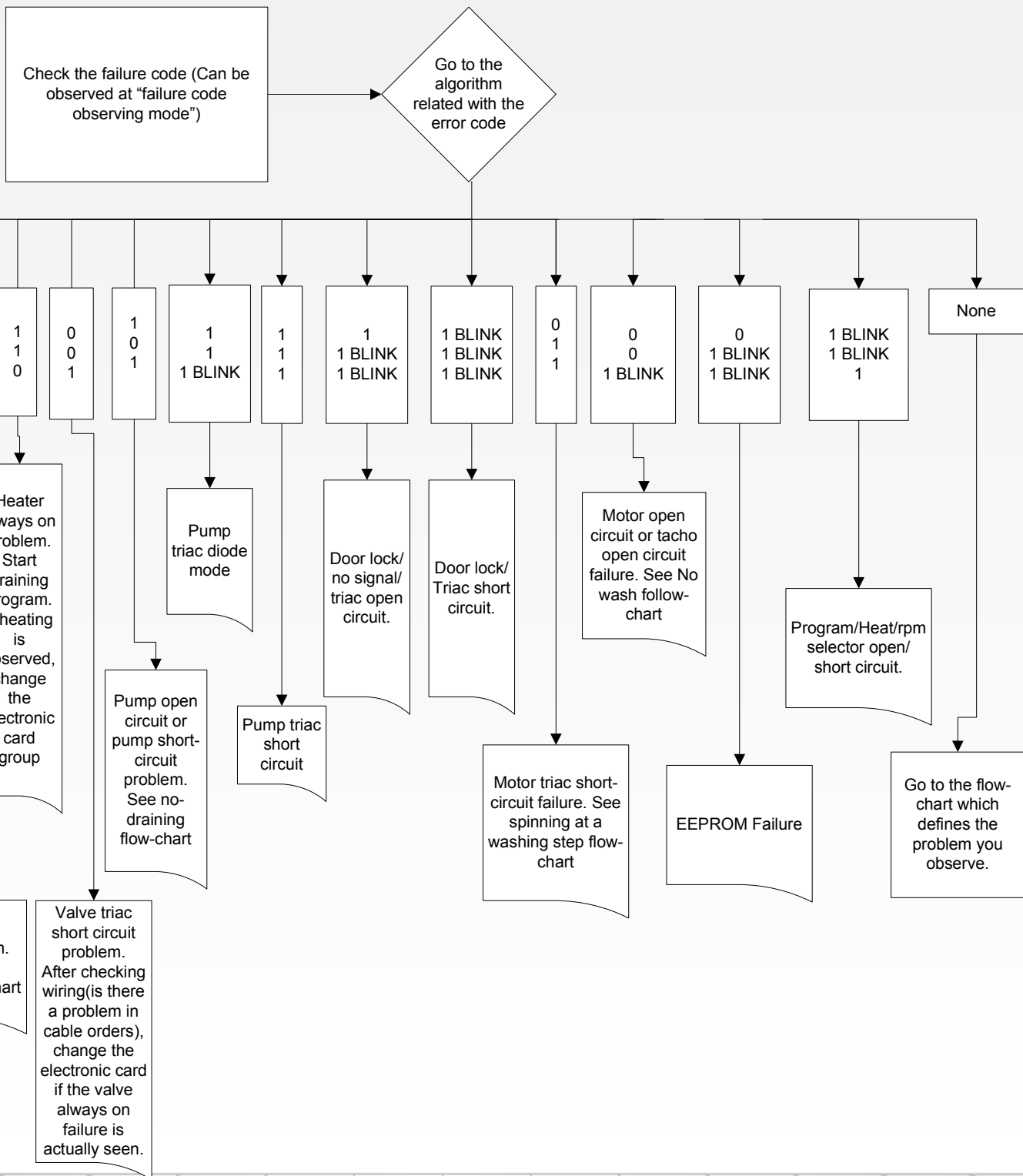


# Fora Failure Finding Flowcharts



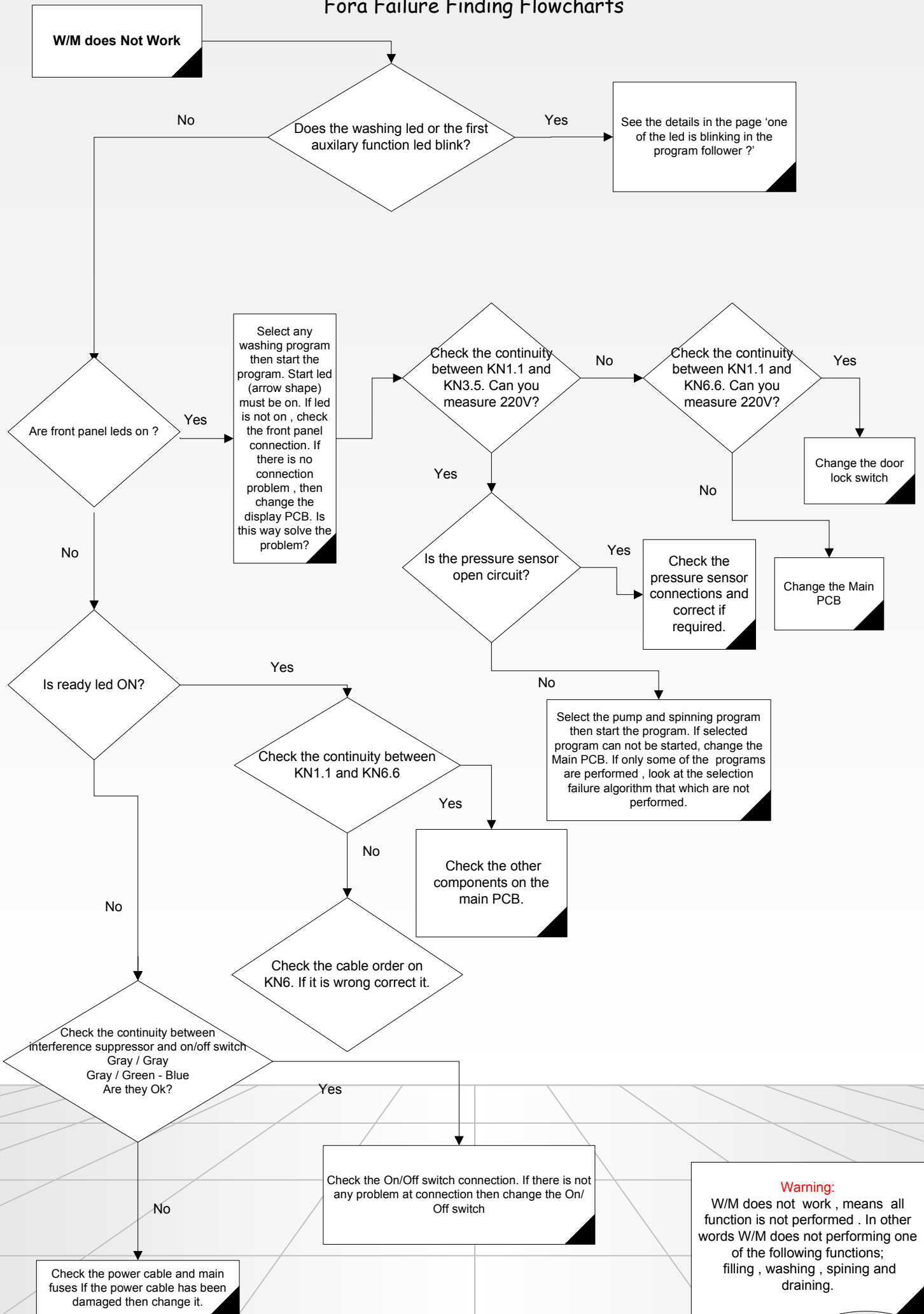
## FAILURE CODE OBSERVING MODE:

Entrance:  
Open the machine from on/off button. From left to right ( Starting from the button next to the start/stop button), press the second auxiliary function button for 3 sec.. The failure code will be seen on the follower. It will disappear in 3 - 5 sec. It will be seen if the button is pressed again.

## NOTE:

**THE FAILURE CODES DO NOT COMPLETELY SHOW THAT THE RELATED COMPONENT IS NOT FUNCTIONING. TO DECIDE THIS WE HAVE TO CHECK THE CABLE CONNECTIONS AND BE SURE THAT THERE IS NOT ANY PROBLEM BETWEEN THE CONNECTIONS.**

# Fora Failure Finding Flowcharts

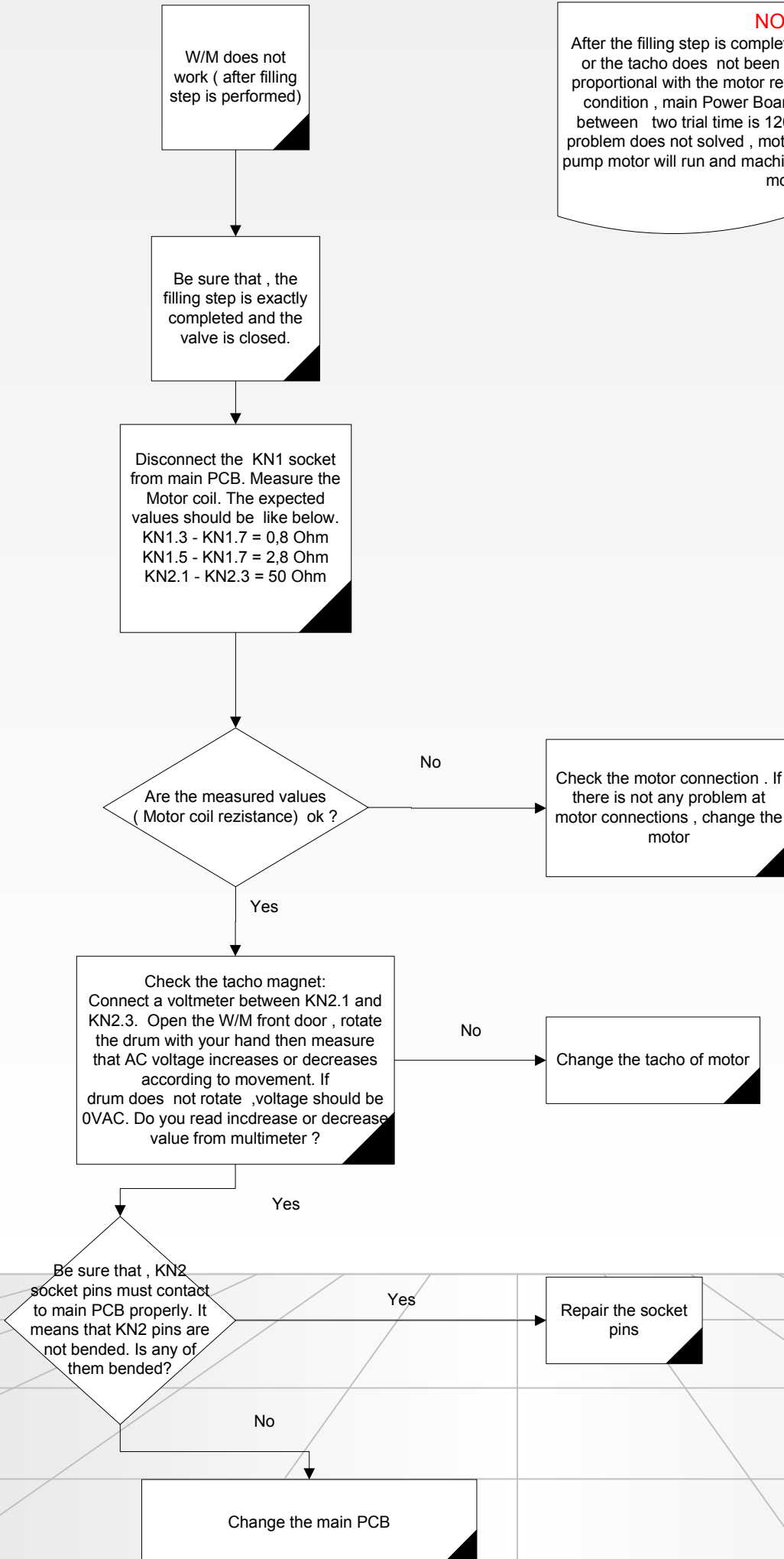


**Warning:**  
W/M does not work, means all function is not performed. In other words W/M does not performing one of the following functions; filling, washing, spinning and draining.

# Fora Failure Finding Flowcharts

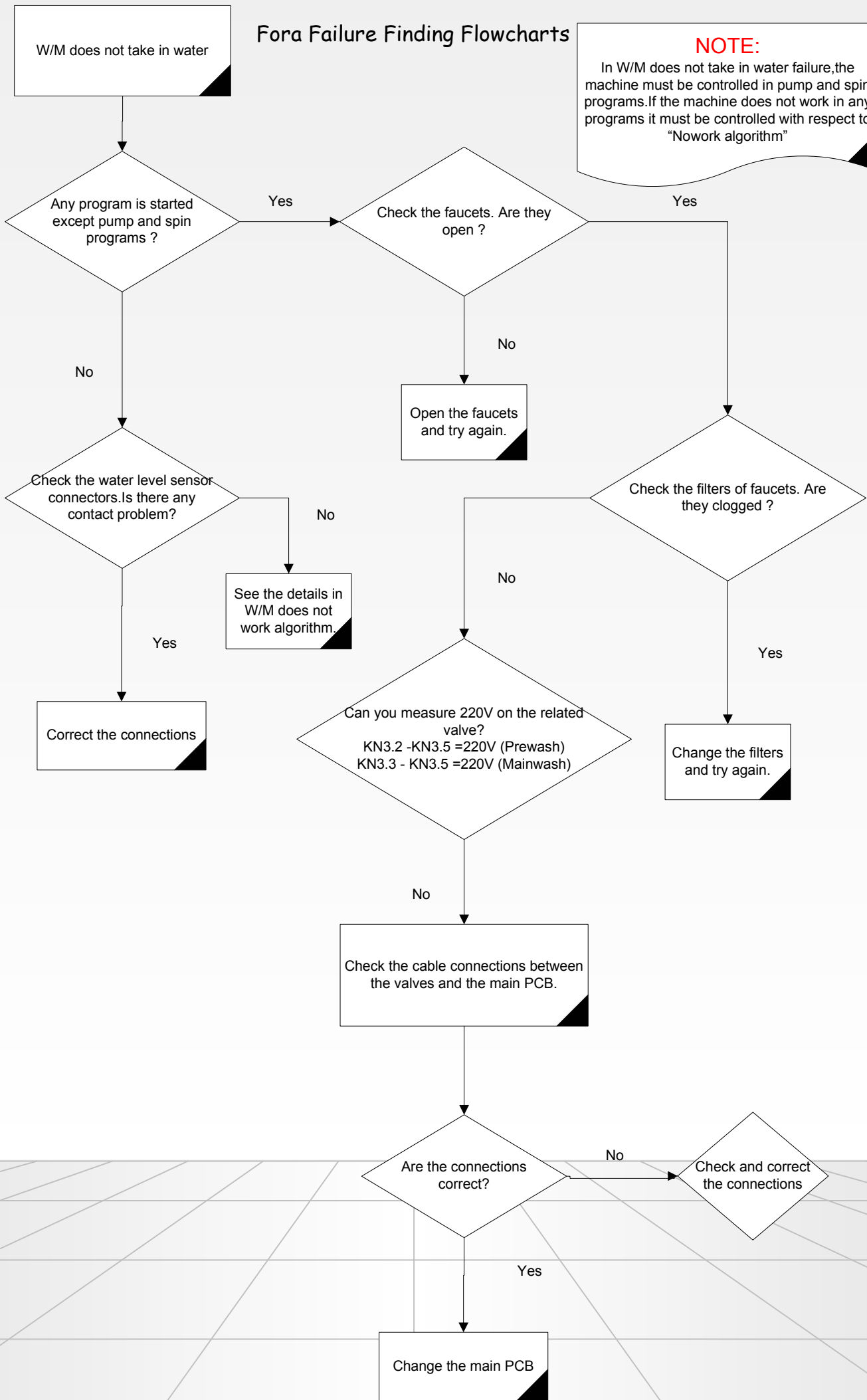
## NOTE :

After the filling step is completed . If the motor does not run or the tachometer does not generate a voltage, which is proportional to the motor revolution ( tachometer defect). In this condition, the main Power Board tries 8 times ( the duration between two trial times is 120 sec) to run the motor. If the problem is not solved, the motor will not be energized again, the pump motor will run and the machine will turn to program selection mode.

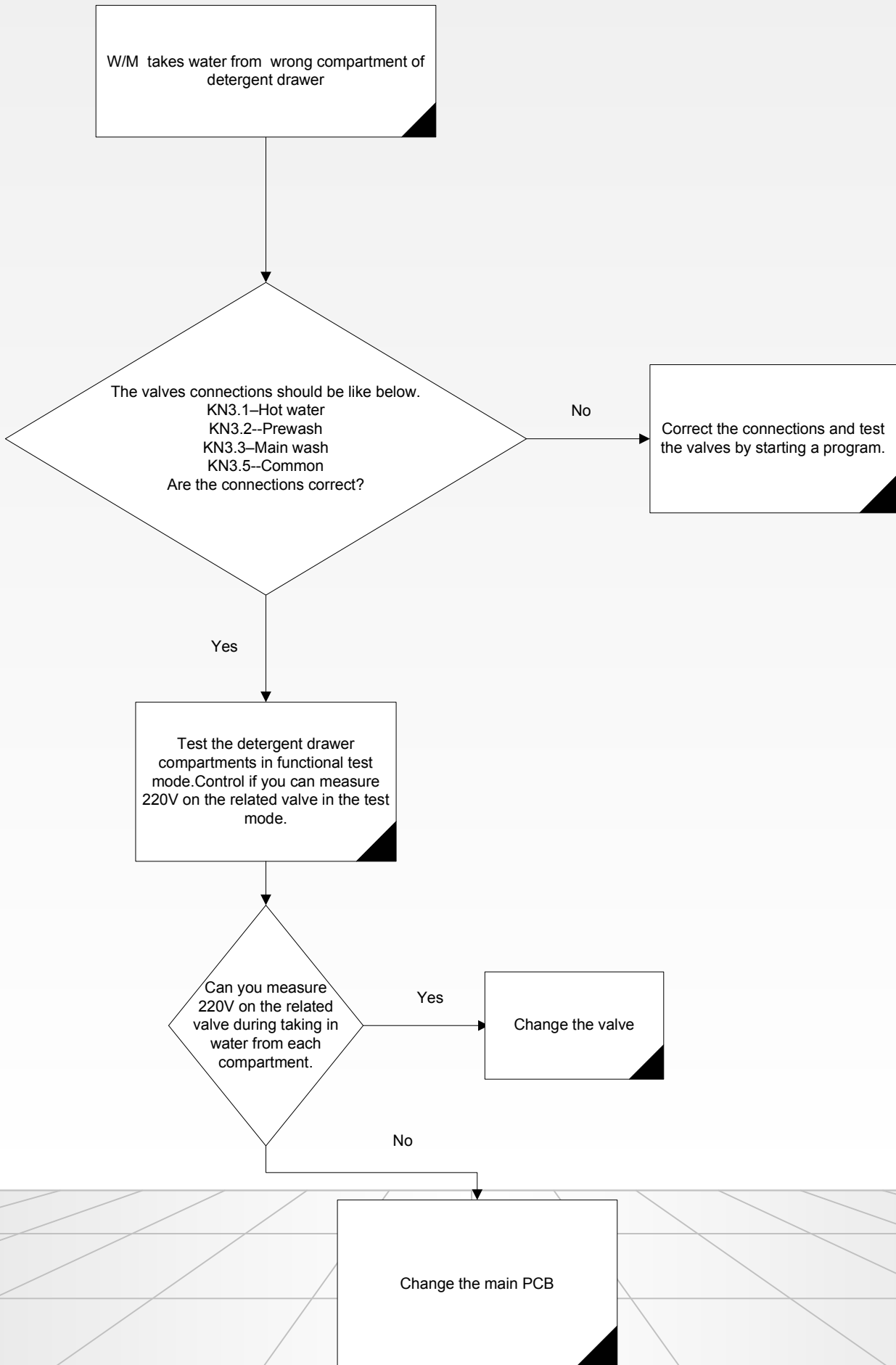


# Fora Failure Finding Flowcharts

**NOTE:**  
 In W/M does not take in water failure, the machine must be controlled in pump and spin programs. If the machine does not work in any programs it must be controlled with respect to "Nowork algorithm"



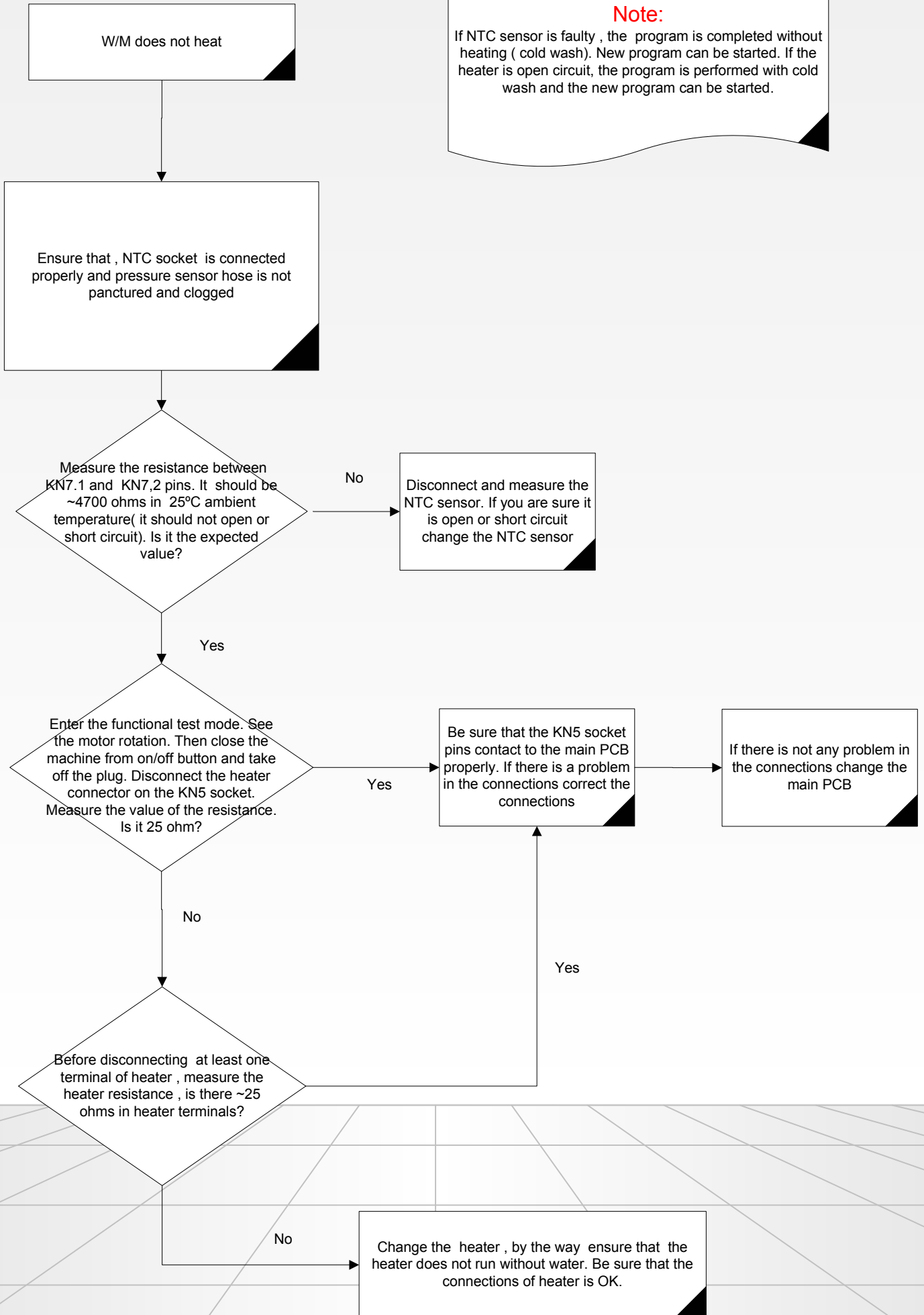
# Fora Failure Finding Flowcharts



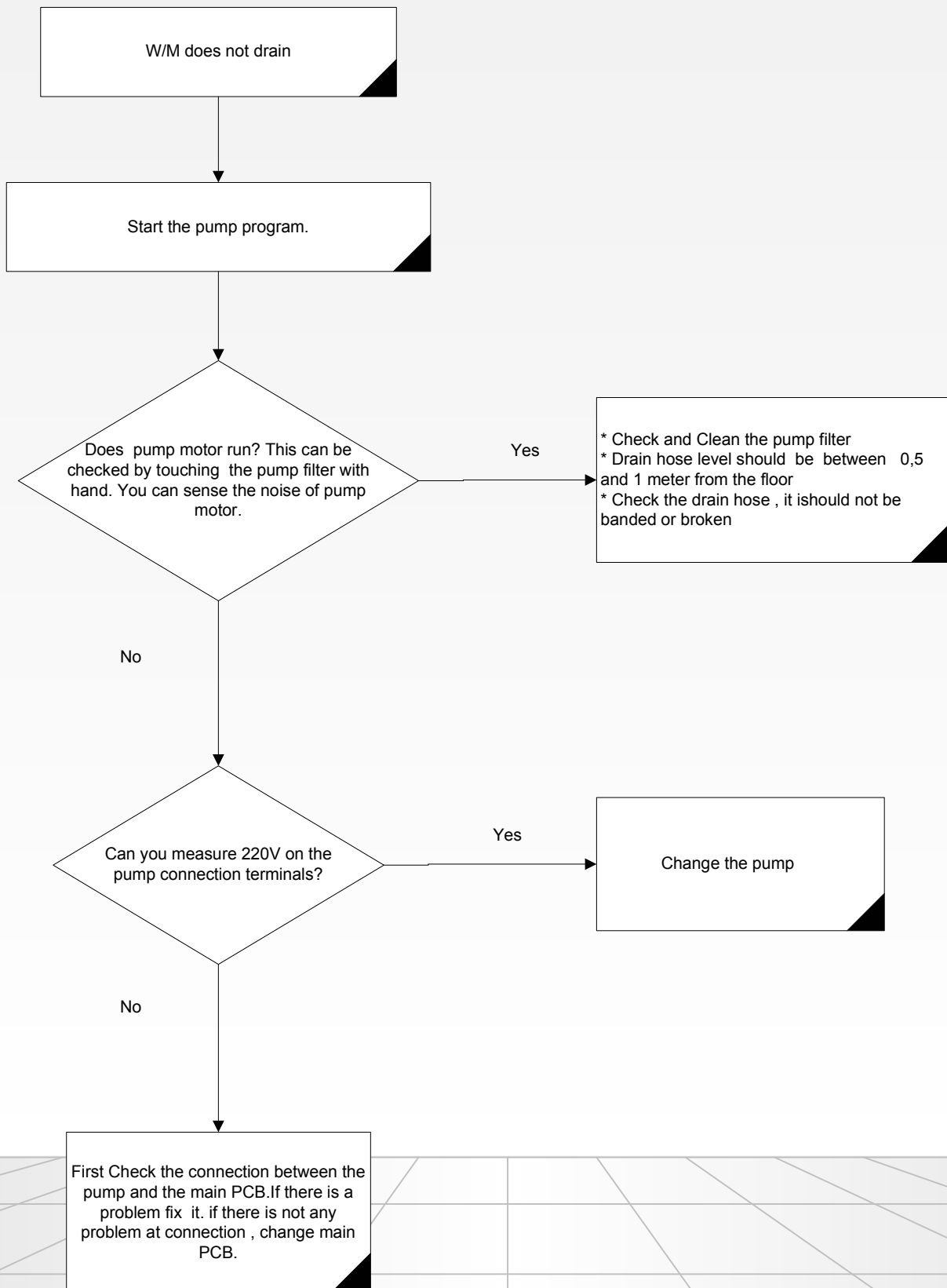
# Fora Failure Finding Flowcharts

**Note:**

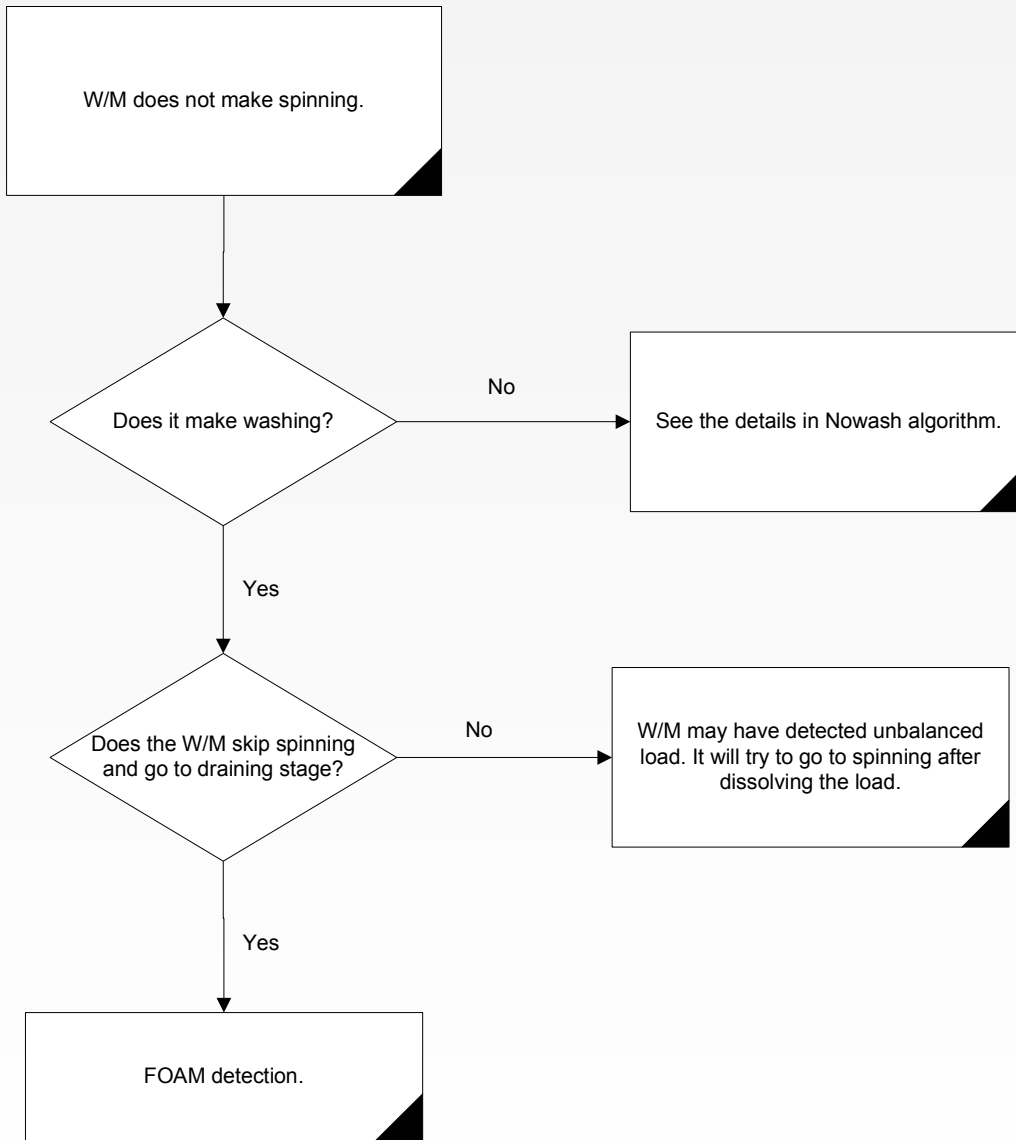
If NTC sensor is faulty , the program is completed without heating ( cold wash). New program can be started. If the heater is open circuit, the program is performed with cold wash and the new program can be started.



# Fora Failure Finding Flowcharts

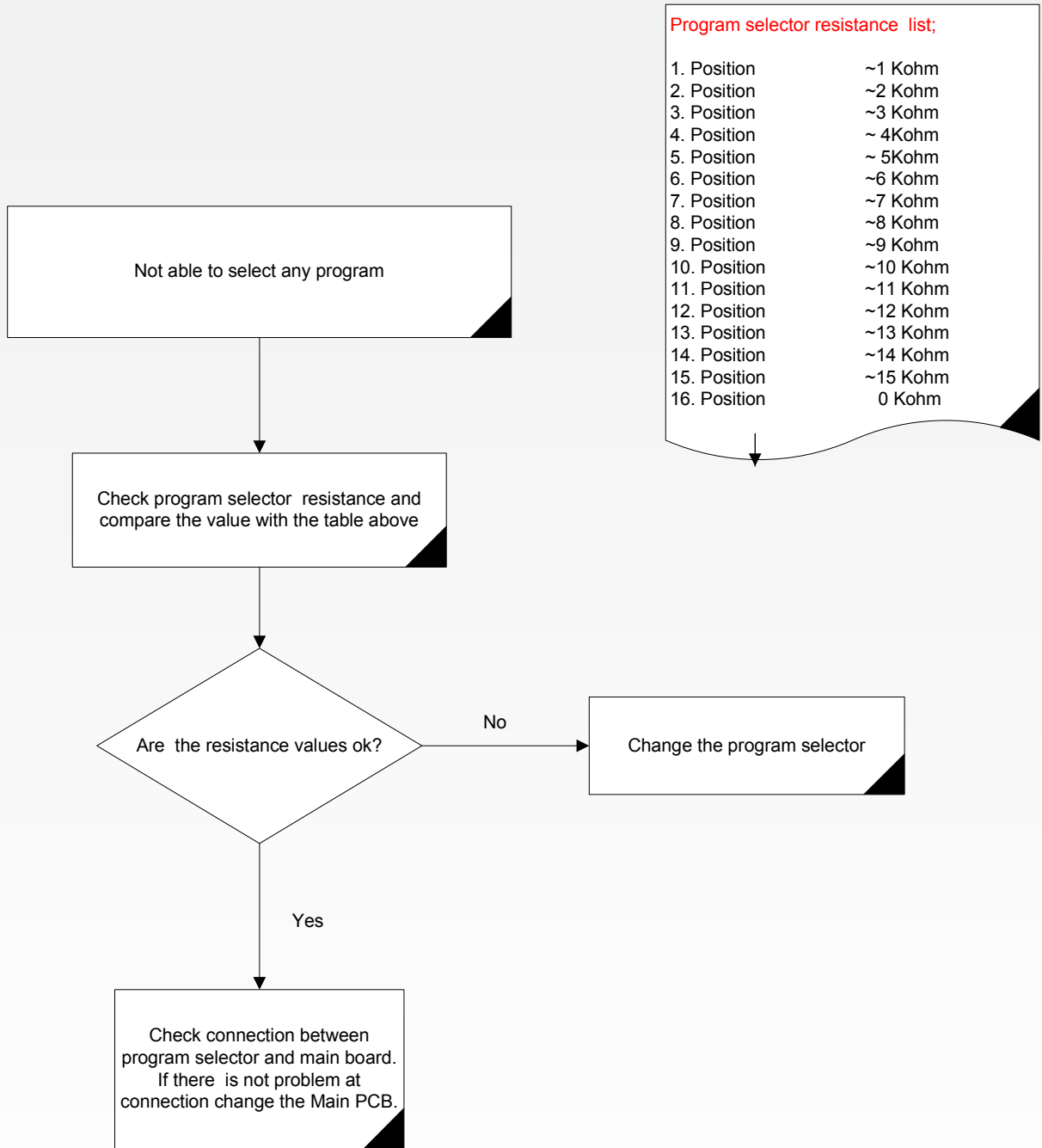


# Fora Failure Finding Flowcharts

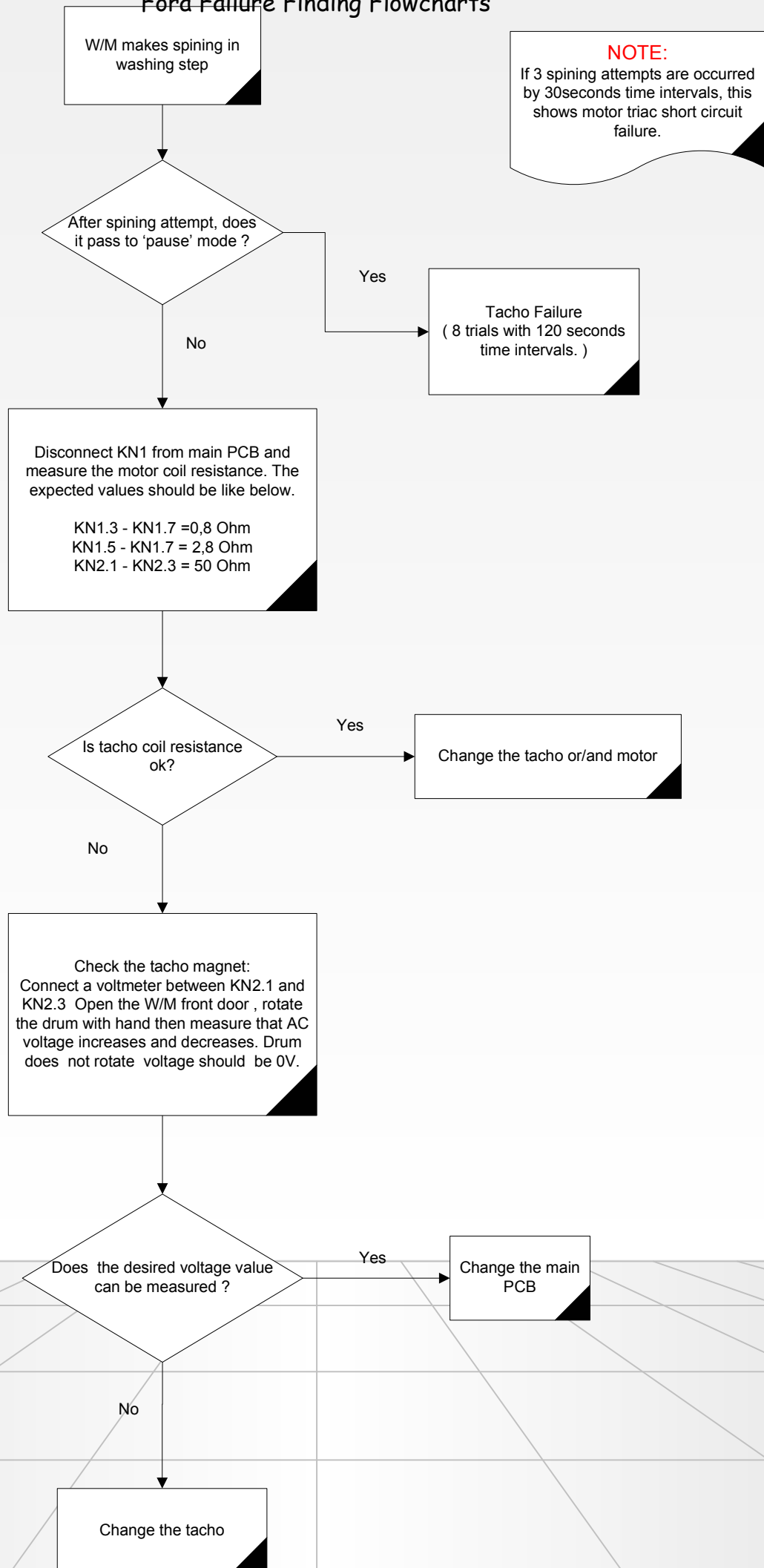




# Fora Failure Finding Flowcharts



# Fora Failure Finding Flowcharts



# Fora Failure Finding Flowcharts

FAILURE CODES that can be seen in FAILURE CODE OBSERVING MODE

NTC OPEN/SHORT CIRCUIT	( 1 - 0 - 0 )
HEATER OPEN CIRCUIT	( 0 - 1 - 0 )
HEATER IS ALWAYS ON	( 1 - 1 - 0 )
VALVE TRIAC SHORT CIRCUIT / TRIAC DIODE MODE	( 0 - 0 - 1 )
PUMP OPEN CIRCUIT	( 1 - 0 - 1 )
PUMP TRIAC DIODE MODE	( 1 - 1 - 1 BLINK )
PUMP TRIAC SHORT CIRCUIT	( 1 - 1 - 1 )
DOOR LOCK FAILURE	( 1 - 1 BLINK - 1 BLINK )
DOOR LOCK TRIAC SHORT CIRCUIT	( 1 BLINK - 1 BLINK - 1 BLINK )
MOTOR TRIAC SHORT CIRCUIT / TRIAC DIODE MODE	( 0 - 1 - 1 )
MOTOR OPEN CIRCUIT /TACHO FAILURE	( 0 - 0 - 1 BLINK )
EEPROM FAILURE	( 0 - 1 BLINK - 1 BLINK )
PROGRAM / TEMPERATURE / SPIN SELECTION POTENTIOMETER FAILURE	( 1 BLINK - 1 BLINK - 1 )

NOTE:  
THE FAILURE CODES DO NOT COMPLETELY SHOW THAT THE RELATED COMPONENT IS MALFUNCTION.  
TO DECIDE THIS, WE HAVE TO CHECK THE CABLE CONNECTIONS AND BE SURE THAT THERE IS NOT ANY PROBLEM BETWEEN THE CONNECTIONS.

# Fora Failure Finding Flowcharts

## Fora Functional Test Mode :

NOTE: To prevent any misunderstanding, entering the functional test mode ends the running program and erases any failure code stored in the memory. So the service firstly must check the failure code observing mode to see if there is any failure code stored in the memory and then run the functional test program.

In functional test mode all the functions are tested for a short time. In Cotton 90C position the machine is opened from the on/off button while pressing the start/stop button at the same time. Keep pressing the button for 2-3 seconds until the start /stop button starts blinking. Now we are in functional test mode. Each push to the Start/Pause button will represent one function.

### **For softwares before FR050\_XX:**

1. Door will be locked.
2. All leds on the board will start to blink when the door is locked. (Led check). By this way we can see the led which is not functioning.
3. Take in water from prewash compartment.
4. Take in water from main wash compartment.
5. Take in water from softener compartment.
6. Take in hot water. (Main wash compartment)
7. Heater will be on. (Note : If the water level inside the tub is not enough for the heater to be switch on, the machine will turn on all the valves and take in water from all compartments to reach to the required level. It is impossible for the heater to switch on without reaching to the required level. By this way the machine can not pass to the next step without testing the previous step)
8. Clockwise motor rotation with 52 rpm.
9. Counter clockwise rotation with 52 rpm.
10. Draining.
11. Spinning.( Spinning up to ½ of the maximum spinning rpm)
12. Turn on all the valves to fill a certain level in a short time for water leakage test on the production line.
13. End of functional test mode.

You can get off the test mode by turning the machine off.

NOTE : In spinning step if the machine spins up to 100 rpm this points to NTC open/short circuit failure.  
In spinning step if the machine spins up to 140 rpm this points to line voltage either less than 180 V of higher than 265 V

### **For softwares FR050\_XX:**

1. Door will be locked.
2. All leds on the board will start to blink when the door is locked. (Led check). By this way we can see the led which is not functioning.
3. One of the follower Leds will start to blink with respect to the position of Temperature/Spin Rate selector button.
4. Take in water from prewash compartment.
5. Take in water from main wash compartment.
6. Take in water from softener compartment.
7. Take in hot water. (Main wash compartment) (If it is available)
8. Heater will be on. (Note : If the water level inside the tub is not enough for the heater to be switch on, the machine will turn on all the valves and take in water from all compartments to reach to the required level. It is impossible for the heater to switch on without reaching to the required level. By this way the machine can not pass to the next step without testing the previous step)
9. Clockwise motor rotation with 52 rpm.
10. Counter clockwise rotation with 52 rpm.
11. Draining.
12. Spinning.( Spinning up to ½ of the maximum spinning rpm.)
13. Turn on all the valves to fill a certain level in a short time for water leakage test on the production line.
14. End of functional test mode.

You can get off the test mode by turning the machine off.

NOTE : In spinning step if the machine spins up to 100 rpm this points to NTC open/short circuit failure.  
In spinning step if the machine spins up to 140 rpm this points to line voltage either less than 180 V of higher than 265 V

### **For softwares after FR051\_XX, NF005\_XX and CF003\_XX:**

1. Door will be locked.
2. All leds on the board will start to blink when the door is locked. (Led check). By this way we can see the led which is not functioning.
3. One of the follower Leds will start to blink with respect to the position of Temperature/Spin Rate selector button. (Selector Check)
4. Clockwise motor rotation with 52 rpm and Pump On.
5. Counter clockwise rotation with 52 rpm and Pump On.
6. Spinning.( Spinning up to ½ of the maximum spinning rpm.) and Pump On
7. Take in water from prewash compartment.
8. Take in water from main wash compartment.
9. Take in water from softener compartment.
10. Take in hot water. (Main wash compartment)
11. Heater will be on and Clockwise motor rotation with 52 rpm . (Note : If the water level inside the tub is not enough for the heater to be switch on, the machine will turn on all the valves and take in water from all compartments to reach to the required level. It is impossible for the heater to switch on without reaching to the required level. By this way the machine can not pass to the next step without testing the previous step.)
12. Draining.
13. End of functional test mode.

You can get off the test mode by turning the machine off.

NOTE : In spinning step if the machine spins up to 100 rpm this points to NTC open/short circuit failure.  
In spinning step if the machine spins up to 140 rpm this points to line voltage either less than 180 V of higher than 265 V

# Fora Failure Finding Flowcharts

