + Spin Night Time
- DirectDrive motor
- 10 degree inclined Stainless Steel drum
- Industry Exclusive! Reversible glass door

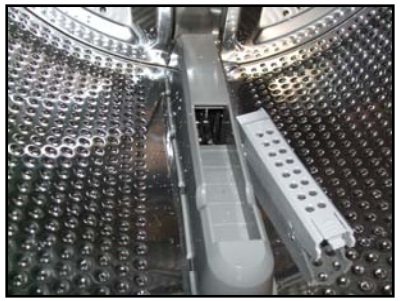
Product Description & Features…Continued

- QuattroPlus ™ – 4 shock suspension, 2 springs & automatic load balancing system ensures quiet, virtually vibration free spin

- Child Lock
- 5 spin speeds, up to 1,150 RPM
- Available in white, Platinum, Red or Black
- Energy Star rated
- Internal heater produces optimal temperatures throughout the entire wash cycle
- Easy to-reach, out-front controls

Product Description & Features…Continued

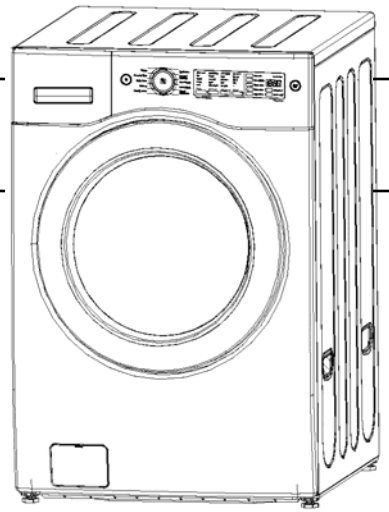
- The QuickWash ™ program Facilitates a faster wash cycle that uses less water and energy
- Every unit is tested at the factory
- The showering paddles are also filters that trap hair, dust and dirt resulting in less lint in the dryer



A pedestal/drawer combination is available which elevates the unit to simplify loading and unloading and is the ideal hiding spot for detergents, fabric softeners coat hangers and other clutter

Product Specification

External Measurements (inches		27” (width) x 32” (depth) x 40 3/8” (height) Depth 52” with door open
Weight		198.4lbs
Rated Supply Power		120V 60Hz
Rated Consumption Power	Washing	200W (1100W during heating)
Washing Method		Tumble action
Water Pressure		Between 4.5 & 145 PSI



Warranty

It is important to register your product warranty by logging onto **www.askousa.com/customercare/registration** and filling out all required fields within 90 days from the date of purchase. After doing so, you will be e-mailed a certificate that will extend the original warranty for one additional year. If you do not have access to the internet, complete the warranty card included with the product and mail it to the address on the warranty card within 90 days of the date of purchase. Cosmetic damage must be reported to your dealer within five days from the date of purchase. After unpacking the washer, thoroughly check the unit for cosmetic damage.

The Model & Serial Number Tag is located on the front panel above the door gasket.

Length of warranty Two-Year Full From date of purchase.

Asko Appliances Inc. will pay for:

ASKO replacement parts and/or repair labor to correct defect in materials or workmanship.

Service must be provided by an authorized ASKO service agent.

Warranty…Continued

Third year full

ASKO replacement parts and/or repair labor to correct defect in materials or workmanship. Service must be performed by an authorized ASKO service agent.

Lifetime

ASKO replacement parts (labor cost not included) for the stainless steel tank if it exhibits a manufacturing defect such as cracking or rusting through.
Service must be provided by an authorized ASKO service agent.

For non-residential installations

One-year full warranty from date of purchase ASKO replacement parts and/or repair labor to correct defect in materials or workmanship.
Service must be provided by an authorized ASKO service agent.

Installation

Hint:

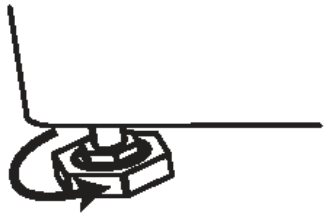
Save the shipping bolts and the wrench in case you ever have to move the machine

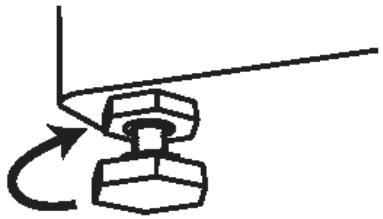
Remove the shipping bolts from the rear of the unit with the wrench supplied.
Insert the four caps into the holes left by the bolts. (the top 2 have the shorter spacer and bolt.
Attach the drain hose (which is packed inside the drum) to the drain outlet at the rear of the unit. The top of laundry tub or stand pipe must be between 24” & 40” from the floor.
Attach the Hot & Cold fill hoses to the unit, Cold is on the left, Hot on the right, as viewed from the rear.

Installation…Continued

Level adjustment

1. The washer must be installed on a sturdy and solid floor or the unit may make considerable noise, vibrate and cause a malfunction.
2. Adjust the level of washer using adjustable legs.
   - Please check if there is any gap between the four adjustable legs and the floor.
   - Turn the adjustable legs with the enclosed wrench to adjust the level of washer and make it sure that the machine does not move when you push on it.
   - After the adjustment are finished, turn the locking nuts up tightly so that the washer maintains the adjustment.
3. Make sure that the washer does not move when you press down on the four corners of the machine.





Note!

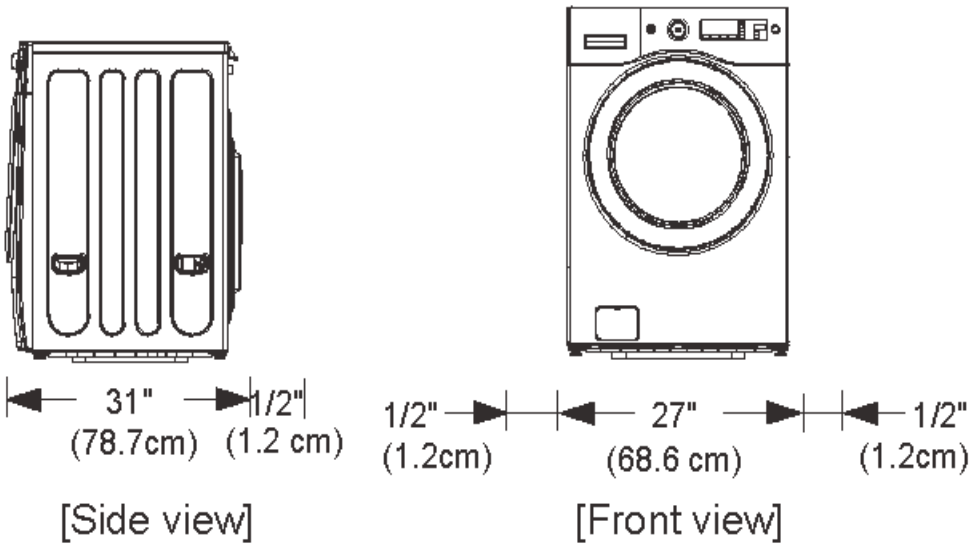
There should be no rocking of the washer and all of the adjustable legs should be sitting firmly on the floor.

Installation…Continued

The machine operates on 120 VAC and should have a dedicated 15 or 20 amp outlet.

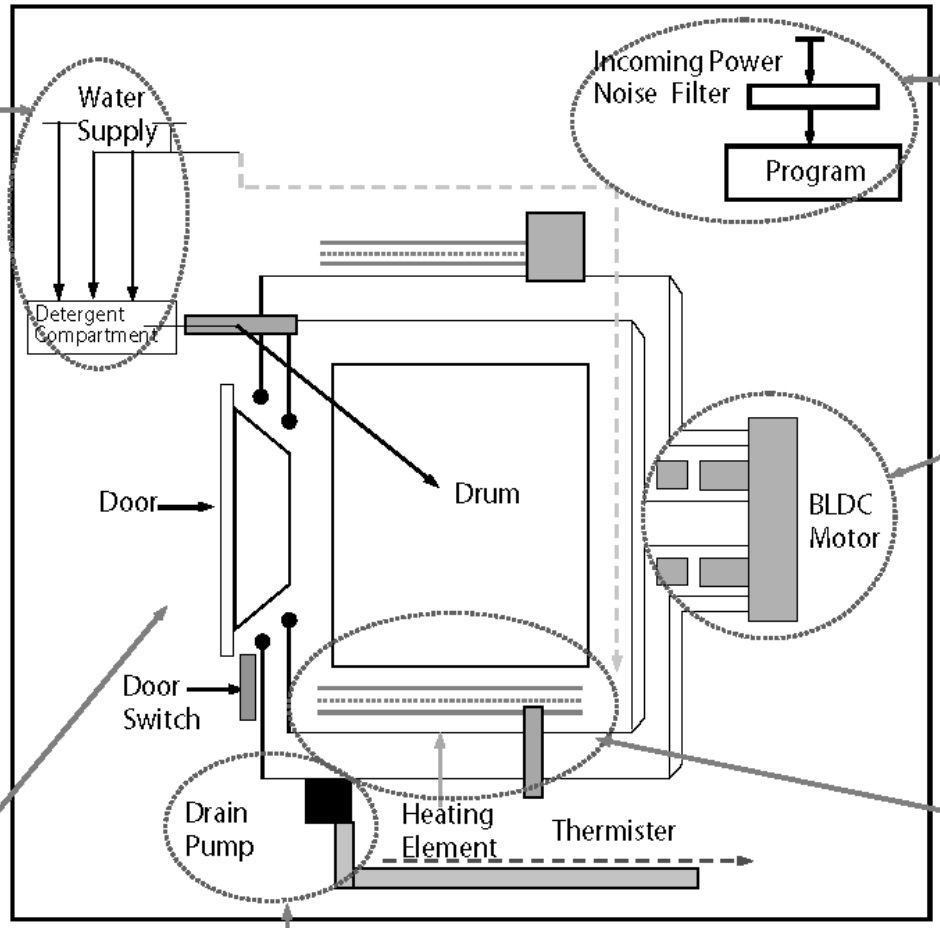
Water supply is Hot & Cold fill and requires a water pressure between 4.5 & 145 PSI.

It is desirable to have minimum of ½ inch clearance all around the unit to reduce noise transfer.



Operating Mechanism Diagram

4. WATER FILL SYSTEM
Cold water. 3 ports
Cold water pre-washing
Hot water. 1 port
Water supply box, hose



1. CONTROL ASSEMBLY
Main PCB
Front PCB
Harness
Noise Filter
Power Cord

2. MOTOR & DRUM
BLDC Motor
Drum
Bearing
Spider/Shaft
Tub
Counterbalance

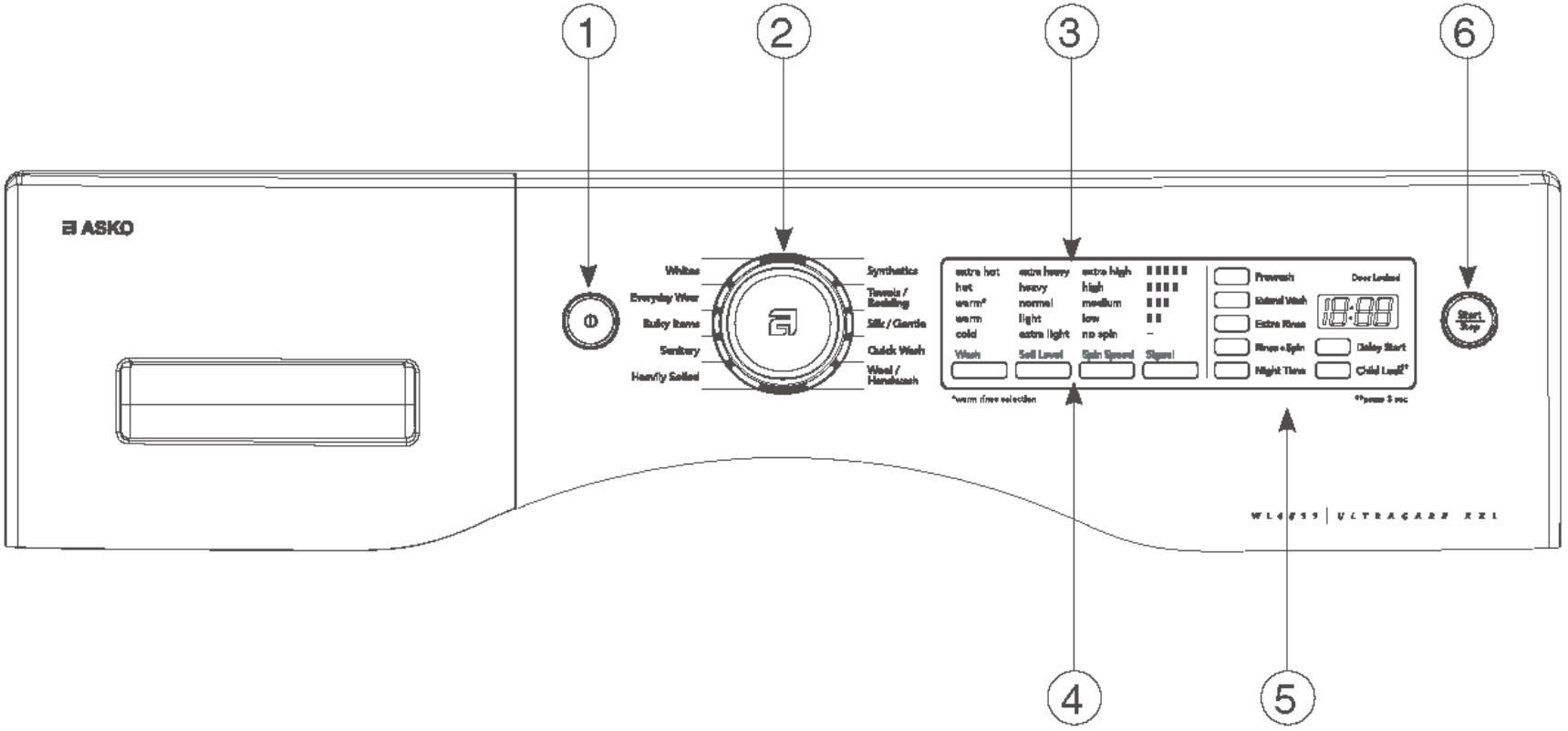
5. DOOR
Door lock switch
Lock catch
Door glass
Gasket

3. HEATING SYSTEM
Heating Element 1000W
Washing temperature sensor

6. DRAIN SYSTEM
Drain pump
Drain pump housing
Hose

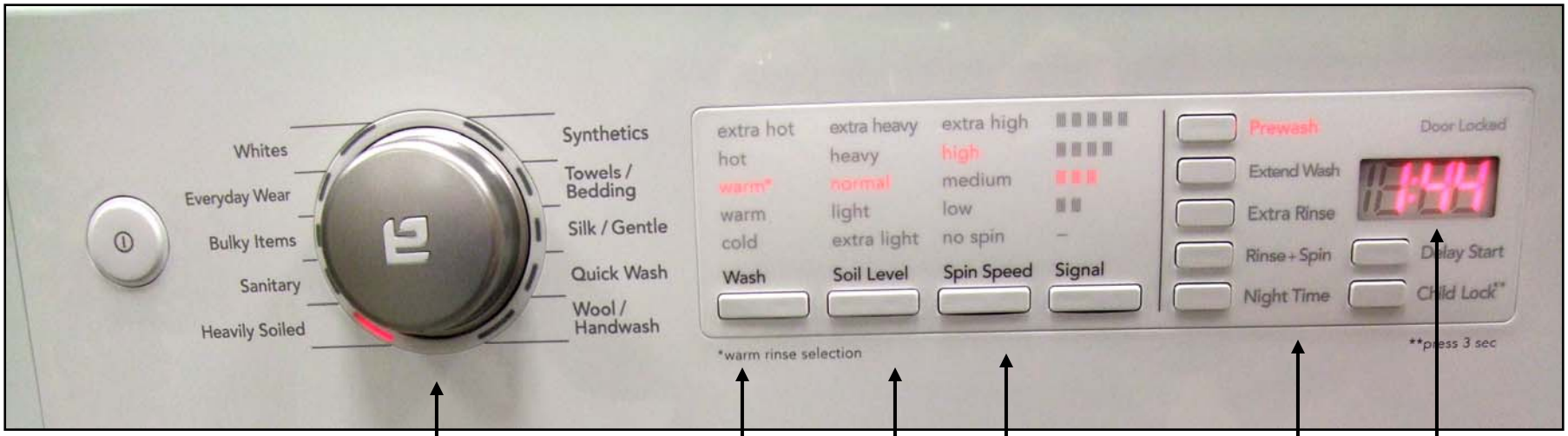
7. SUSPENSION SYSTEM
Base
Shocks: 4
Springs: 2

Operation…Fascia Panel



1. Main power button
2. Program selector
3. Display window
4. Setting buttons
5. Option buttons
6. Start/Stop button

Operation…Controls



When knob is turned to selected program the segment is illuminated

5 Wash Temperatures

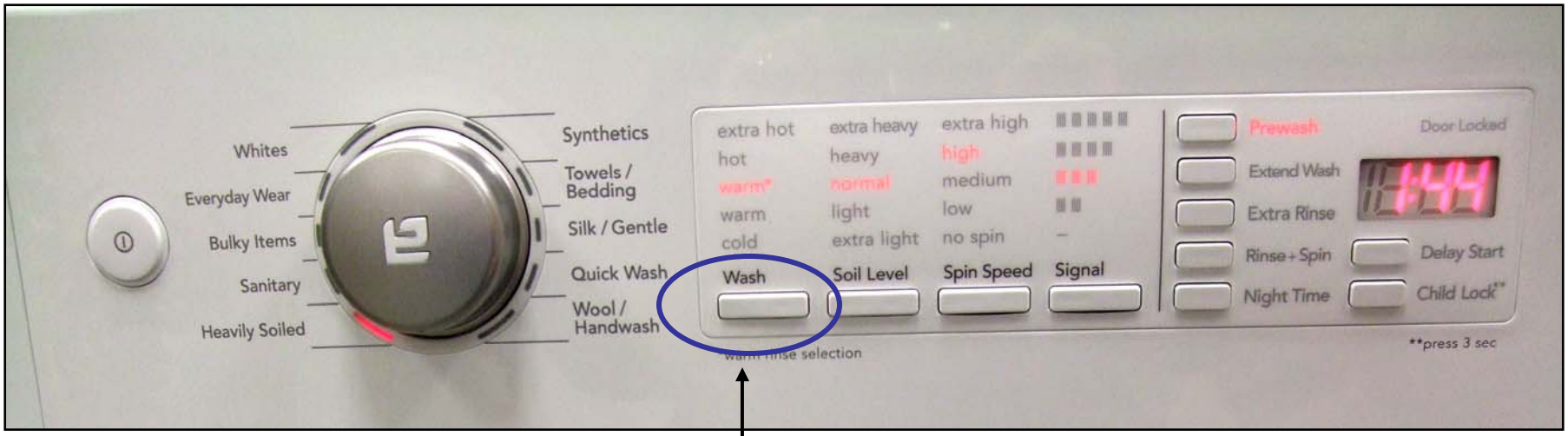
5 Soil Level Settings

Choice of 4 spin speeds or no spin

Auxiliary Programs

Digital Display

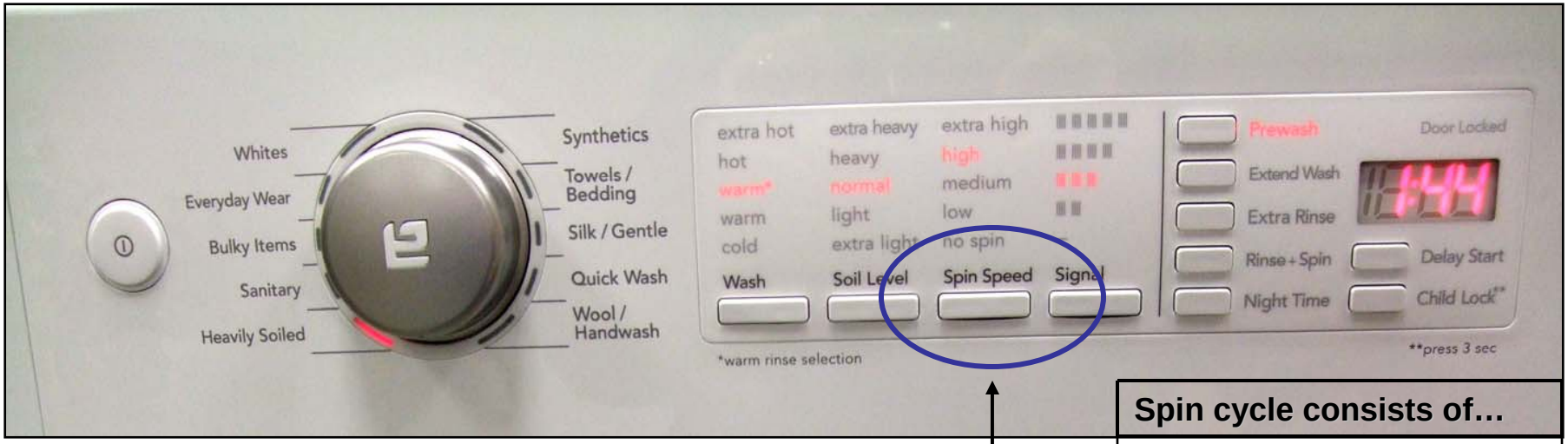
Operation…Controls



5 Wash Temperatures

Water Temp.	Target Temp.	Rinse Temp.
Extra Hot	155 F (67 C)	Cold
Hot	105 F (41 C)	Cold
Warm	86 F (31 C)	Warm
Warm	86 F (31 C)	Cold
Cold	—	No Heating

Operation…Controls



5 Spin Speeds

Spin Drying Classification	Max. r.p.m.
Low	550 r.p.m.
Medium	790 r.p.m.
High	990 r.p.m.
Extra High	1150 r.p.m.
No Spin	-

Spin cycle consists of…

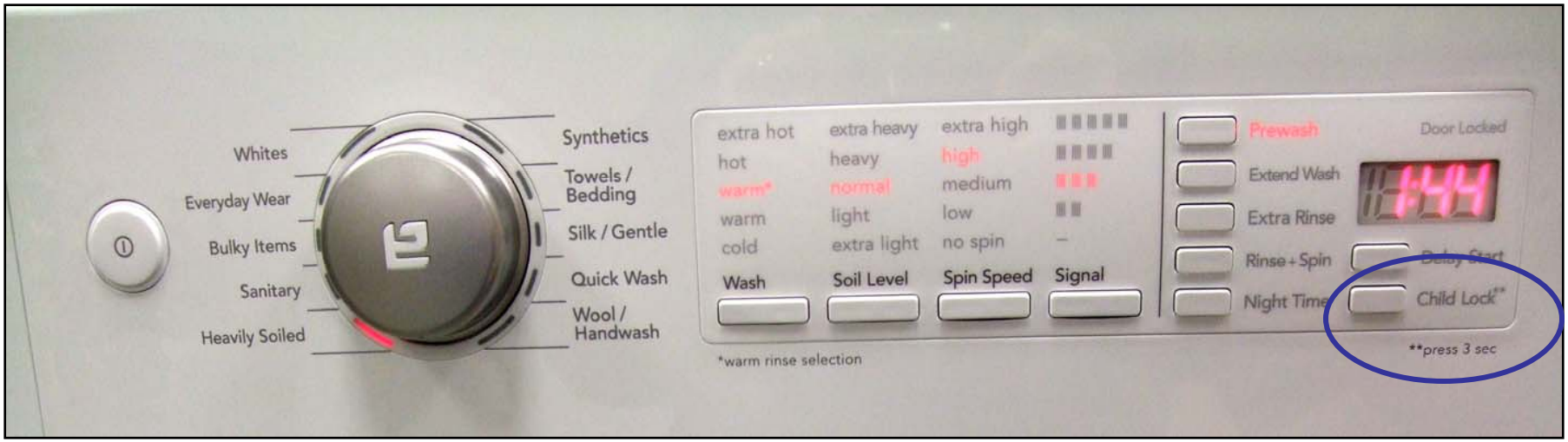
1. Load sensing
Is done while the laundry is still wet, tumbles @ 75 r.p.m. for 10 secs calculates load on motor

2. Drain
Unit will drain for 1 minute

3. Balance spin
Unit will attempt to balance the load up to 20 times

4. Main spin
Main spin will vary based on cycle & options selected

Operation…Controls

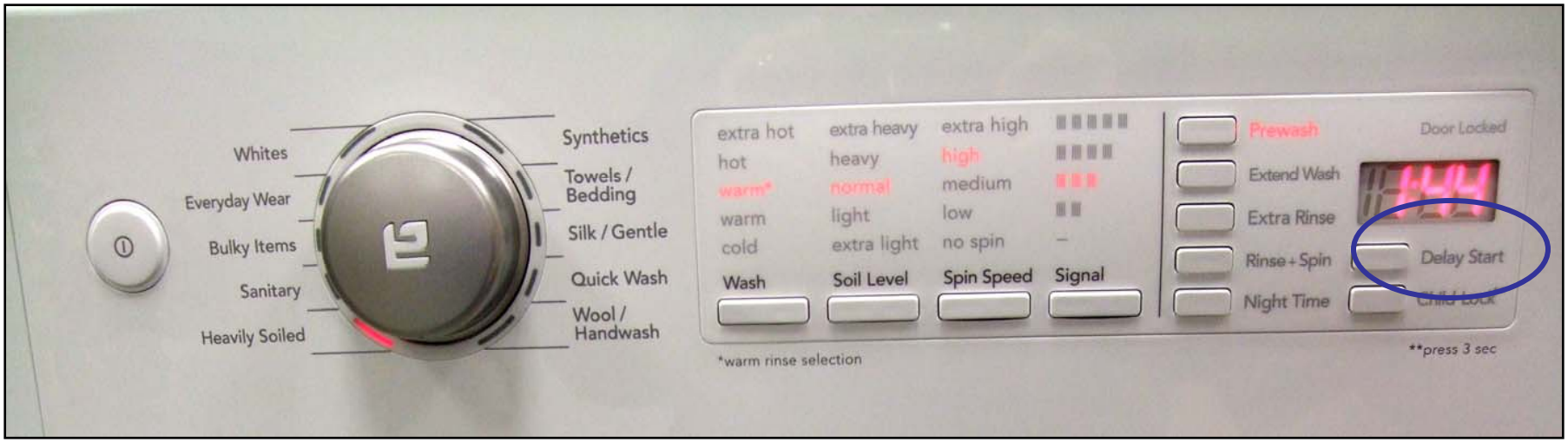


Child Lock Feature…

To activate child lock, first start a program. Next press child lock button for 3 seconds, child lock will be illuminated. Once in this mode only the power button will be active.

To cancel, press child lock again for 3 seconds.

Operation…Controls



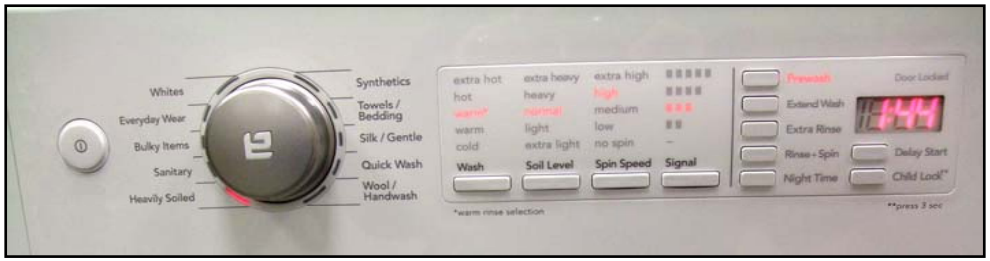
Delay Start…

Will delay the start of a chosen program by 1 – 12 hours

After selecting the delay start time, cycle options can be changed before the program has been started by pressing the start / stop button. They can't be changed once a program has started.

Once a program has been started in a delay start mode, you can check on the selected cycle by pressing the start / stop button. The program will display for 3 seconds.

Operation…Controls



Load Sensing…water level…

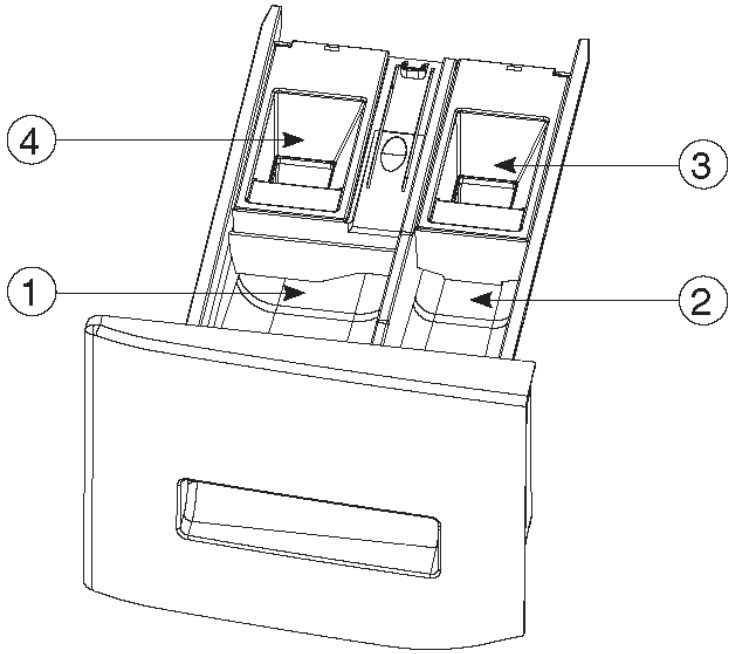
Load sensing to determine water level…is carried out when Everyday wear, Sanitary, or Towels / bedding wash cycles are selected. The sensing is done while the laundry is still dry. Once a wash cycle is started the motor will tumble at 75 r.p.m for 10 seconds & calculate the load on the motor. Water levels & wash times are based on these calculations.

Load Sensing for the spin cycle…

Is done after the main wash cycle while the laundry is still wet.
Once a drain cycle is completed the motor tumbles @ 75 r.p.m. for 10 seconds & calculates the load on the motor.
The base value for intermediate, unbalance and final spin are calculated based on the load on the motor.

Operation…Detergent Dispenser & Fill Valves

1. Detergent compartment - main-wash
2. Detergent compartment – pre-wash
3. Fabric softener compartment
4. Liquid bleach compartment



Note!

- Place liquid detergent cup in the detergent compartment if you use liquid detergent.
- Powdered detergent will not dispense with the liquid detergent cup.
- For powered detergent, remove the liquid detergent cup.

All coils should measure between 0.9 & 1.2 K Ohms

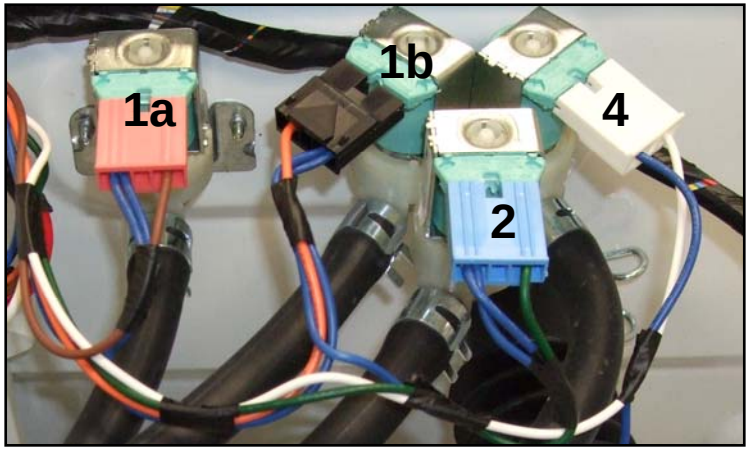
1a - Hot valve for main wash

1b - Cold valve for main wash

2 – Cold valve for pre-wash

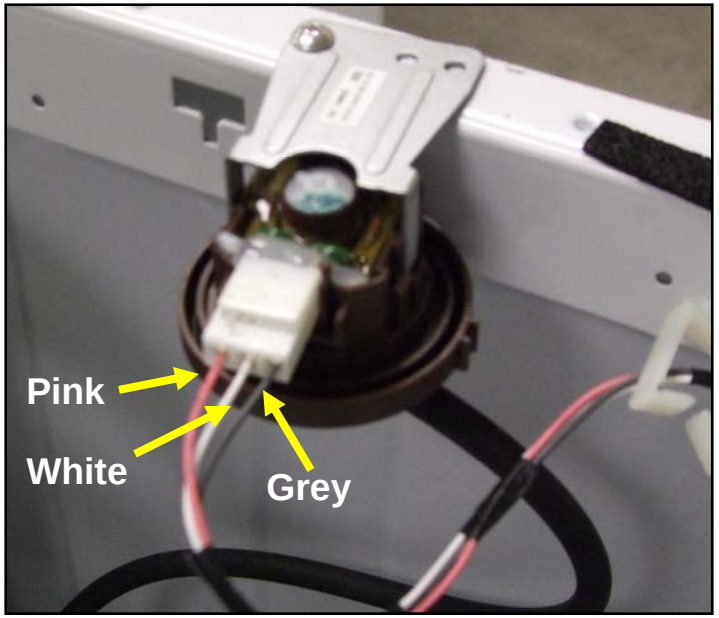
4 – Cold valve for bleach

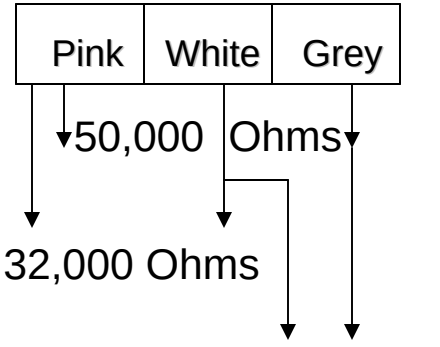
3 – Cold valve for pre-wash & main wash 1b & 2



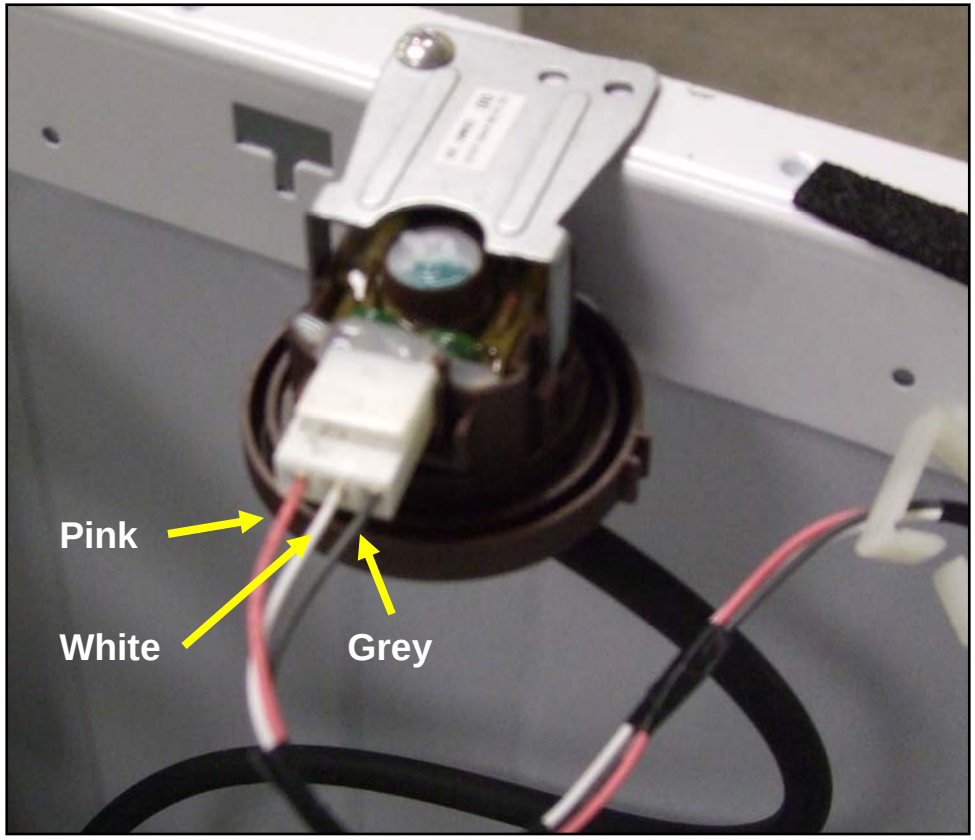
Operation…Pressure Sensor / Water Level Sensor

- Controls the water intake based on program selected
- Controls the refilling if water is soaked up by clothes (will do this up to 10 times during wash cycle)
- Controls door opening (water level has to fall to safe level)
- Controls heater operation (no water, no heat)
- If overfill is detected, turns on drain pump and disables valve
- Allows unit to spin when water level drops to safety level

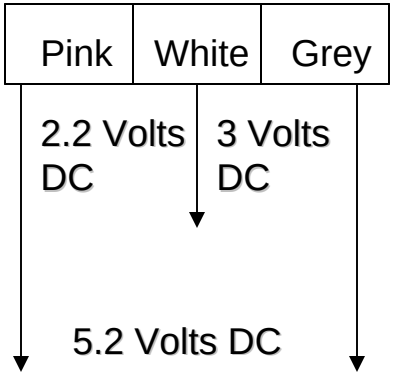




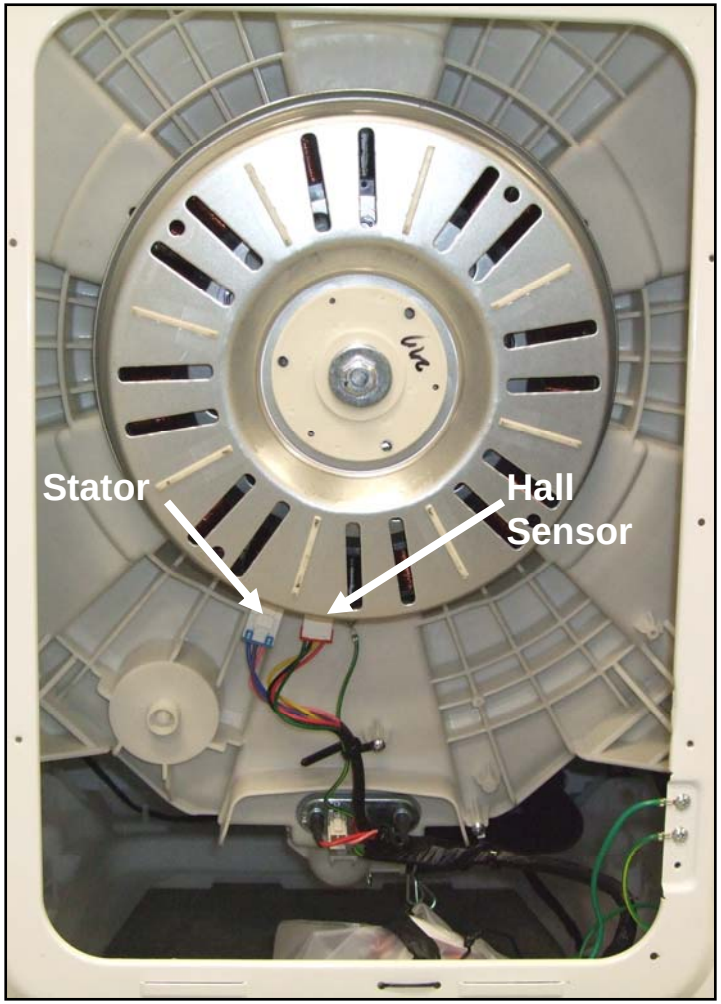
Operation…Pressure Sensor / Water Level Sensor



Voltage readings at the sensor



Operation – Direct Drive Induction Motor



The washing Machine drum is driven by the BLDC motor, (brushless 3 phase DC direct drive induction motor).

The pulley is the rotor which has 24 permanent magnets attached to the inside circumference.

The stator is attached to the rear tub assembly and consists of 36 individual coils

As these coils are energized in turn, a magnetic field is induced around the coil which interacts with the permanent magnets of the rotor and drives the wash drum.

Motor speeds are controlled by the “Hall Sensor”

(Tachometer)

Operation– Door Lock / Switch

Door Lock / Switch … consists of a bi-metal switch & a solenoid operated lock.

Door locking:

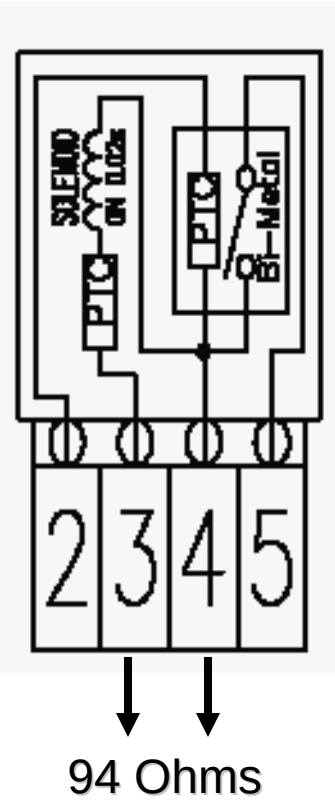
As soon as start button is pressed bi-metal begins operation to close switch. 3 seconds after bi-metal operation of door switch, solenoid is activated twice to lock the door.

Motor and other electronic parts only begin operation when the door is locked. The door will remain locked if the water temperature is above 131 degrees F or the water level is higher than the safety level.

Door unlocking:

Bi-metal plate of door switch is turned off and solenoid is energized until door is unlocked.

During a cycle the unit may be paused and the door unlocked, as long as water levels and temperatures are below those indicated above.



Operation– Drain Pump

Heavy duty auto reversing pump with manual drain hose

Clean out - pin & coin trap

Pump Operation:

During drain cycle pump runs continuously

During spin cycle – pump on for 18 secs. off for 3 secs.

Operation – Heating Element

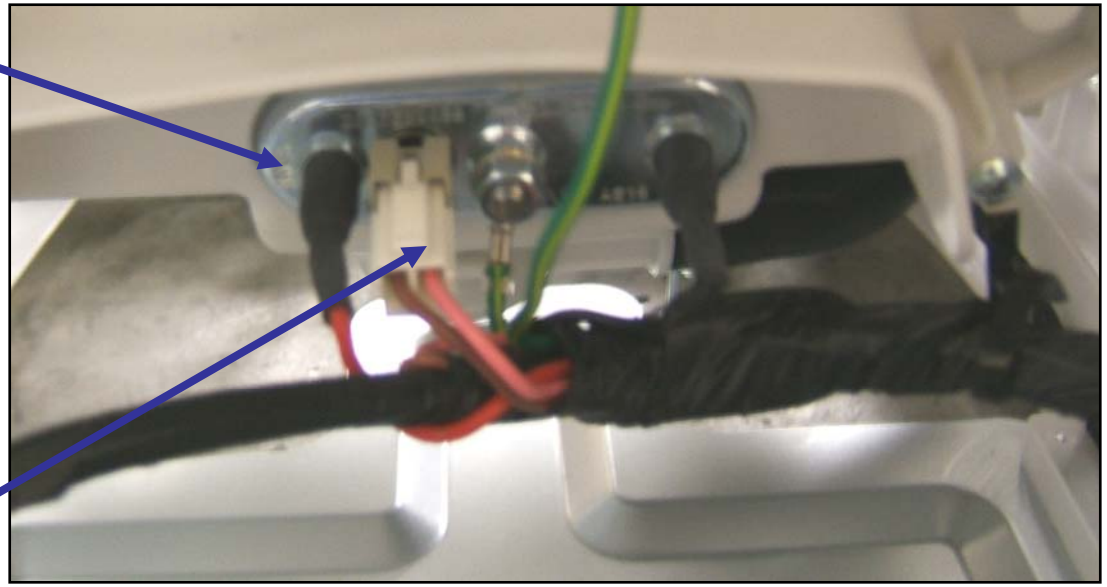
120 Volt element

1000 Watt

Resistance 11.8 Ohms

Built-In thermal fuse disables element @ 363 degrees F

Element has built-in thermister NTC
As temperature rises the resistance falls.



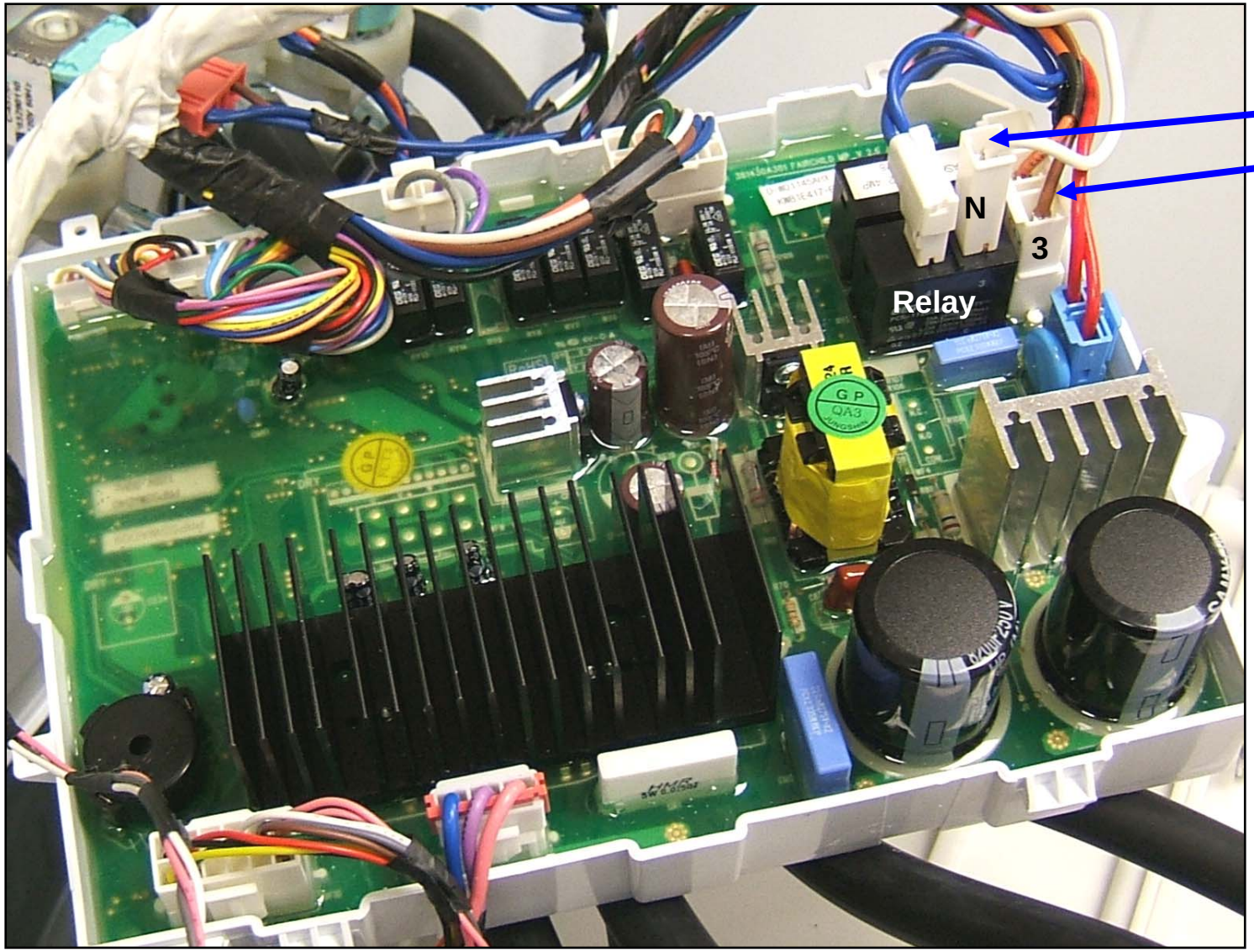
Operation – Thermister NTC

Temp.	Resistance(Ω)	Voltage
0	35.97	0.58
10	22.76	0.86
20	14.77	1.21
22	13.57	1.29
24	12.48	1.37
25	11.98	1.41
27	11.04	1.49
29	10.18	1.58
30	9.78	1.62
32	9.04	1.71
34	8.36	1.80
36	7.74	1.89
38	7.17	1.98
40	6.65	2.07
49	4.7	2.50
55	3.85	2.75
60	3.24	2.96
65	2.74	3.16
75	1.99	3.51

Note:

These temperatures are in centigrade. Voltages are D.C. volts

Voltage checks from the board



Input Voltage

Neutral

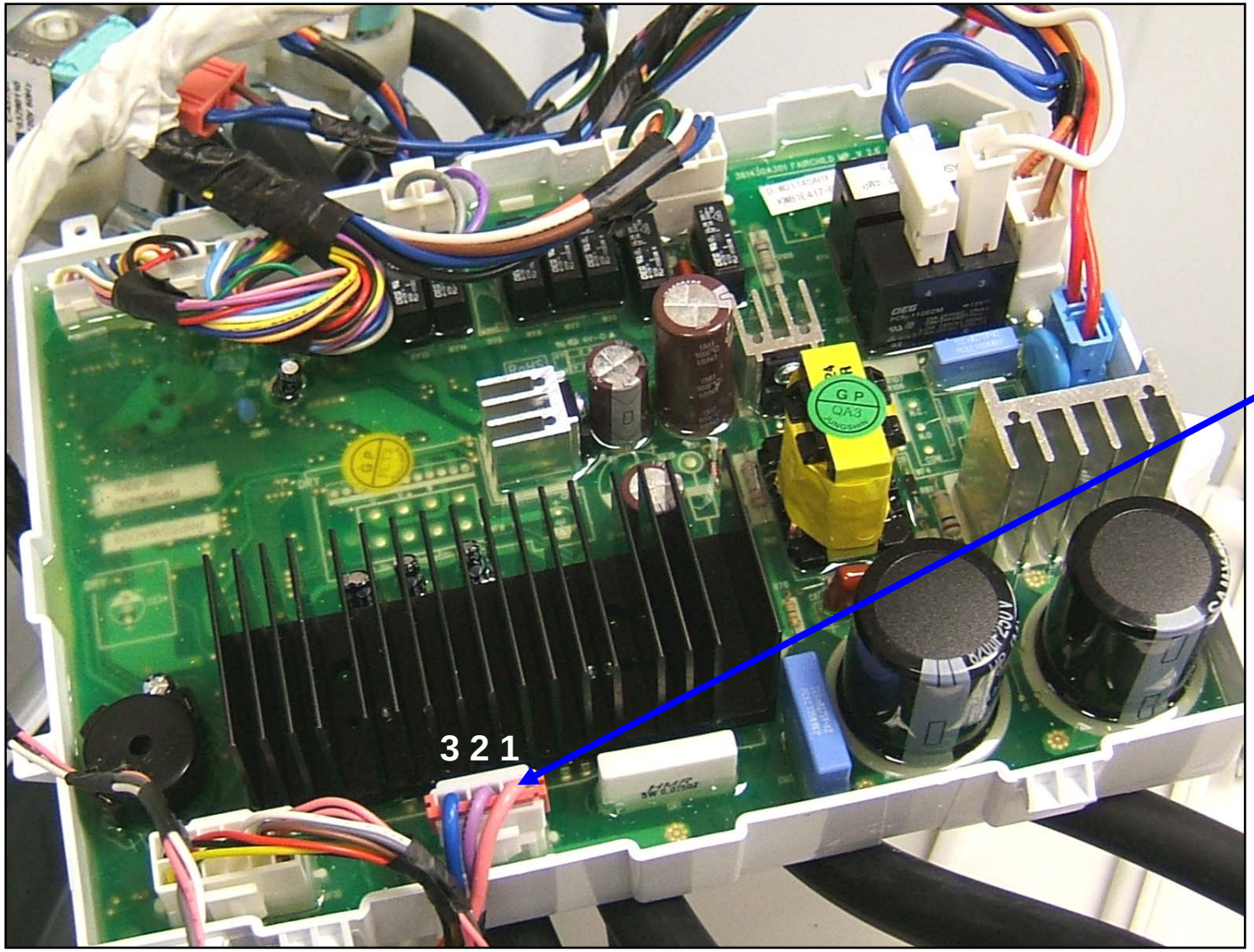
L1

Input voltage into board 120 VAC

Hot is brown wire on WF03 plug, connector # 3.

Neutral is white wire on relay.

Voltage checks from the board

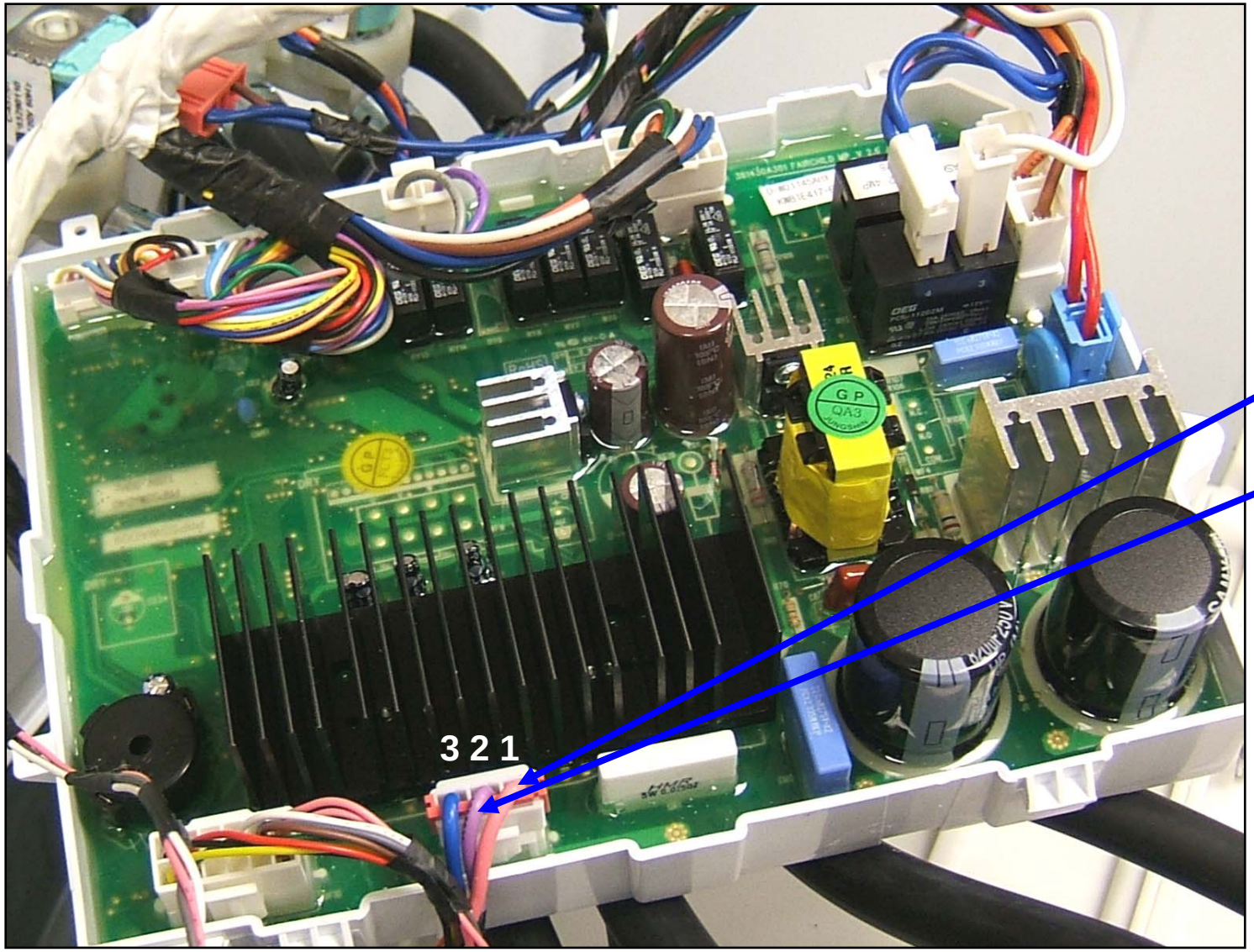


Motor

From motor Plug WFO9 connector # 1 to ground measures

170 – 185 VAC

Voltage checks from the board

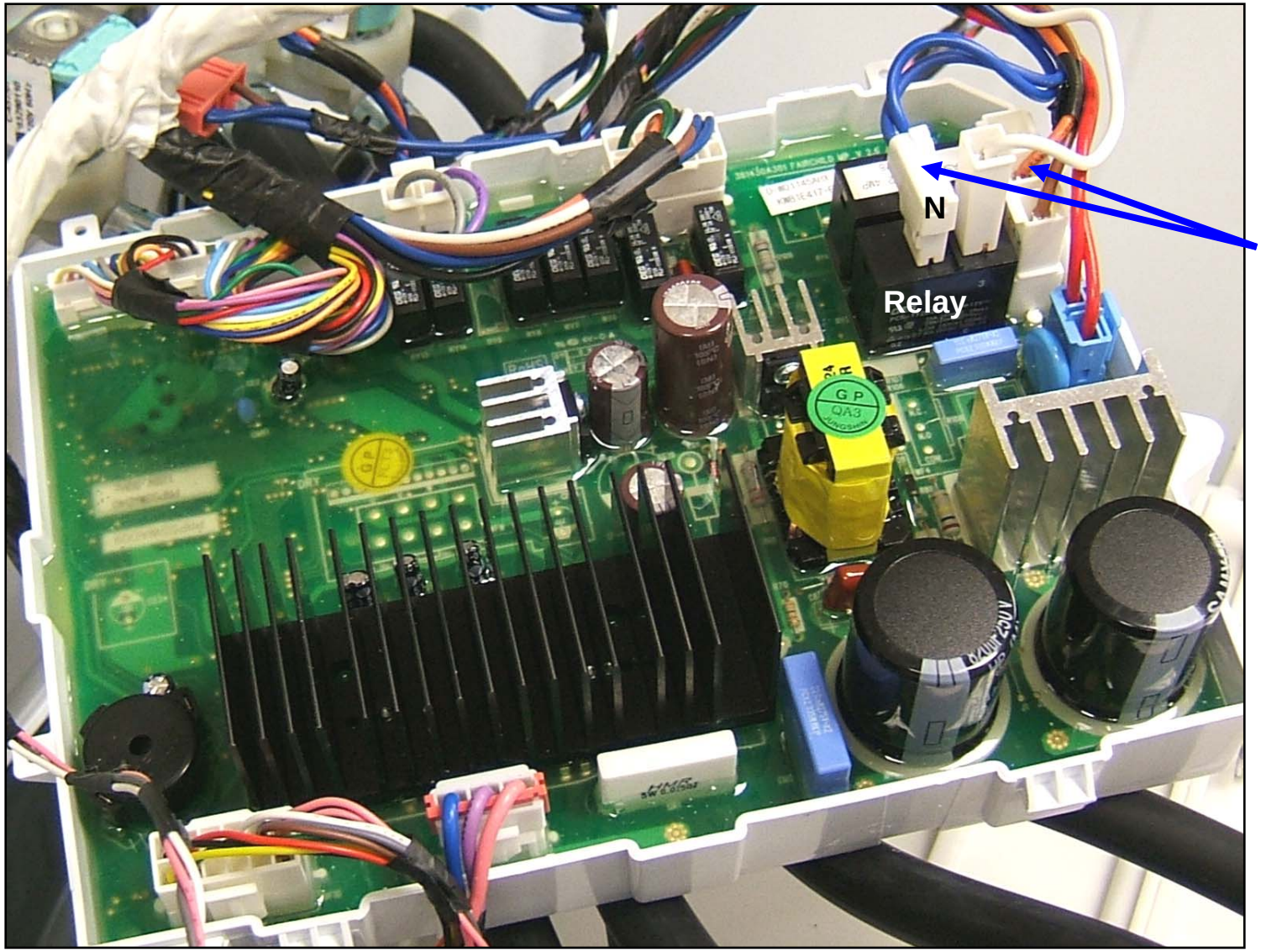


Motor

From motor Plug WFO9 connector 1 -- 2 or 1 -- 3 measures

7 – 11 VAC

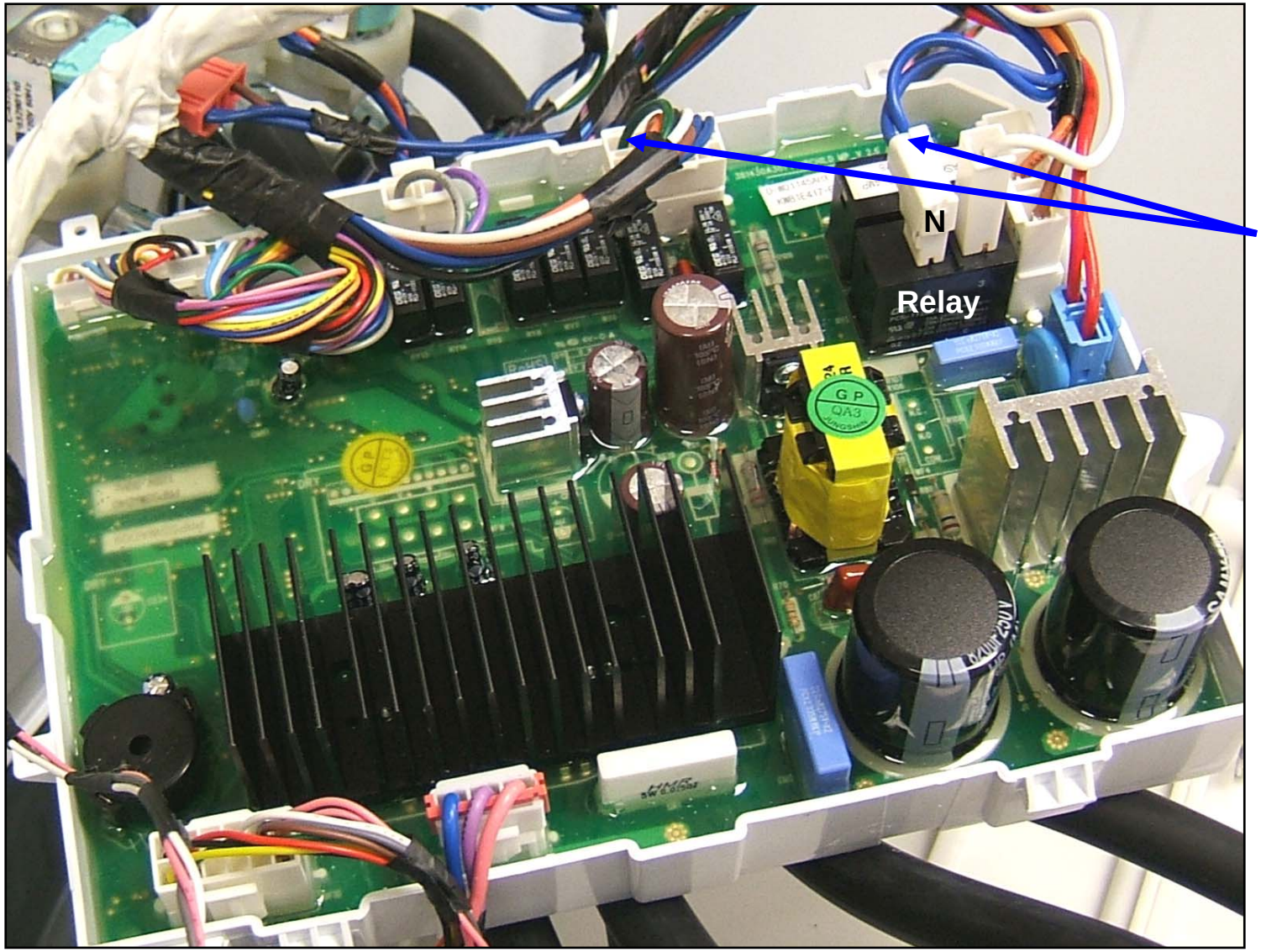
Voltage checks from the board



Heater

From Plug WF03 connector #2 (Orange wire) to blue wire on relay measures 120 VAC when calling for heat

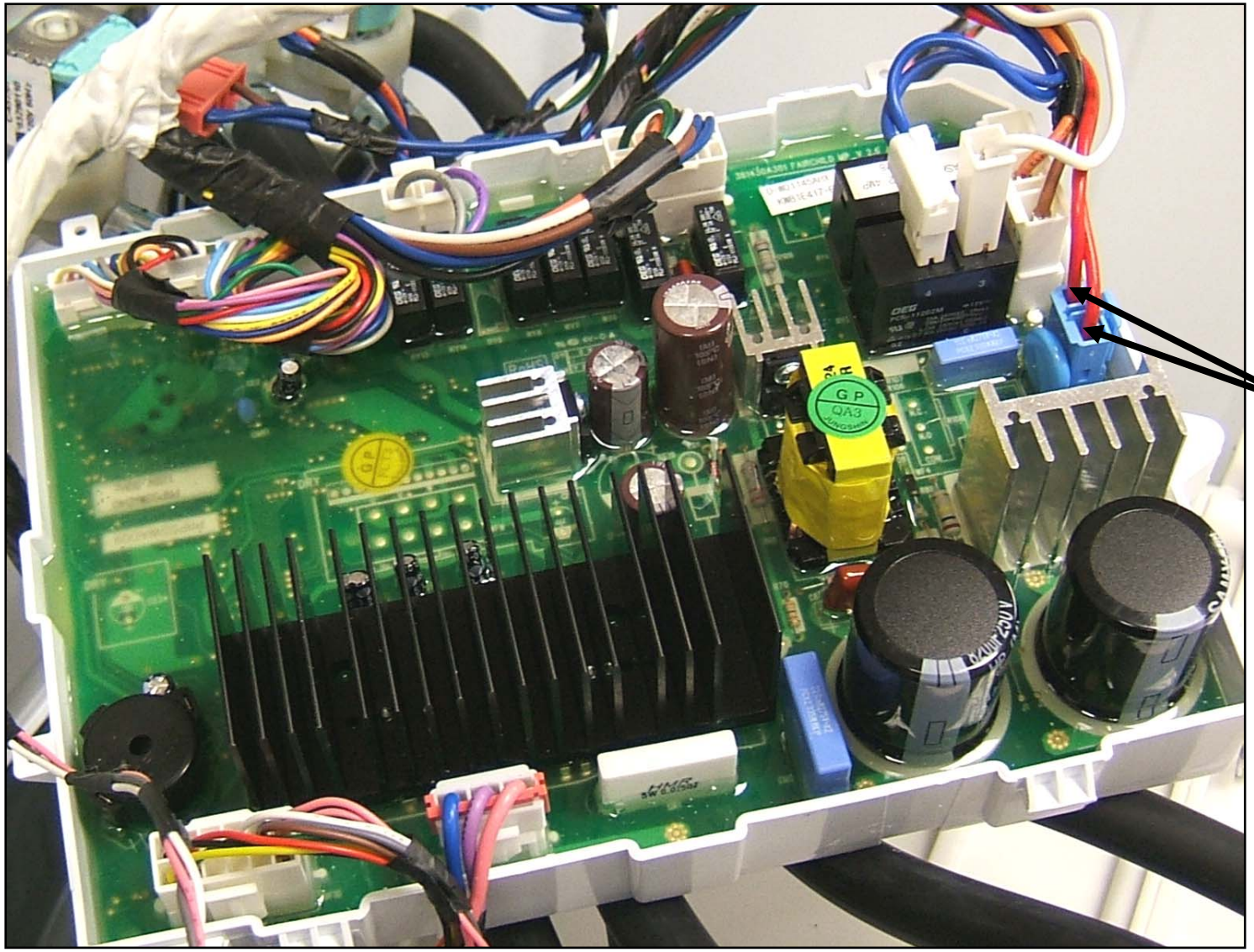
Voltage checks from the board



Drain Pump

From Plug WFO1, connector # 6 (black wire) to blue neutral wire on relay should measure 120 VAC when calling for pump operation

Voltage checks from the board

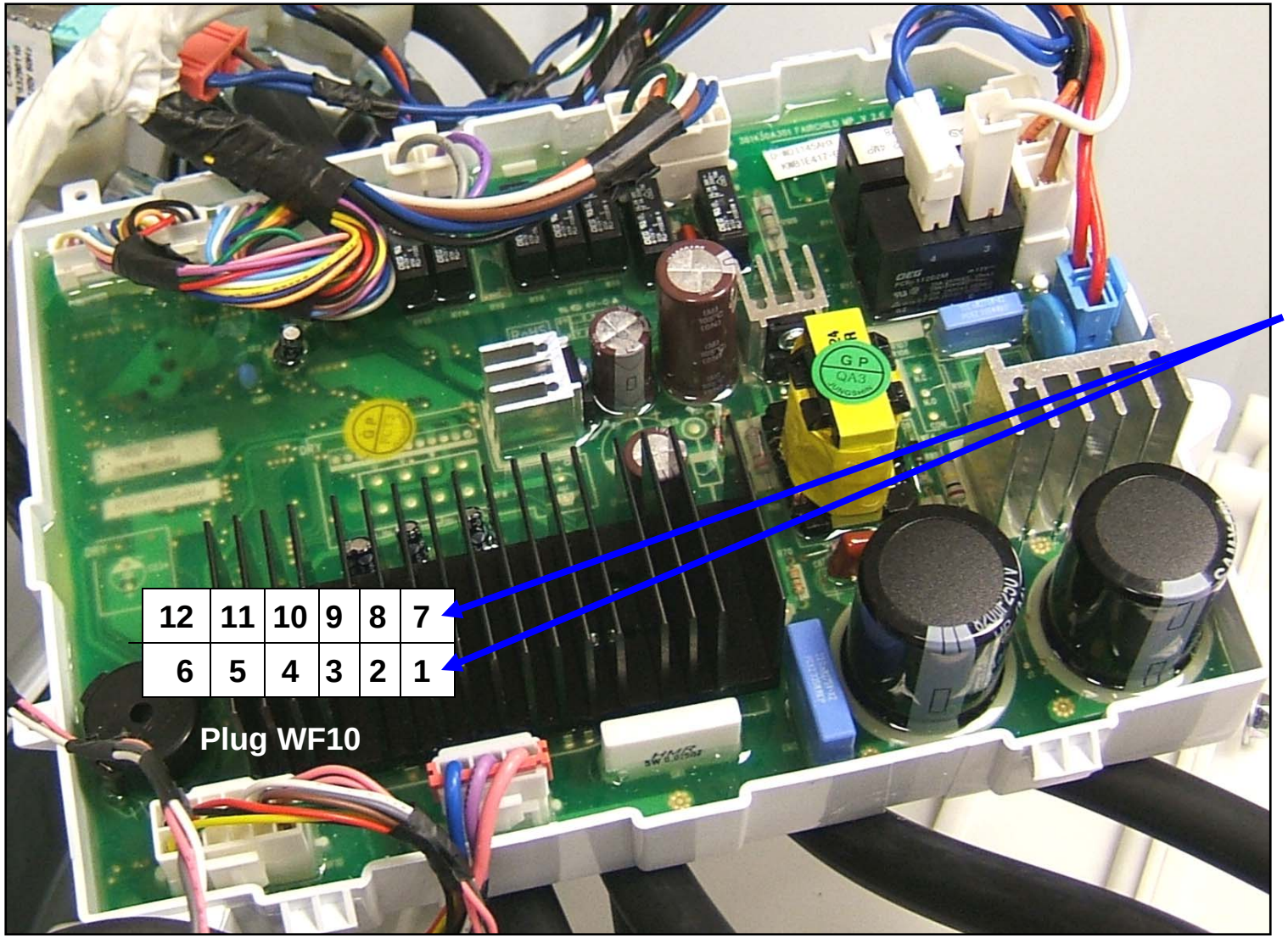


Reactor

Plug WFO5 (2 RED wires)

Line Voltage comes out of board through reactor (transformer coil) and back into board. If reactor fails, unit will not work

Resistance checks from the board

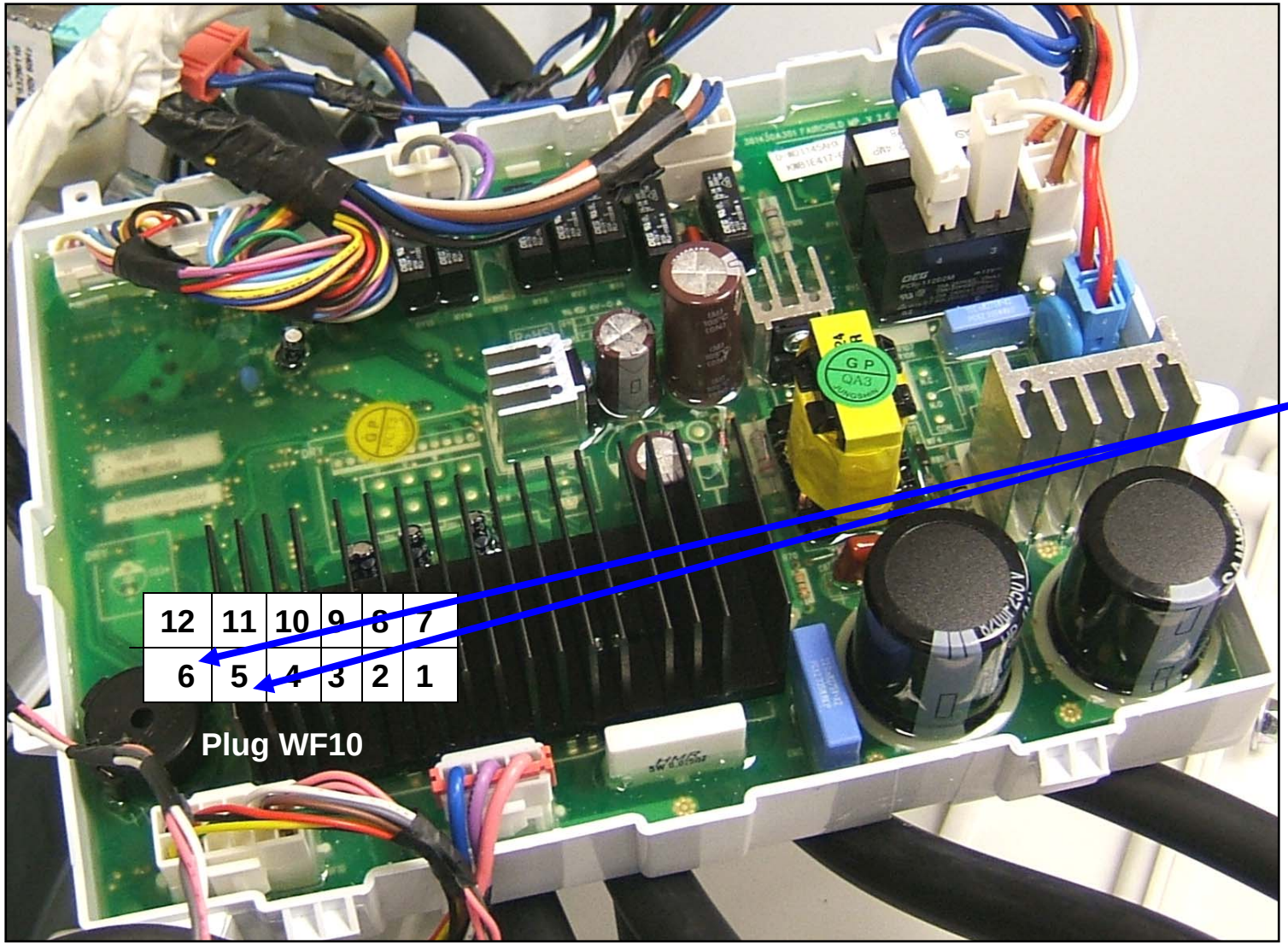


Thermister

Connector # 1 Brown wire to connector # 7 Pink wire measures 14 -- 15 Ohms at room temperature

<u>Note</u>
Disconnect plug from board before checking

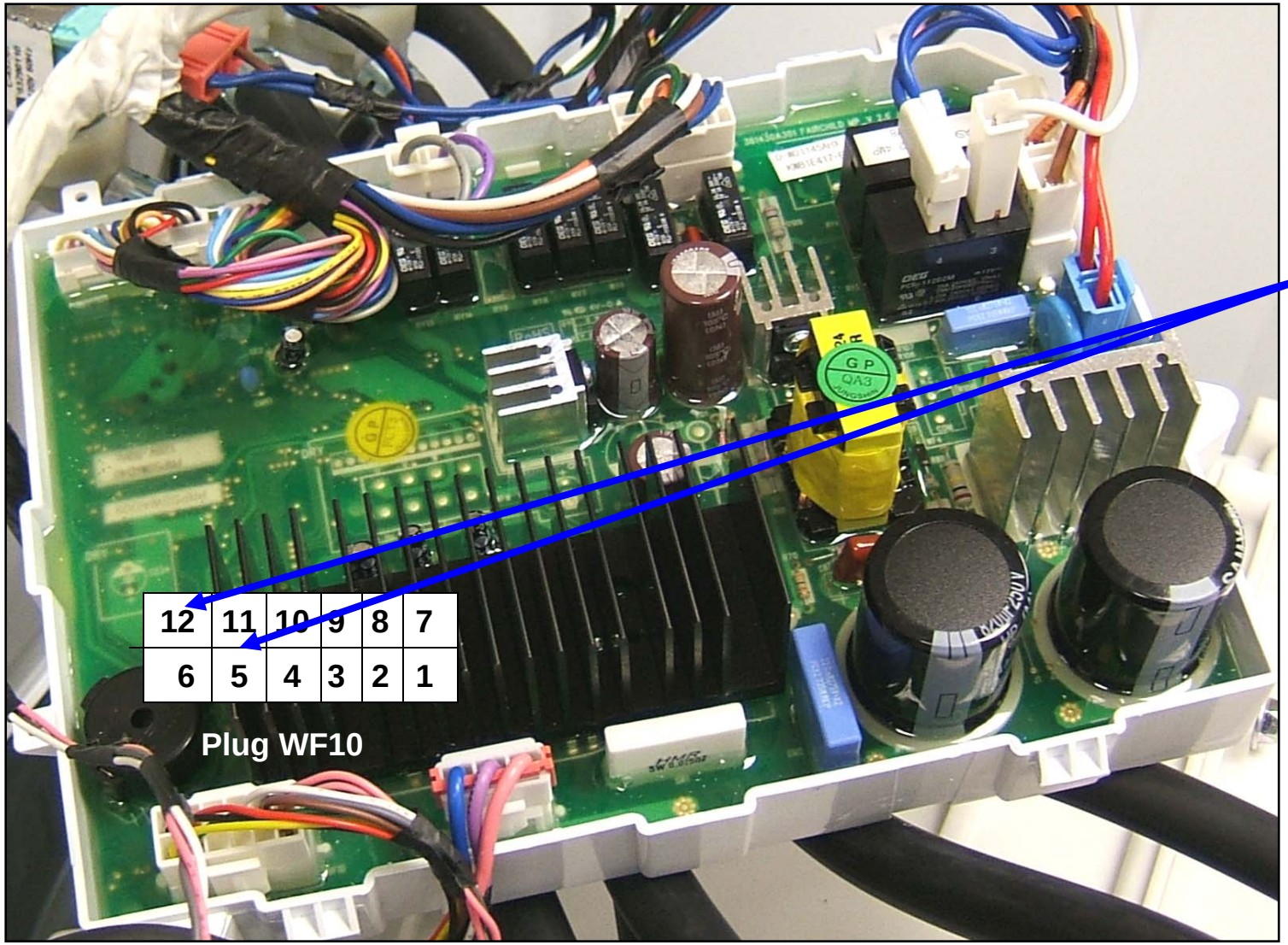
Resistance checks from the board



Hall Sensor

Connector # 5 (green wire) to connector # 6 (yellow wire) reads 18,000 Ohms

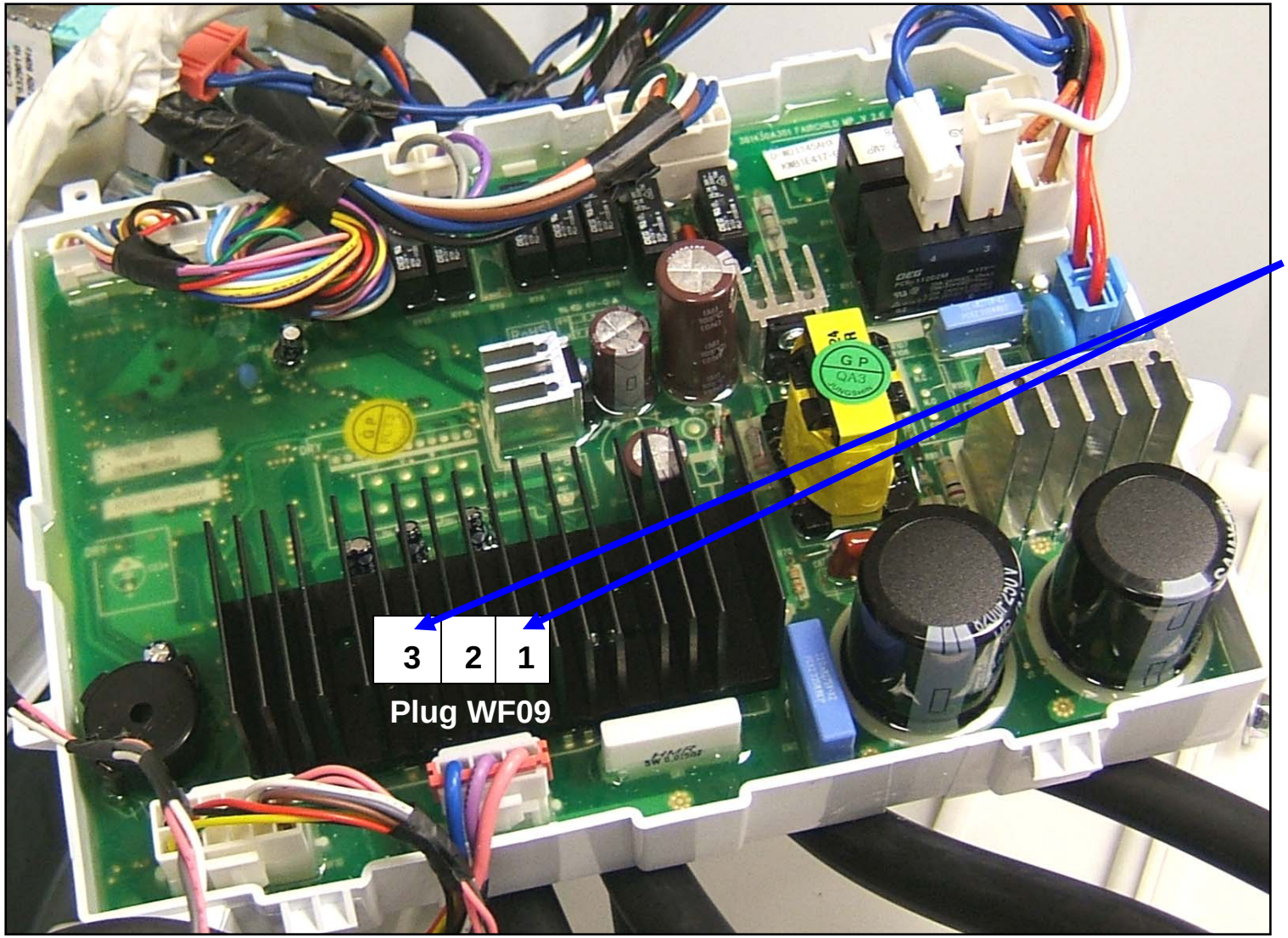
Resistance checks from the board



Hall Sensor

Connector # 11 (violet wire) to connector # 12 (black wire) reads 10,000 Ohms

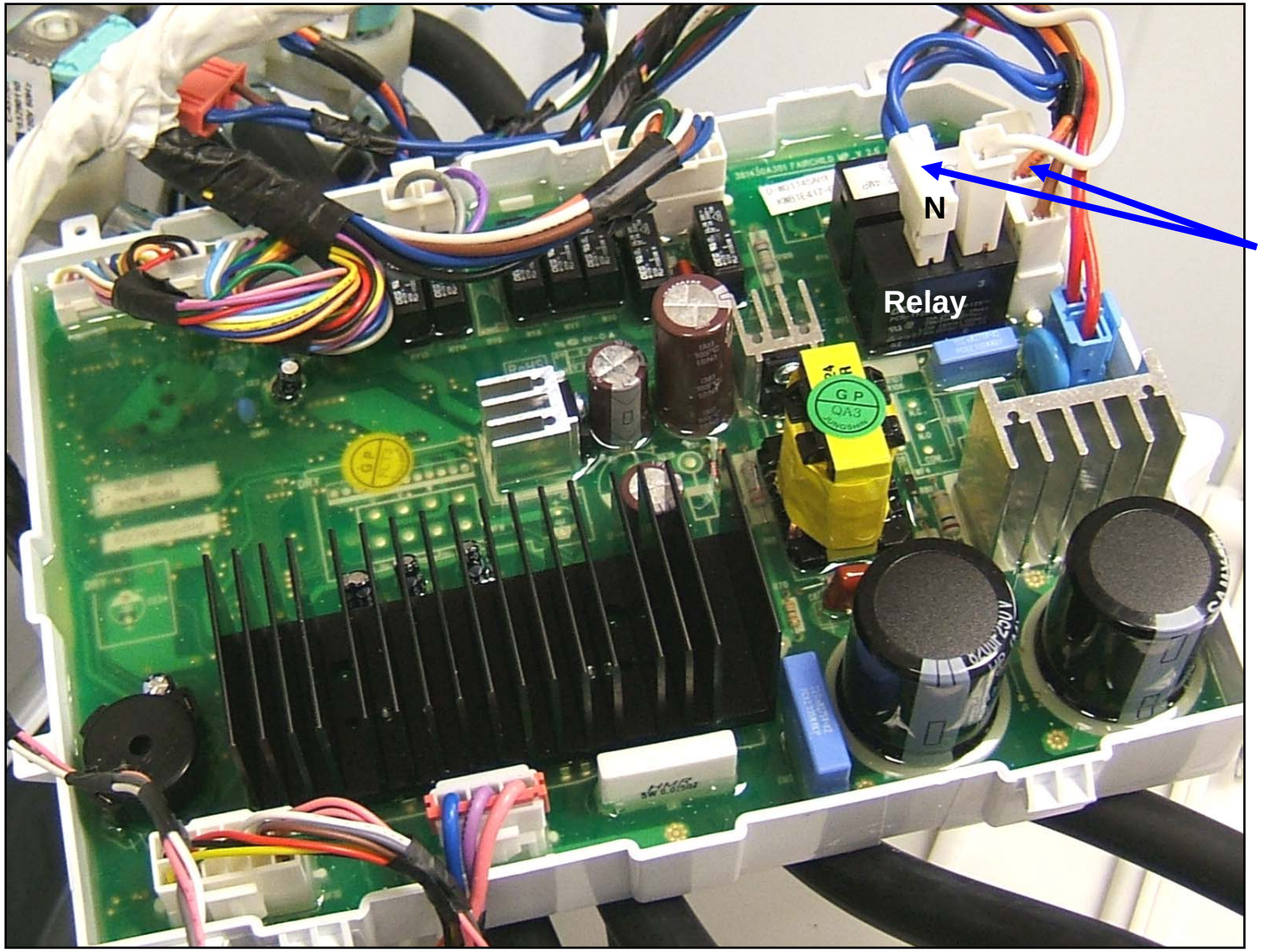
Resistance checks from the board



Motor Stator

Measure between any 2 of the 3 connectors. Should read 7 – 8 ohms

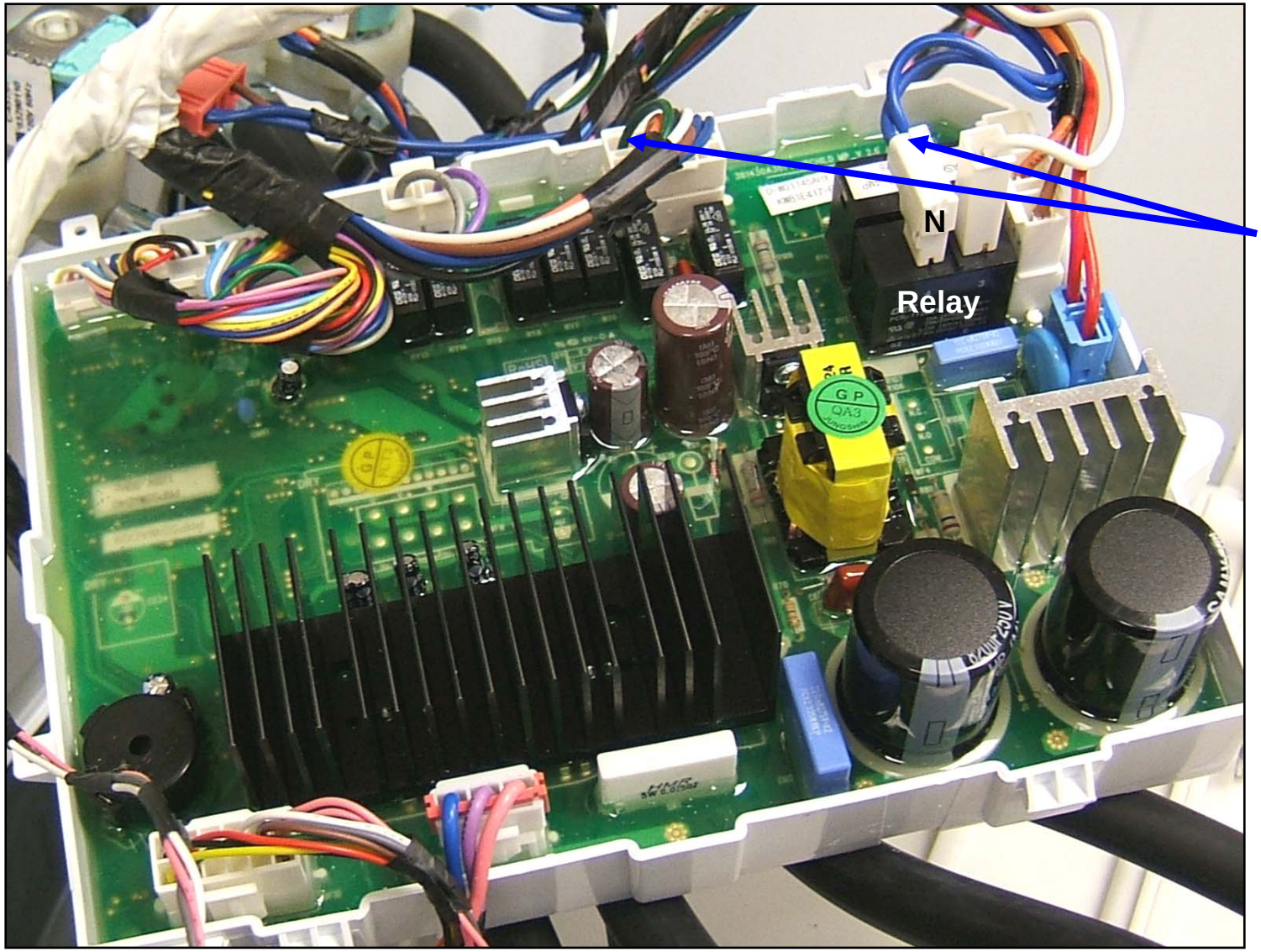
Resistance checks from the board



Heater

From Plug WF03 connector #2 (Orange wire) to blue wire on relay measures 14 Ohms

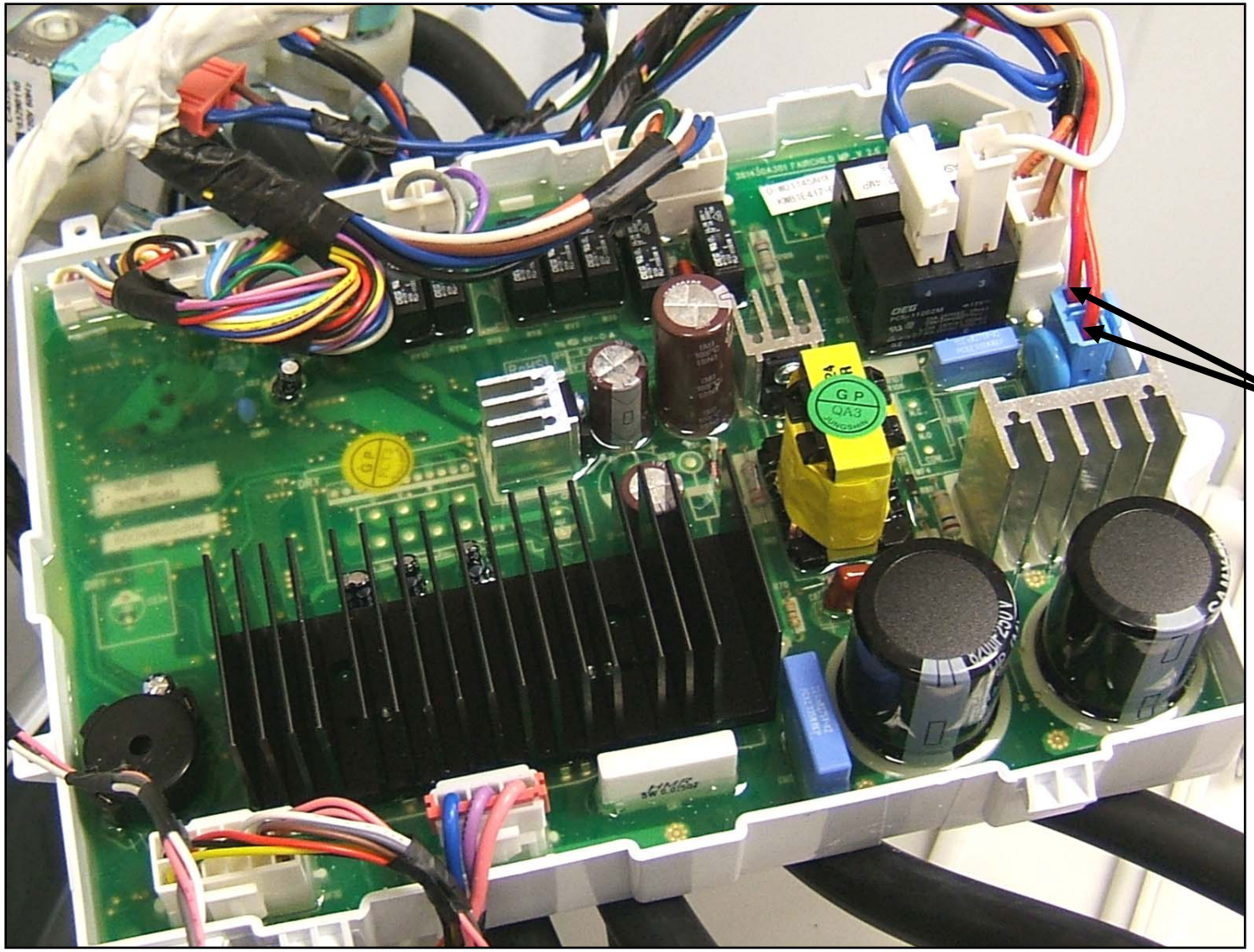
Resistance checks from the board



Drain Pump

From Plug WFO1, connector # 6 (black wire) to blue neutral wire on relay should measure 14 Ohms

Resistance checks from the board



Reactor

Plug WFO5
(2 RED wires)

Measures 0.2 Ohms

Disassembly – Fascia Panel

1. Remove dispenser by pressing in middle section & pulling out

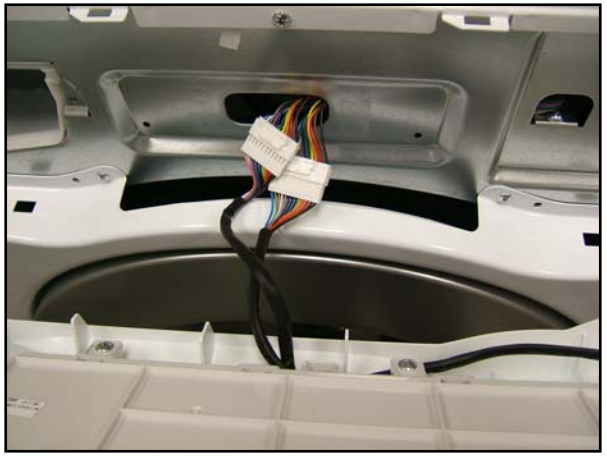
2. This exposes two screws

3. Remove the two screws

4. Lift up on Fascia panel

5. Clear the tabs in top panel

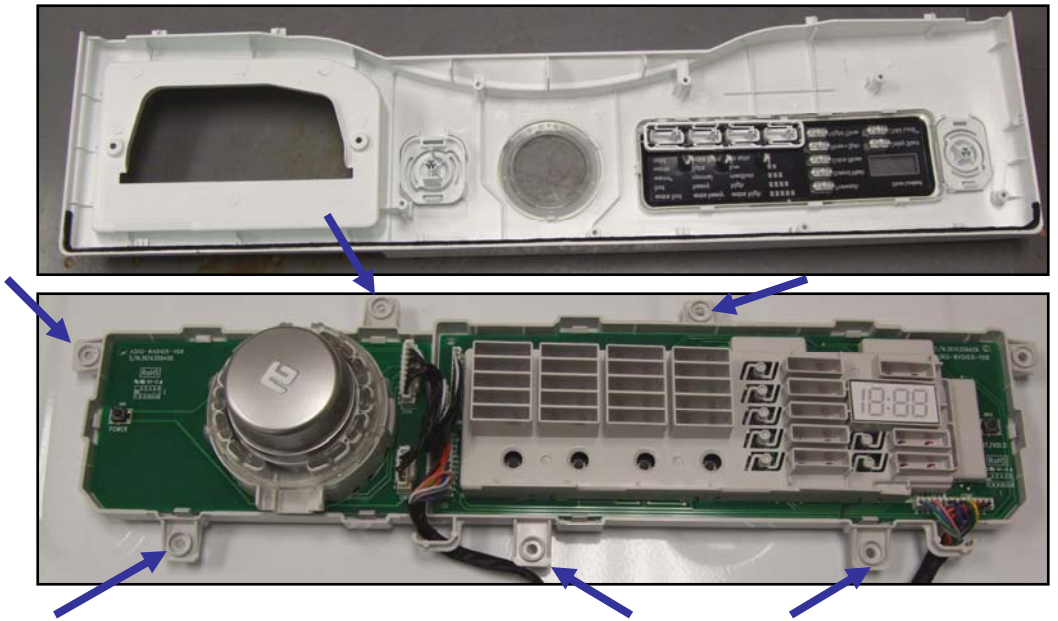
6. Disconnect the 2 connectors



Disassembly – Control Console Assembly

1. Remove Fascia panel from unit

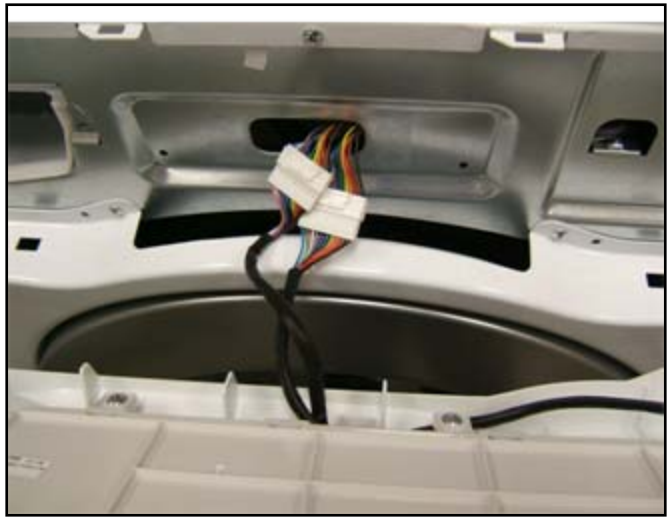
2. Remove 7 screws holding control console to housing



Selector knob and power button can only be removed when console is disassembled

Disassembly – Top Cover

1. Fascia panel removed



2. Remove 3 screws from front of cover

Note: Top cover can not be removed without first removing the fascia panel

3. Remove 4 screws from rear

4. Slide the top towards the front

Disassembly - Front Cabinet

1. Release tension on gasket spring

2. Remove wire

3. Fold gasket inside drum

4. Remove 4 screws at top of panel

5. Lean panel out & lift clear

6. Disconnect door switch harness

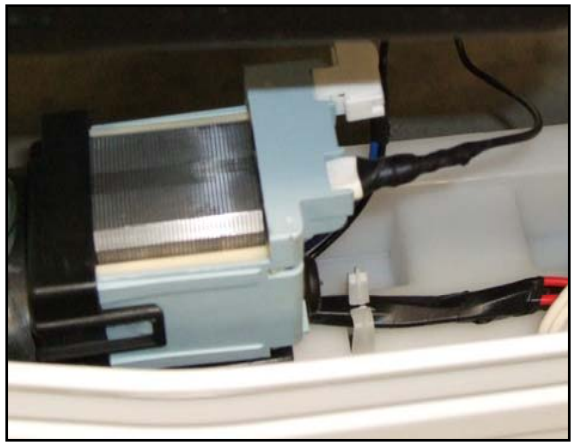
Disassembly - Drain Pump

1. Drain water from sump

2. **Remove Drain Hose Clamp**

3. Remove two screws & sump hose

4. Disconnect the two spade connectors



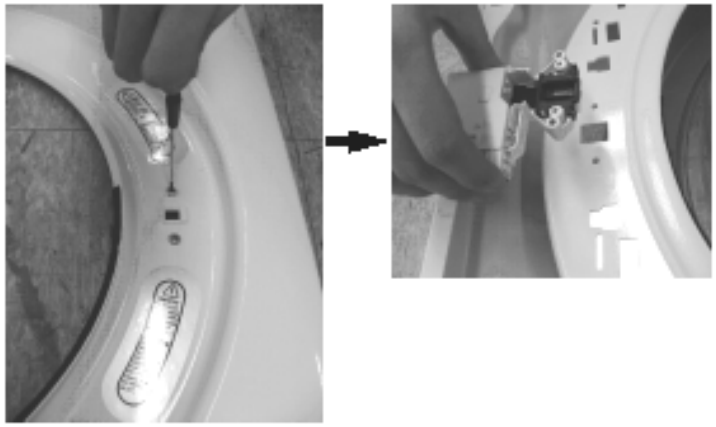
5. Remove Pump

The two hose clamps can be released by simply squeezing with thumb and forefinger. Disengage the pump housing from keyhole slot in front base of unit.

Disassembly – Door Switch

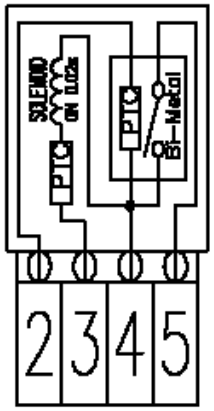
*** How to Replace Door Lock Switch**

1) Open door and dismantle clamp spring for gasket.
2) Dismantle gasket.
3) Loosen 2 screws for door lock S/W.
4) Remove door lock S/W.
5) Administer assembly in reverse order.



*** Checking Solenoid Wiring of Door Lock Switch**

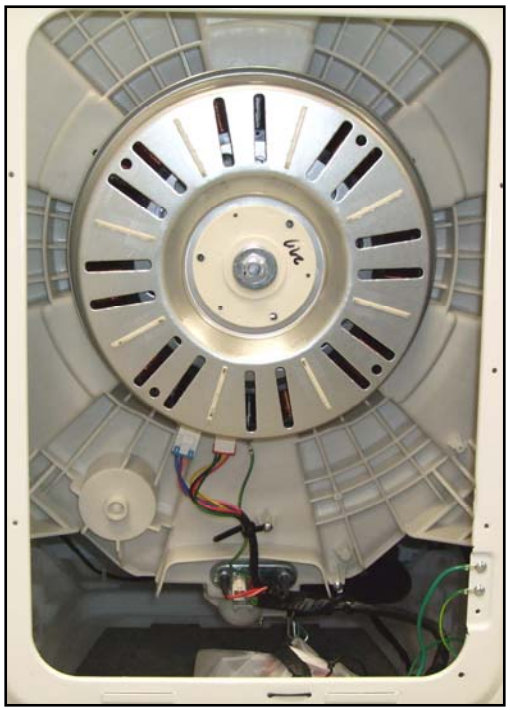
PIN Arrangement



2 3 4 5
(1 does not exist.)

Terminal 3 and 4:
94 Ω

Disassembly – Direct Drive Inverter Motor



Remove the 17mm set screw, lock washer & flat washer. Then remove the Rotor.

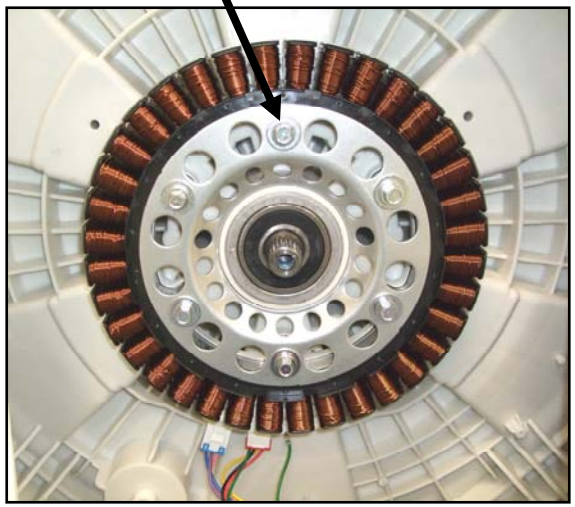
Hint The Rotor is a permanent magnet so watch your hands when pulling it off.

To remove the Stator, first disconnect the 3 pin motor harness plug and then the 4 pin "Hall Sensor" plug.

Next remove the 6 - 10mm set screws, lock washers & flat washers, this will release the stator retaining plate. Make sure at this point that the stators 3 location pegs do not fall out of the rear tub assembly. The stator will need to be supported as the last set screw is removed.

Inside of Rotor showing the 24 permanent magnets

(6) 10mm set screws



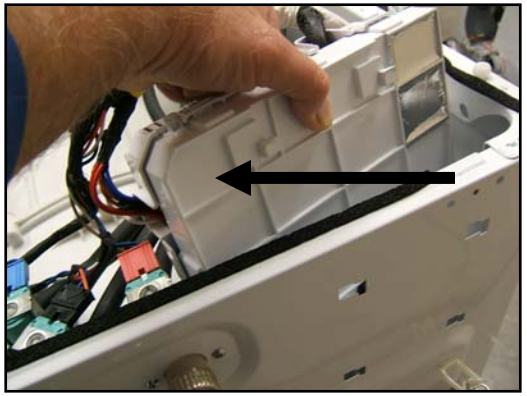
Stator showing the 36 separate coils

Disassembly – Main PCB Assembly

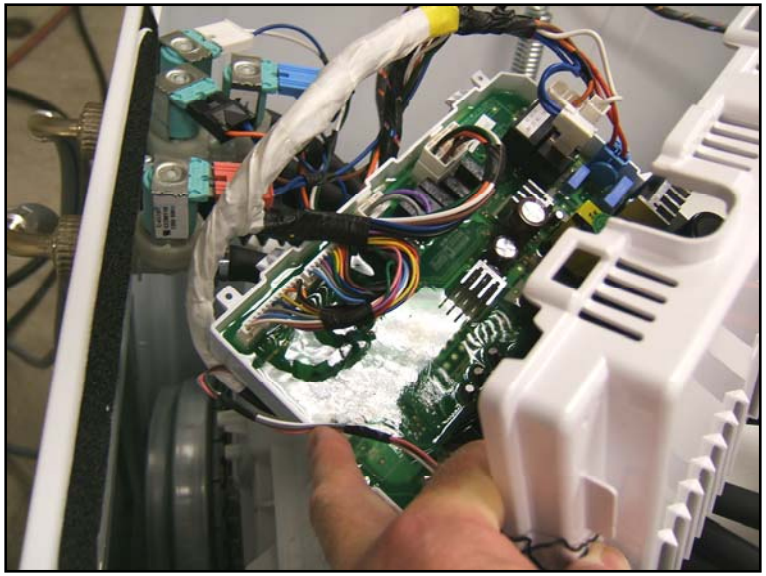
1. Remove single screw

2. Undo wire tie & free harness

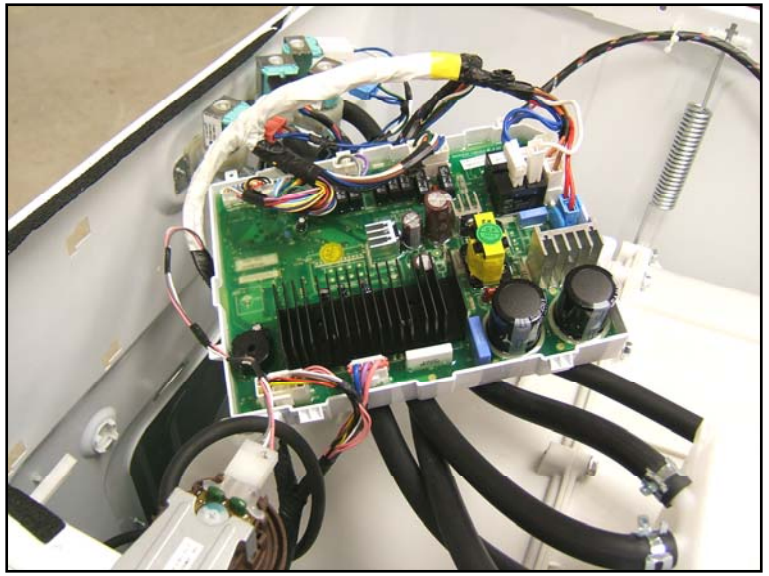
3. Slide box up & to left to free tabs



4. Remove cover by disengaging tabs



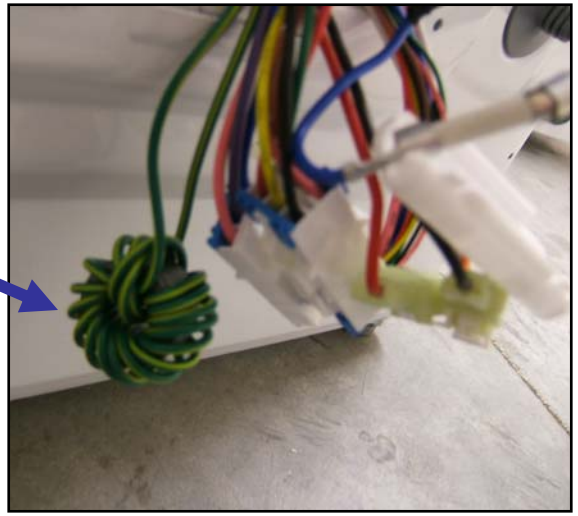
5. Remove connectors or test from board

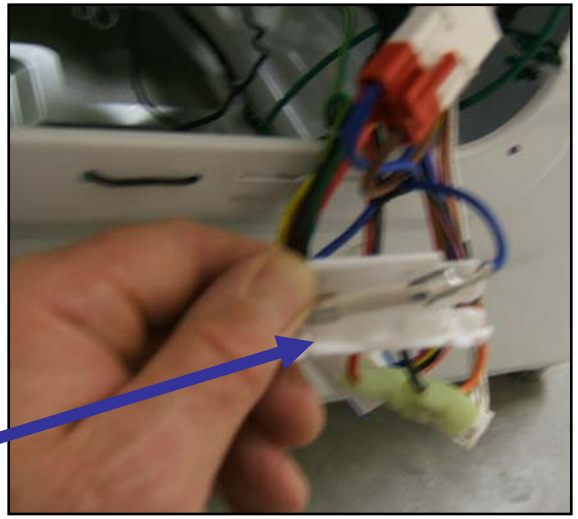


Disassembly – RF filter & Thermal Fuse

Attached to the rear lower wall of the cabinet is a plastic bag containing wire connectors the RF filter and a plastic holder containing an IN-LINE THERMAL FUSE rated at 20 amps

RF filter





20 amp thermal fuse

Disassembly – Tub & Drum Removal

Follow the steps for disassembly of:

Control Panel

Top Cover

Front Panel

Motor

Boot Seal

Then remove the hose which goes from the dispenser to the front half of the tub.

Lay the machine on its back.

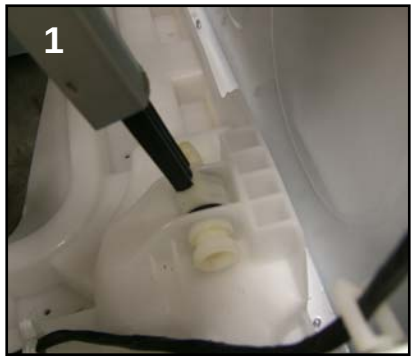
Separate the front tub supports (shocks)

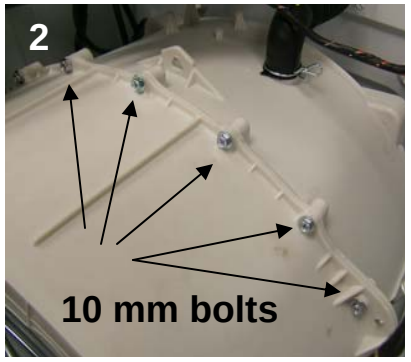
Remove the support springs from the front half of the tub

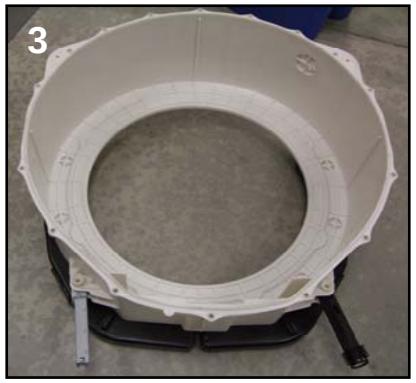
Remove all 10mm bolts which hold the two sections of the tub together.

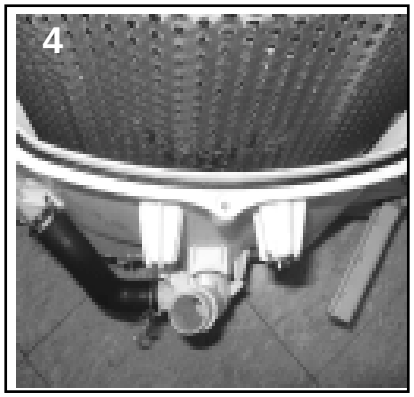
Lift out the front half of the tub (If it is easier, the weights can be removed from tub)

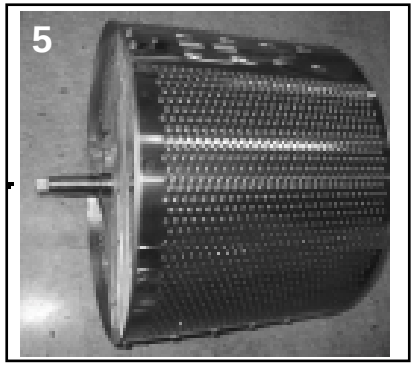
Remove the drum

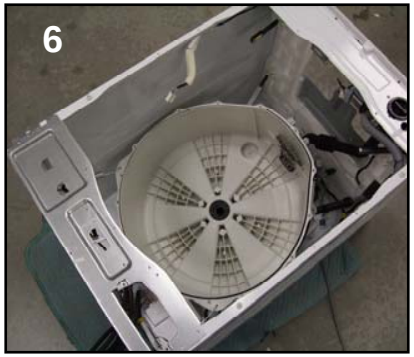












Door Reversal…Changing from left hinge to right hinge

1. Remove dispenser by pressing in middle section & pulling out

2. This exposes two screws

3. Remove the two screws

4. Lift up on Fascia panel

5. Clear the tabs in top panel

6. Lay Fascia panel on to top panel

Door Reversal…Continued

7. Release tension on gasket spring

8. Remove wire

9. Fold gasket inside drum

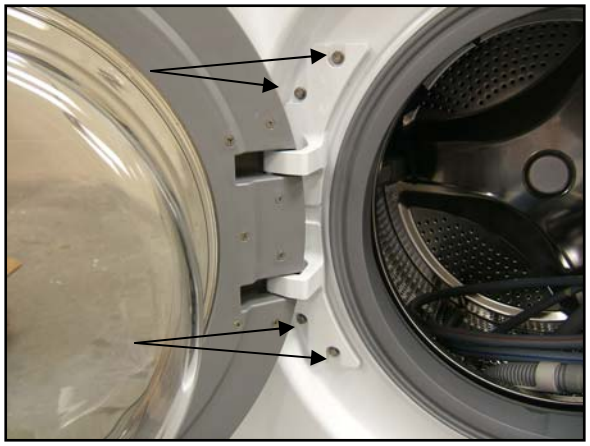
10. Remove 4 screws at top of panel

11. Lean panel out & lift clear

12. Disconnect door switch harness

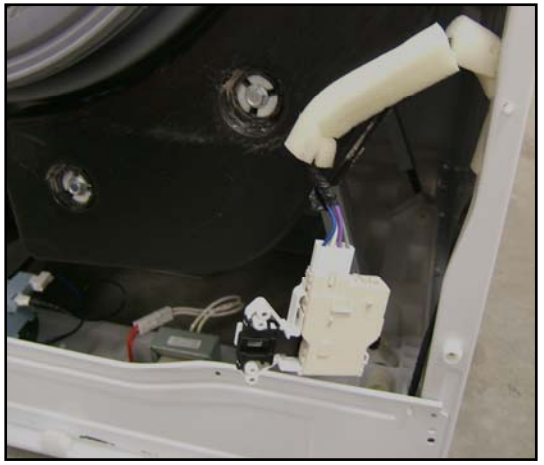
Door Reversal…Continued

13. Remove the 4 set screws from hinge, It will stay in place. 14. Slide hinge to right & lift up & out of panel



15. Remove retaining plate

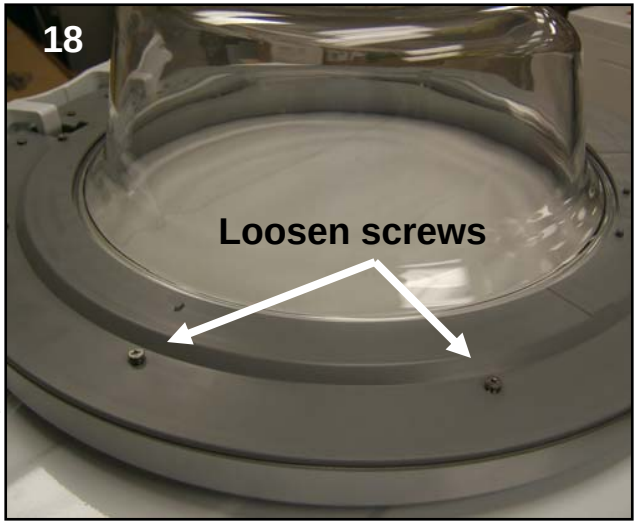
16. From inside the panel push on labels which cover mounting holes and peel off carefully to re-use. Remove the 2 screws holding the door lock and set the panel aside.



Door Reversal…Continued

Disengage wiring harness for lock from right side & bottom panel retainers, & secure to left side of unit

18. Loosen screws around inner door, lift slightly with a flat blade & rotate the glass 180 degrees it will lock into place. Tighten screws Attach hinge plate to right side of panel, then install door & hinge assembly. Attach lock to left side of panel then place stickers over the holes in plate.



PCB Manual Test Mode

1. Press the power button to turn on.

The PCB and other electronic parts can be tested without having a water supply to test their operation

2. Press & hold the “Wash” button

3. Press the spin button 3 times the display will show version information

4. Press the signal button to cycle through the following tests….1. Door lock close

PCB Manual Test Mode…Continued

2. Running times count

3, 4, 5, & 6 – E5-E8 Error codes logged

7. Not used 8. Hot valve on

9. Cold valve on

PCB Manual Test Mode…Continued

10. Pre wash valve on

11. Do not use

12. Bleach valve on

13. Drain pump on

PCB Manual Test Mode…Continued

14. Door lock open

1. Back to door lock close

The PCB manual test mode enables the technician to see how many cycles the machine has run, and the number of E5-E8 errors. All the valves can be activated plus the door lock and the drain pump.

The Wash / Spin motor is not activated through this test. To test the motor, run a spin cycle or a rinse and spin cycle.

Error Codes the consumer may see

Most problems are easily solved if you understand the cause. If the machine shows an error code in the display, consult the fault code descriptions below for a possible cure. Once you've tried the following suggestions, turn the power to the washer off. Next, turn the machine back on and restart the wash cycle. If you are unable to resolve the issue, call our Customer Care Center at the number on the bottom of the page.

The washer will not operate at all.

- Is there a power failure?
- Is the power cord correctly connected to an electric outlet?
- Did you turn on the power?
- Did you press Start/Stop button?
- Is there correct amount of laundry in the washer?
- Is the door open? (The lamp "  " will light up in this case.)

The washer will not spin

Error display 

- Are the clothes in the drum collected on one side?
- Is the washer installed on an uneven floor or is the vibration serious?

Spinning is insufficient

Error display 

- Is the filter of the drain pump clogged?
- Does there appear to be water left in the wash drum?
- Did you use the proper amount of detergent?
- Is the drain hose placed higher than 39" above floor?

Vibrating and too noisy

- Is the washer installed on an uneven floor?
- Have all the shipping bolts removed?

Error Codes the consumer may see

Water is not supplied

Error display 

- Did you connect the inlet hoses and open water valves?
- Are the inlet hoses or water valves frozen?
- Is the water supply shut off?
- Is there debris blocking the inlet hose filters?

The washer will not drain

Error display 

- Is the drain hose frozen or blocked by debris?
- Is the drain hose kinked or deformed?
- Is the end of the drain hose pushed more than 3 or 4 inches into the drain pipe?
- Check to make sure the drain filter is clean.

Note!

- If  and  error mode are showed on LED panel, please contact our Customer Care Center at the number listed on the bottom of the page.

Error Codes the Technician may see

6-3. UE (Unbalance Error)

1) Conditions of Occurrence

① In case the main spin is not reached within 20 cycles of balance spinning.

② In case balance spining fails during the middle spin, UE occurs as the cycle moves to the next process.

2) All LEDs are turned off and 'UE' blinks in the display.

3) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

4) The error mode is cleared by opening door and organizing the laundry in drum, closing door and pressing start/stop button. The spin cycle will begin again.

Error Codes the Technician may see

6-4. LE (Lock Error) - Door opening error

1) Conditions of Occurrence

① When starting a cycle while door is opened

2) All LEDs are turned off and 'LE' blinks in the display.

3) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

4) The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-5. E1 - Water level detection error

1) Conditions of Occurrence

① In case water level is below reset or overflow is detected in line test mode

2) The drain pump is kept on until water level falls below reset.

3) All LEDs are turned off and 'E1' blinks in the display.

4) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

5) The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-6. E2 - Overflow error

1) Conditions of Occurrence

① In case water level in water tank is above overflow level due to continuous operation of water inlet valve

2) The drain pump is kept on until water level falls below reset.

3) All LEDs are turned off and 'E2' blinks in the display.

4) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

5) The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-7. E4 - Water leakage during washing

1) Conditions of Occurrence

① In case water level falls below re-supply even after 15 times of re-supply and before temperature has been satisfied.

2) All LEDs are turned off and 'E4' blinks in the display.

3) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

4) The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-8. E9 - Abnormalities in water level sensor

1) Conditions of Occurrence

① In case water level frequency is of 15KHz or lower and 30KHz or higher during cycle due to abnormalities in water level sensor, etc.

2) All LEDs are turned off and 'E9' blinks in the display.

3) An error buzzer alarm is sounded for 10 seconds every 10 minutes.

4) The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-9. Motor-related Error

1) E5 (DC-Link High Voltage) Error

① In case DC-link voltage to IPM increases to 450V or higher

② Motor operation is stopped and 'E5' is shown in display window.

③An error buzzer alarm is sounded for 10 seconds every 10 minutes.

④The error display is cleared when turning off/ on power.

2) E6 (EMG) Error

① In case current detected with EMG port is of 20A or higher

② Motor operation is stopped and 'E6' is shown in display window.

③An error buzzer alarm is sounded for 10 seconds every 10 minutes.

④The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-9. Motor-related Error

3) E7 (Direction) Error

① In case signal of Hall IC is different from the predicted signal according to direction of rotation

② Motor operation is stopped and 'E7' is shown in display window.

③An error buzzer alarm is sounded for 10 seconds every 10 minutes.

④The error display is cleared when turning off/ on power.

4) E8 (Initial Operation Fail) Error

① In case input signal of Hall IC is abnormal due to problems in motor connection, etc.

② Motor operation is stopped and 'E8' is shown in display window.

③ An error buzzer alarm is sounded for 10 seconds every 10 minutes.

④ The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-10. Error in Temperature Sensor

1) H2 Error - Washing temperature sensor open/ short

① In case washing temperature sensor is defective or not connected

② An error buzzer alarm is sounded for 10 seconds every 10 minutes.

③ The error display is cleared when turning off/ on power.

2) H4 Error - Washing temperature sensor overheating

① In case temperature detected by washing temperature sensor is 205°F (95°C) or higher.

② An error buzzer alarm is sounded for 10 seconds every 10 minutes.

③ The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-10. Error in Temperature Sensor

3) H5 Error - Water temperature error in wool/ delicate course

① In case water temperature in wool/ delicate course is 113°F (45℃) or higher

②An error buzzer alarm is sounded for 10 seconds every 10 minutes.

③The error display is cleared when turning off/ on power.

4) H6 Error - Abnormality in washing heater

① Within 15 minutes after heater operation begins;

In case standard temperature is of 108°F (42℃) or lower: If temperature does not increase by 2°F or more. In case standard temperature is higher than 108°F (42℃): If temperature does not increase by 2°F or more

② If temperature falls below standard temperature by 2°F or more due to re-supply of water, etc., standard temperature is reset as the current temperature and error check time of 15 minutes is reset.

③An error buzzer alarm is sounded for 10 seconds every 10 minutes.

④The error display is cleared when turning off/ on power.

Error Codes the Technician may see

6-10. Error in Temperature Sensor

5) H8 Error - Washing heater overheating

① In case washing heater temperature increases by 10°F (5°C) or more within 30 seconds when there is no water in tank, etc.

②An error buzzer alarm is sounded for 10 seconds every 10 minutes.

③The error display is cleared when turning off/ on power.

6-11. PFE (Pump Filter Error)

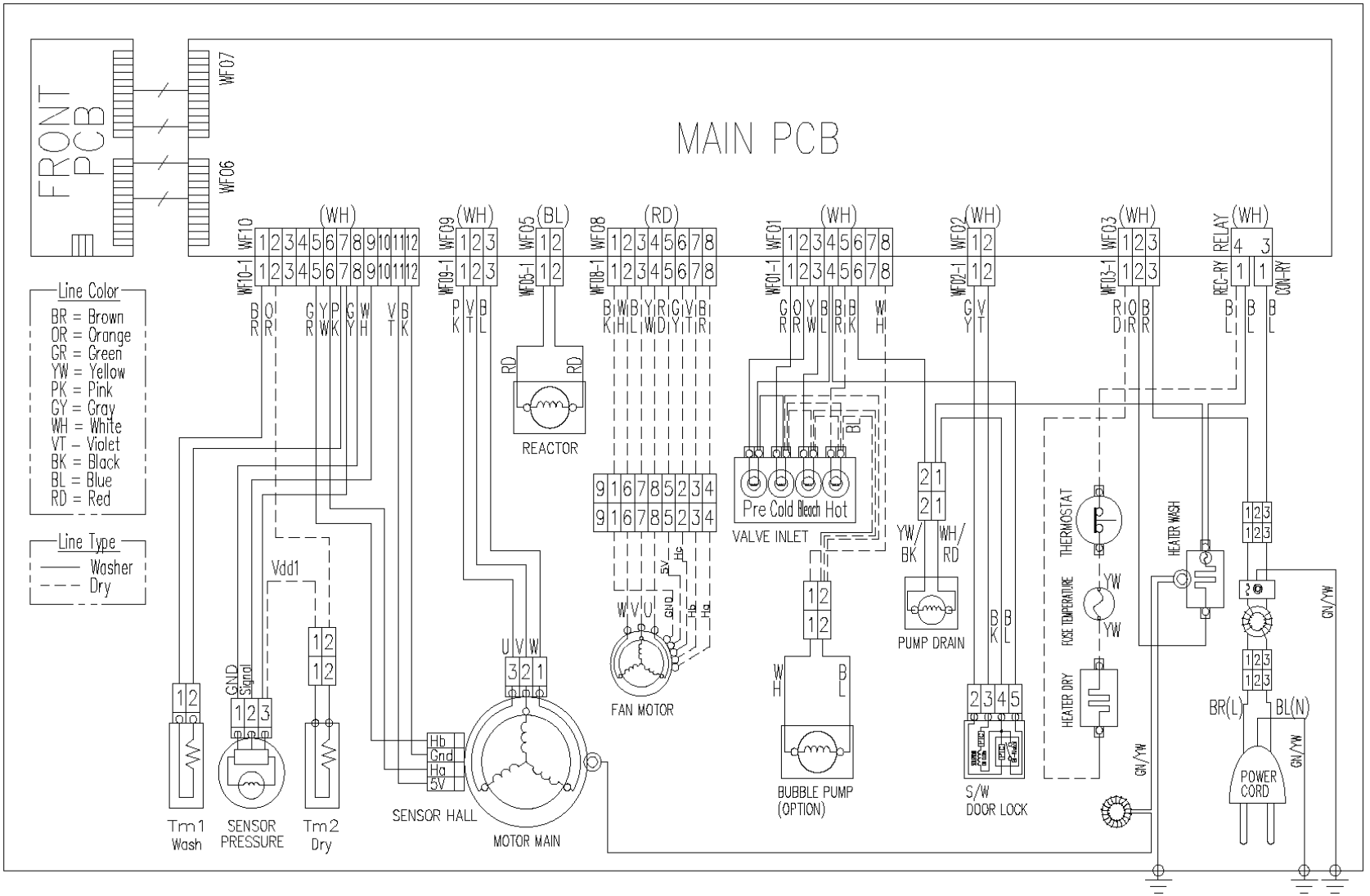
① Cycle is skipped to the next when the current r.p.m. is different from the target r.p.m by 70 during the middle spin cycle.

② Cycle is skipped to balance spin when the current r.p.m is different from the target r.p.m by 70 during main spin cycle.

③ 'PFE' error is caused if main spin cycle current r.p.m differs from the target r.p.m by by 70 occurs 10 times.

④The error display is cleared when turning off/ on power.

Wiring Diagram



Wiring Diagram…Heater Circuit