

# Galanz

Domestic Dishwasher

## SERVICE MANUAL

---



Models

W45A1A401L

## Contents

<b>1. FEATURES .....</b>	<b>3</b>
<b>2. SAFETY PRECAUTION .....</b>	<b>4</b>
<b>3. WASH CYCLE TABLE .....</b>	<b>6</b>
<b>4. HOW TO KEEP YOUR DISHWASHER IN SHAPE.....</b>	<b>7</b>
<b>5. FAULT FINDING .....</b>	<b>8</b>
<b>6. MAINTENANCES SERVICES AND TROUBLE SHOOTING ...</b>	<b>12</b>
<b>7. MALFUNCTION DIAGNOSTIC.....</b>	<b>15</b>
<b>8 TROUBLE SHOOTING GUIDE.....</b>	<b>19</b>
<b>9. NET DIMENSION .....</b>	<b>26</b>

## 1. Features

1.1 A+ grade for energy consumption of European standard

1.2 A grade for washing efficiency of European standard

1.3 A grade for drying efficiency of European standard


1.4 Electronic control, delay washing

1.5 Water softening function is provided which can prevent  
incrustation forming

1.6 Conceal heater and avoid heater turf burning.

1.7 Super-capacity for 9 settings



The symbol  on the product or on its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## 2. Safety precaution

### At time of delivery

- Check packaging and dishwasher immediately for signs of transport damage. If the appliance is damaged, do not put it into use but contact your supplier or customer service without delay.
- Please dispose of packaging materials properly.

### During installation

- Site the dishwasher and connect it up in accordance with the installation instructions.
- The dishwasher must not be connected to the electricity supply while installation is being carried out.
- Ensure that the domestic wiring is properly earthed.
- The mains electricity supply must conform to the details shown on the dishwasher nameplate.
- Do not connect the dishwasher to the electricity supply via an extension cable.
- Built-under and built-in appliances should always be installed under a continuous work surface which it is attached to the adjacent cupboards, in order to ensure that the appliance is entirely stable.
- After the appliance has been installed, the mains plug should still be easily accessible.
- Not on all models:
  - The plastic housing on the water inlet contains an electrically operated valve. The connecting wires are inside the inlet hose. Do not cut through this hose and do not immerse the plastic housing in water.
- During installation, the power supply cord must not be excessively or dangerously bent or flattened.

### During normal use

- The dishwasher must only be used by adults for the washing of household dishes and cooking utensils.
- This appliance cannot be installed outdoor, not even if the area in which it is installed is covered by a roof; it is also very dangerous to leave it exposed to the rain and elements.
- Do not place any heavy objects or stand on the door when it is open. The appliance could tip forward.
- The water inside the dishwasher is not suitable for drinking.
- Do not use solvents of any kind inside your dishwasher. They could cause an explosion danger.
- Open the door very carefully if the dishwasher is operating. There is a risk of water squirting out.

- Do not touch the heating element during or after a wash cycle.
- Fundamental rules to follow when using the appliance:
  - Never touch the dishwasher when barefoot or with wet hands or feet;
  - We discourage the use of extension cords and multiple sockets;
  - If the appliance is not operating properly or maintenance must be performed, disconnect the appliance from the power supply.

### 3. Wash Cycle Table

W45A1A401L

Program	Cycle Selection Information	Description of Cycle	Detergent Pre/main	Running Time (min)	Energy(Kwh)	Water (L)
Intensive	For the heaviest soiled loads, such as pots, pans, casserole dishes and dishes that have been sitting with dried food on them for a while.	Pre-wash Main wash (62°C) Rinse 1 Rinse 2 Hot rinse Drying	5/22g (or 3 in 1)	170	1.20	16.4
Eco	For normally soiled loads, such as pots, plates, glasses and lightly soiled pans. Standard daily cycle.	Pre-wash Main wash(46°C) Hot rinse Drying	5/22g (or 3 in 1)	168	0.78	10
Light	Light wash cycle to be used for more delicate items which are sensitive to high temperatures. (Run cycle immediately after use)	Main wash(45°C) Rinse Hot rinse Drying	20g (or 3 in 1)	82	0.76	10
60 min	For lightly and normally soiled plates and pans for every day.	Pre-wash Main wash(60°C) Hot rinse Drying	5/20g	60	0.84	10
Rapid	A shorter wash for lightly soiled loads that do not need drying.	Main Wash(45°C) Hot rinse	15g	40	0.60	6.8
Pre-Rinse	To rinse dishes that you plan to wash later that day.	Pre-wash	/	13	0.01	3.6

## 4. How to keep your dishwasher in shape

### After Every Wash

After every wash, turn off the water supply the appliance and leave the door slightly ajar so that moisture and odors are not trapped inside.

### Remove the plug

Before cleaning or performing maintenance, always remove the plug from the socket. Do not run risks.

### No solvents or Abrasive Cleaning Products

To clean the exterior and rubber parts of the dishwasher, do not use solvents or abrasive cleaning products. Rather, use only a cloth and warm soapy water. To remove spots or stains from the surface of the interior, use a cloth dampened with water and a little white vinegar, or cleaning product made specifically for dishwashers.

### Moving the Appliance

If the appliance must be moved, try to keep it in a vertical position. If absolutely necessary, it can be positioned on its back.

### Seals

One of the factors that cause odors to form in the dishwasher is food that remains trapped in the seals.

Periodic cleaning with a damp sponge will prevent this from occurring.

The door should not be left in the open position since this could present a tripping hazard.

### When You Go on Holiday

When you go on holiday, it is recommended that you run a wash cycle with the dishwasher empty and then remove the plug from the socket, turn off the water supply and leave the door of the appliance slightly ajar. This will help the seals last longer and prevent odors from forming within the appliance.

### 5. Fault finding

#### Resolving minor problems yourself

Experience has shown that you can resolve most problems that rise during normal daily usage yourself, without having to call out a service engineer. Not only does this save costs, but it also means that the appliance is available for use again that much sooner. The following list of common occurrences and their remedies should help you identify the causes of most problems.

#### Problems...

...when the appliance is switched on

Appliance does not start up

- Fault with fuse in mains electricity supply.
- Plug not inserted in wall socket.
- Appliance door not closed properly.
- Programme button has not been pressed.
- Water tap not turned on.
- Blocked strainer in water intake hose.
- The strainer is situated in the Aqua-stop or supply-hose connection.



#### Caution

**Do not forget that repairs should only be carried out by a qualified specialist. Improper repairs can lead to considerable equipment damage as well as danger to the user.**

#### Service Diagnostics Cycle Notes

Press the "Power" and "Delay" buttons, after the buzzer emits 2 short signal, all the LED indicators will be lighted, the LED display shows 888, the dishwasher entry the service diagnostic cycle.

Fill	Press " Program" button	The inlet valve work about 1 minute
Dispenser	Press "delay" button	The dispenser work 1 minute
Motor	Auto	The washing pump work about 1 minute
Heater	Auto	The water will be heated up 60°C
Drain	Press " Program" button	The drain pump work about 1 minute
Fill	Press "delay" button	The inlet valve work about 1 minute
Motor	Press " Program" button	The washing pump work 3 minutes
Softener	Press "delay" button	The softener work 90 seconds
Drain	Press " Program" button	The drain pump work about 1 minute
End	Press "delay" button	The buzzer emits 1 signal and the display shows ---



If you take all these checks and the dishwasher still does not function or your dishwasher have any other error display, you can power the dishwasher OFF, and wait a few minutes. You can power the dishwasher on, try it again, if the dishwasher still does not function and/or the problem persists, contact the nearest authorised service center and provide them with the following information:

--the nature of the problem.

--the model type number (Mod...) And the serial number (S/N...), which are indicated on the plate located on the side of the inner part of the door.

Lower spray arm rotates with difficulty

--Spray arm is blocked by small items or food remains.

Lid in detergent compartment cannot be closed

--Detergent compartment has been overfilled.

--Mechanism is clogged with remnants of detergent.

Indicator lamps do not extinguish after washing has finished

--Main switch is still set to ON.

Remnants of detergent stuck inside dispenser

--Compartment was damp when it was filled up with detergent. Compartment must be dry before detergent is added.

Water remains inside appliance after program has ended

--Blockage or kind in drainage hose.

--Pump is jammed.

--Filters are blocked.

--The program is still running. Wait for the program to end.

...during washing

Unusual amount of foam is creased

--Normal washing up liquid has been poured into the rinse-aid container.

--Remove any spilled rinse aid with a cloth as it could otherwise lead to excessive foaming during the next washing cycle.

Appliance stops suddenly while washing is taking place

--Cut off electricity supply to appliance.

--Water supply has been interrupted.

Knocking sound can be heard while washing is taking place

A spray arm is knocking against the dishes inside the appliance.

Rattling sound can be heard while washing is taking place

Crockery has not been stacked properly inside the appliance.

Knocking sound coming from inlet valves

This is caused by the way the water pipes have been laid and it has no effect upon the way the appliance functions. There is no remedy for this.

...with the dishes, cutlery, etc.

Remnants of food are stuck to the dishes, cutlery ,etc.

--Dishwasher was not loaded properly. Jets of water could not reach all parts of the dishes, etc.

--Too many items in the rack.

--Items in the rack were touching each other.

--Not enough detergent was added to dispenser.

--Selected wash program was not intensive enough.

--Rotation of spray arm was obstructed by dishes, etc.

--Nozzles in spray arm are blocked by remnants of food.

--Filters are blocked.

--Filters have been incorrectly fitted.

--Waste-water pump is jammed.

Plastic items are discoloured

--Not enough detergent was added to dispenser.

--Detergent has insufficient bleaching properties. Use a detergent containing a chemical bleaching agent.

White stains are left on crockery, glasses have a milky appearance

--Not enough detergent was added to dispenser compartment.

--Amount of rinse-aid was set too low.

--Although water is quite hard, no salt has been put in appliance.

--Lid on salt container is not screwed tight.

--If you used a phosphate-free detergent , try a detergent containing phosphates and compare results.

Dishes,cutlery,etc.have not been dried

--Selected program did not include drying function.

--Amount of rinse-aid was set too low.

--Items were removed from dishwasher too soon.

Glasses have a dull appearance

--Amount of rinse-aid was set too low.

Tea stains or traces of lipstick have not been completely removed

- Detergent does not have a sufficient bleaching effect.
- Washing temperature was set too low.

Traces of rust on cutlery

- Cutlery is not sufficiently rustproof.
- Salt content in washing water is too high.
- Lid on salt container is not screwed tight.
- Too much salt was spilt while filling container.

Glasses become clouded and discoloured; coating cannot be wiped off

Unsuitable detergent was used.

Glasses are not dishwasher-proof.

Smears left behind on glasses and cutlery; glasses have acquired a metallic appearance

Amount of rinse-aid set too high.

## 6. Maintenance Services and Trouble Shooting

### 6.1 maintenance services

With the aid of the following guide, minor problems can be easily corrected Without calling for the assistance, saving you both time and money.

#### Before Calling for Service

Reviewing the charts on the following pages may make you be free of calling for service.

Problem	Possible Causes	What To Do
<b>Dishwasher doesn't run</b>	Fuse blown, or the circuit breaker acted	Replace fuse or reset circuit breaker. Remove any other appliances sharing the same circuit with the dishwasher.
	Power supply is not turned on	Make sure the dishwasher is turned on and the door is closed securely. Make sure the power cord is properly plugged into the wall socket.
	Water pressure is low	Check that the water supply is connected properly and the water is turned on.
<b>Drain pump doesn't stop</b>	Overflow	The system is designed to detect an overflow. When it does, it shuts off the circulation pump and turns on the drain pump.
<b>Noise</b>	Some audible sounds are normal	Sound from detergent cup opening.
	Utensils are not secure in the baskets or something small has dropped into the basket	To ensure everything is secured in the dishwasher.
	Motor hums	Dishwasher has not been used regularly. If you do not use it often, remember to set it to fill and pump out every week, which will help keep the seal moist.
<b>Suds in the tub</b>	Improper detergent	Use only the special dishwasher detergent to avoid suds. If this occurs, open the dishwasher and let suds evaporate. Add 1 gallon of cold water to the tub. Close and latch the dishwasher, then start the "soak" wash cycle to drain out the water... Repeat if necessary.
	Spilled rinse agent	Always wipe up rinse agent spills immediately.
<b>Stained tub interior</b>	Detergent with colorant was used	Make sure that the detergent is the one without colorant.
<b>Dishes and flatware not clean</b>	Improper program	Select a stronger program.
	Improper rack loading	Make sure that the action of the detergent dispenser and spray arms are not blocked by large dishware.

<p><b>Spots and filming on glasses and flatware</b></p>	<ol style="list-style-type: none"> <li>1 Extremely hard water</li> <li>2 Low inlet temperature</li> <li>3 Overloading the dishwasher</li> <li>4 Improper loading</li> <li>5 Old or damp powder detergent</li> <li>6 Empty rinse agent dispenser</li> <li>7 Incorrect dosage of detergent</li> </ol>	<p>To remove spots from glassware:</p> <ol style="list-style-type: none"> <li>1 Take out all metal utensils out of the dishwasher.</li> <li>2 Do not add detergent.</li> <li>3 Choose the longest cycle.</li> <li>4 Start the dishwasher and allow it to run for about 18 to 22 minutes, then it will be in the main wash.</li> <li>5 Open the door to pour 2 cups of white vinegar into the bottom of the dishwasher.</li> <li>6 Close the door and let the dishwasher complete the cycle. If the vinegar does not work: Repeat as above, except use 1/4 cup (60 ml) of citric acid crystals instead of vinegar.</li> </ol>
<p><b>Cloudiness on glassware</b></p>	<p>Combination of soft water and too much detergent</p>	<p>Use less detergent if you have soft water and select a shortest cycle to wash the glassware and to get them clean.</p>
<p><b>Yellow or brown film on inside surfaces</b></p>	<p>Tea or coffee stains</p>	<p>Using a solution of 1/2 cup of bleach and 3 cups of warm water to remove the stains by hand.  <b>▲ WARNING</b>            You have to wait for 20 minutes after a cycle to let the heating elements cool down before cleaning interior; otherwise, burns will happen.</p>
	<p>Iron deposits in water can cause an overall film</p>	<p>You have to call a water softener company for a special filter.</p>
<p><b>White film on inside surface</b></p>	<p>Hard water minerals</p>	<p>To clean the interior, use a damp sponge with dishwasher detergent and wear rubber gloves. Never use any other cleaner than dishwasher detergent for the risk of foaming or suds.</p>
<p><b>The detergent lid cannot be closed properly</b></p>	<p>Clogged detergent residue is blocking the catch.</p>	<p>Clean the detergent from the catch.</p>
<p><b>Detergent left in dispenser cups</b></p>	<p>Dishes block detergent Cups</p>	<p>Re-loading the dishes properly.</p>
<p><b>Steam</b></p>	<p>Normal phenomenon</p>	<p>There is some steam coming through the vent by the door latch during drying and water draining.</p>
<p><b>Black or gray marks on dishes</b></p>	<p>Aluminum utensils have rubbed against dishes</p>	<p>Use a mild abrasive cleaner to eliminate those marks.</p>
<p><b>Water standing on the bottom of the tub</b></p>	<p>This is normal</p>	<p>A small amount of clean water around the outlet on the tub bottom keeps the water seal lubricated.</p>

<b>Dishwasher leaks</b>	Overfill dispenser or rinse aid spills	Be careful not to overfill the rinse aid dispenser. Spilled rinse aid could cause oversudsing and lead to overflowing. Wipe away any spills with a damp cloth.
	Dishwasher isn't level	Make sure the dishwasher is level.

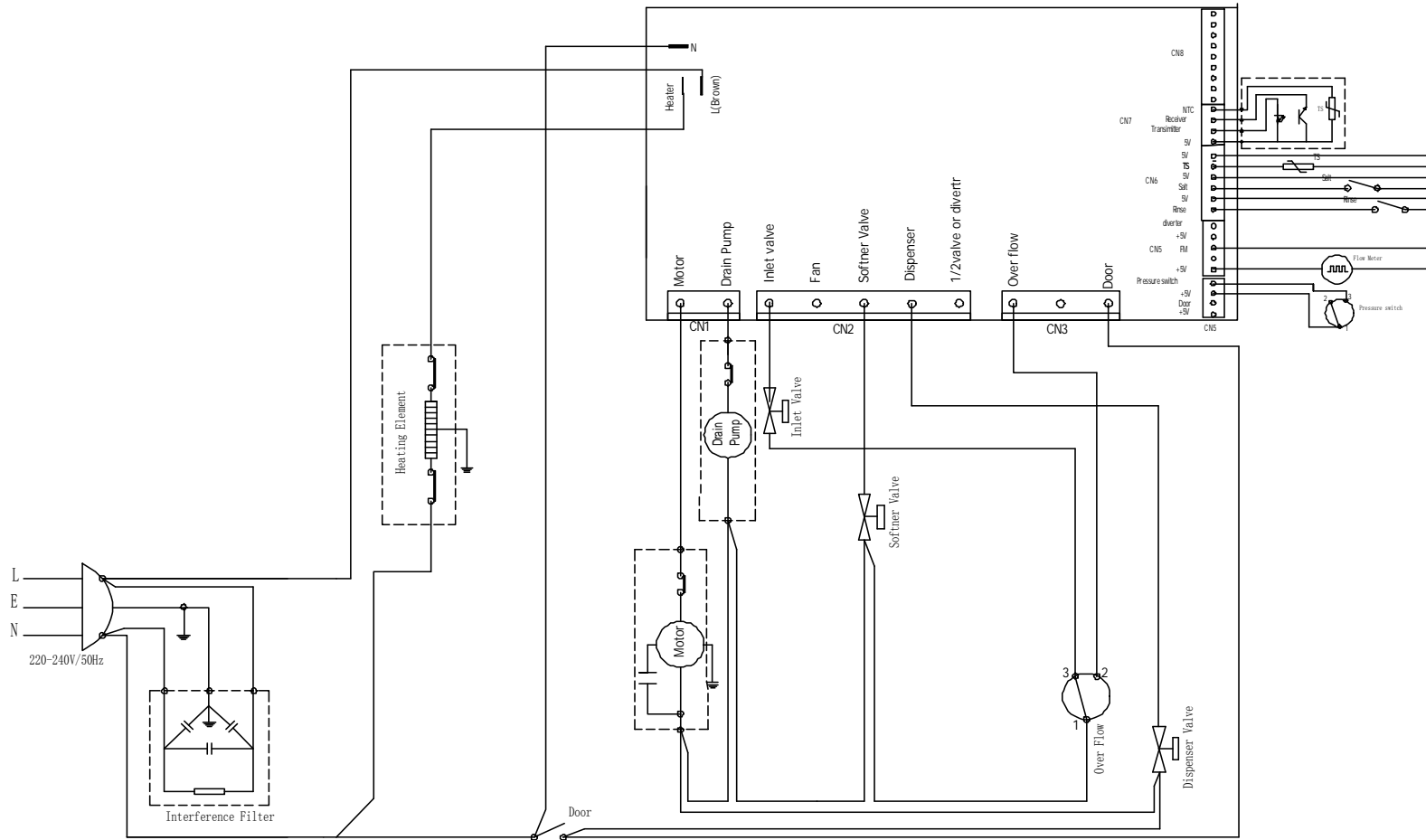
## 6.2 Error codes

When some malfunctions happen, the appliance will display error codes to warn you.

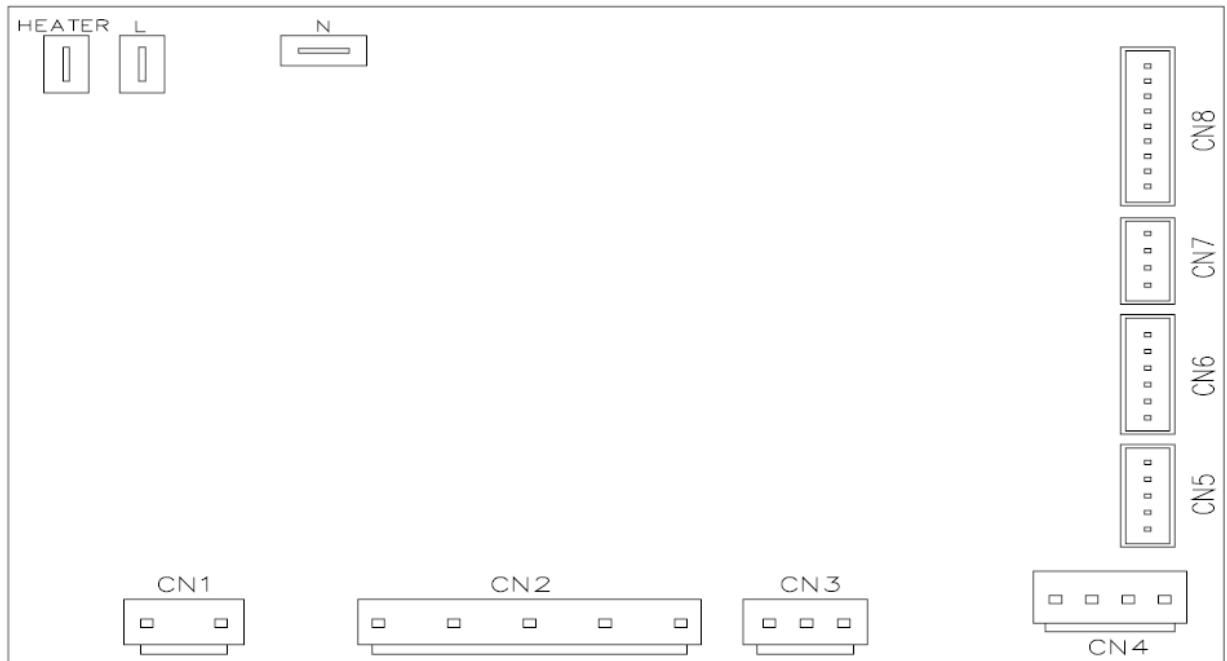
Codes	Meanings	Possible Causes
E1	Door open	The door is opened when the dishwasher is operating.
E2	Water inlet	Water inlet malfunction.
E3	Water drainage	Water drainage malfunction.
E4	Temperature sensor	Temperature sensor malfunction.
E5	Overflow	Overflow occurs/water leakage occurs.
E6	Water leakage	Water leakage occurs.
E7	Heating element	Abnormal heating.

### 7. Malfunction Diagnostic

#### Wiring Diagram



### 7.1 Connector of PCBA



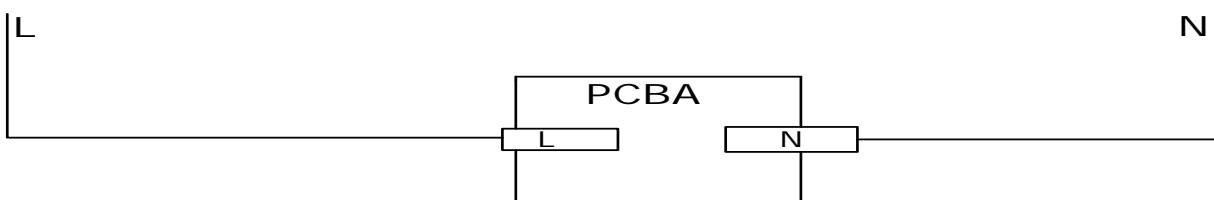
16

### 7.2 Dishwasher Strip Circuits

The following individual circuits are for use in diagnoses. Do not continue with the diagnoses of the appliance if a fuse is blown, a circuit breaker is tripped, or if there is less than a 230 volt power supply at the wall outlet.

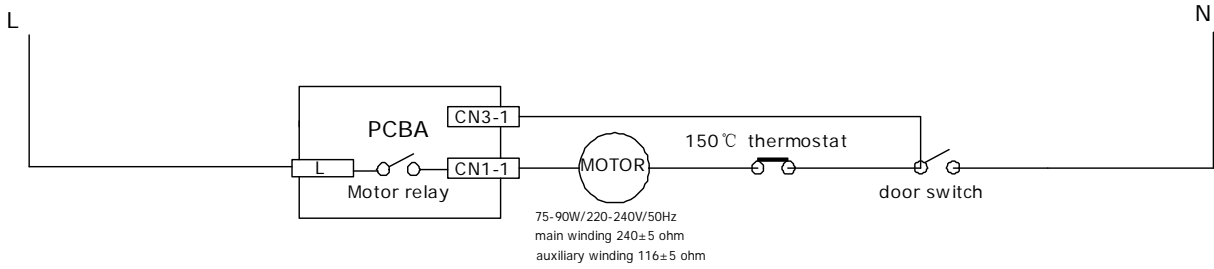
- Unplug dishwasher or disconnect power.
- Perform resistance checks. To check resistance of a component, disconnect harness leads first.

#### Power Up

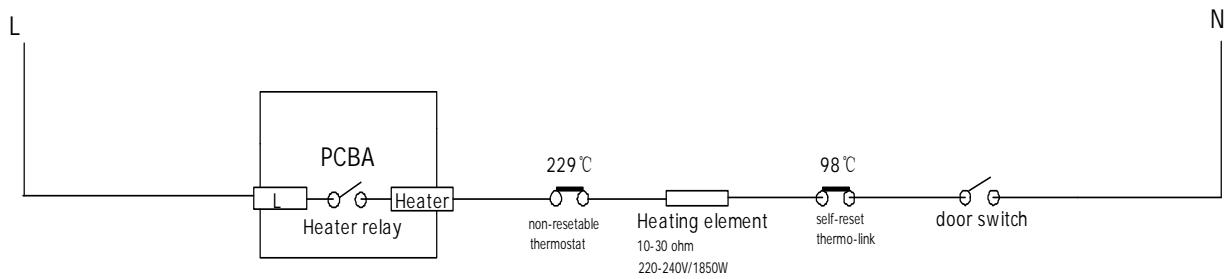




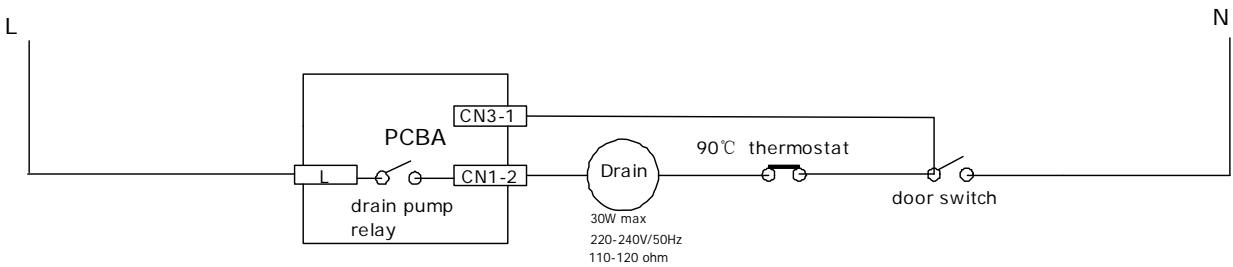
### Washing Motor



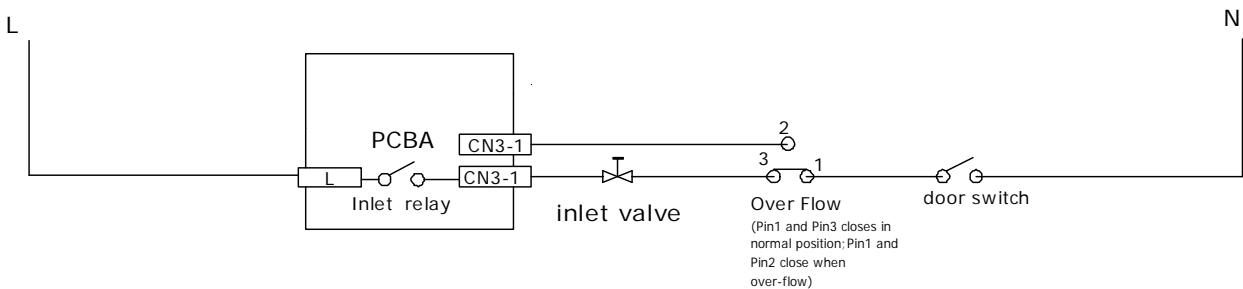
### Heater Element



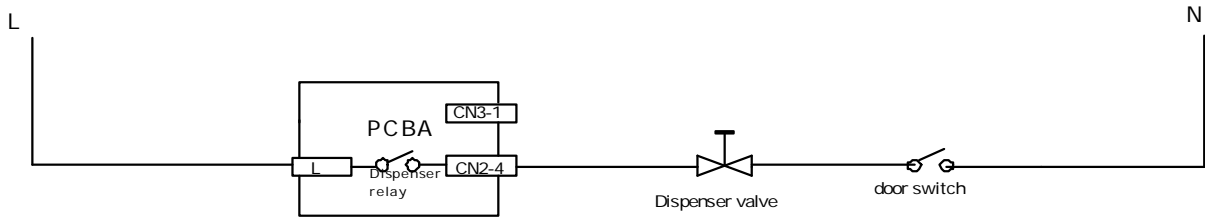
### Drain Pump



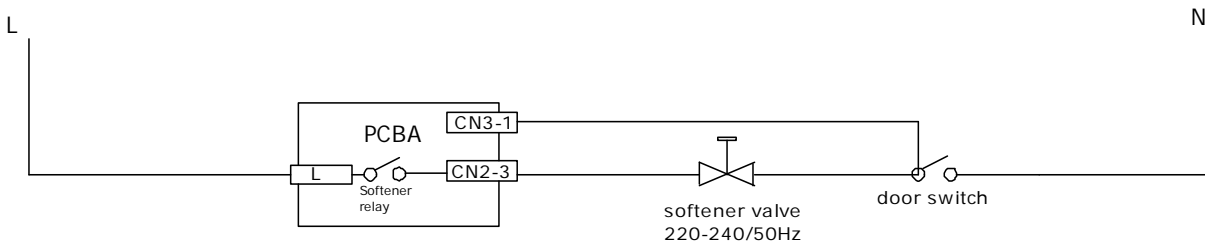
### Fill and OverFlow



### Dispenser

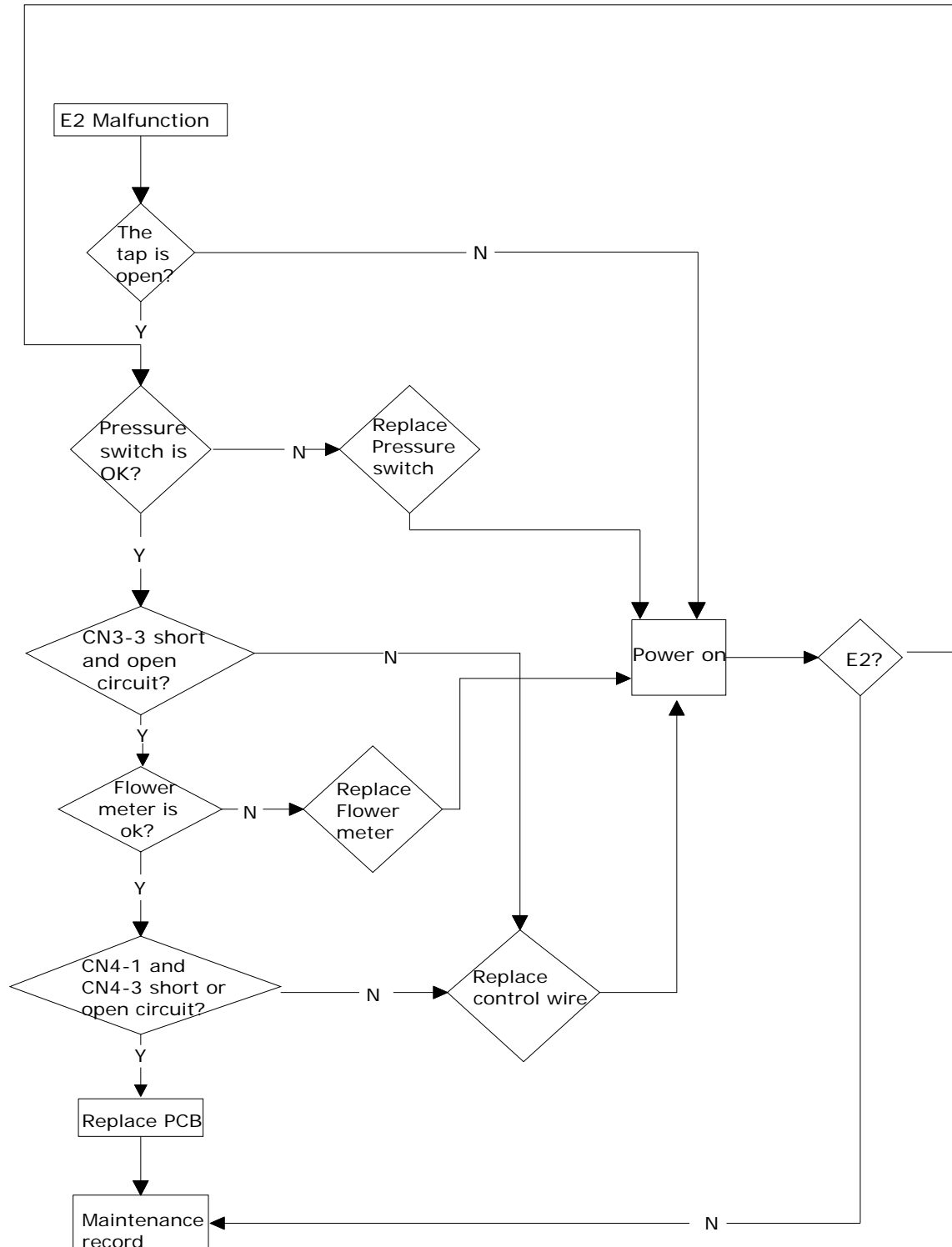


### softener

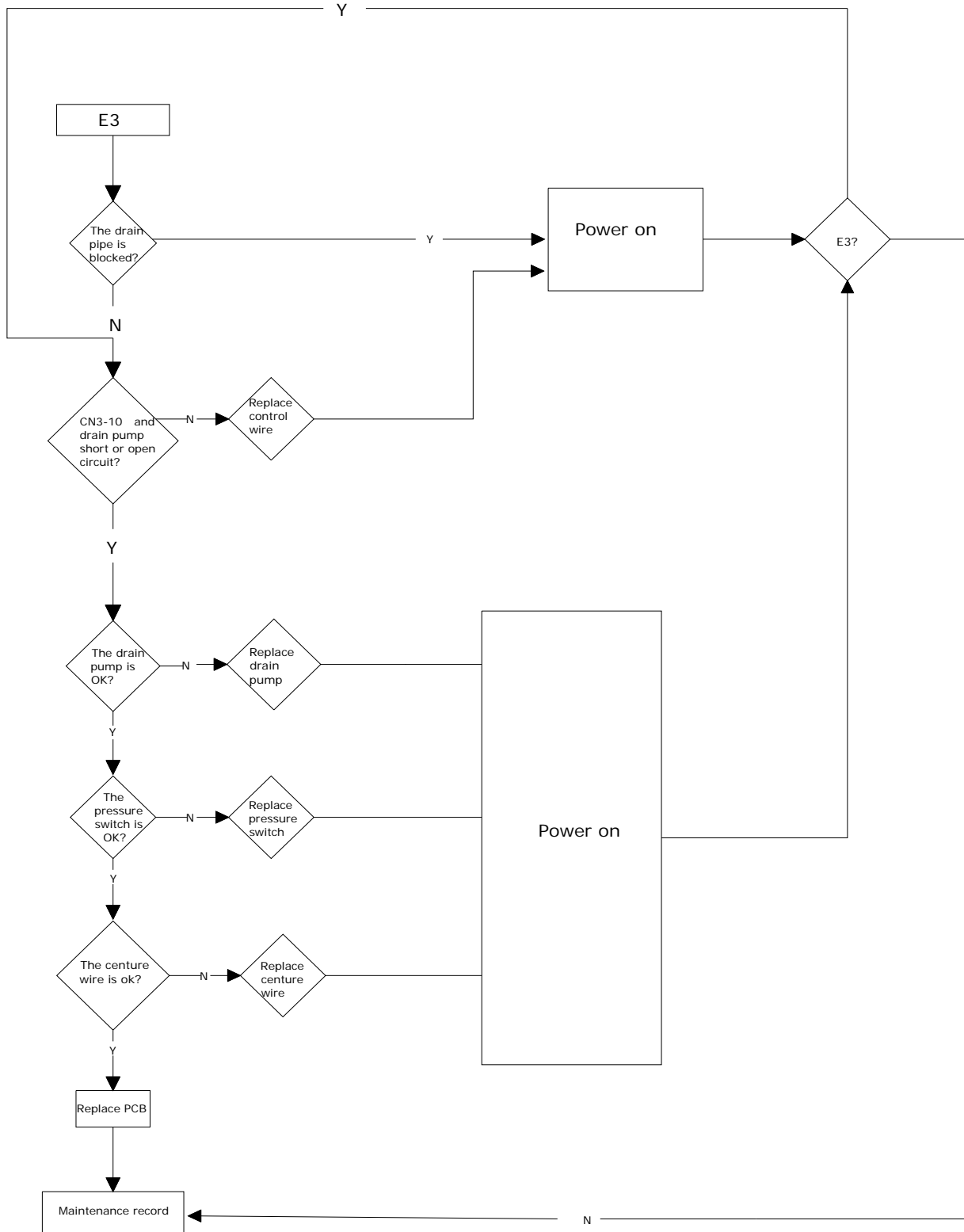


## 8 Trouble shooting guide

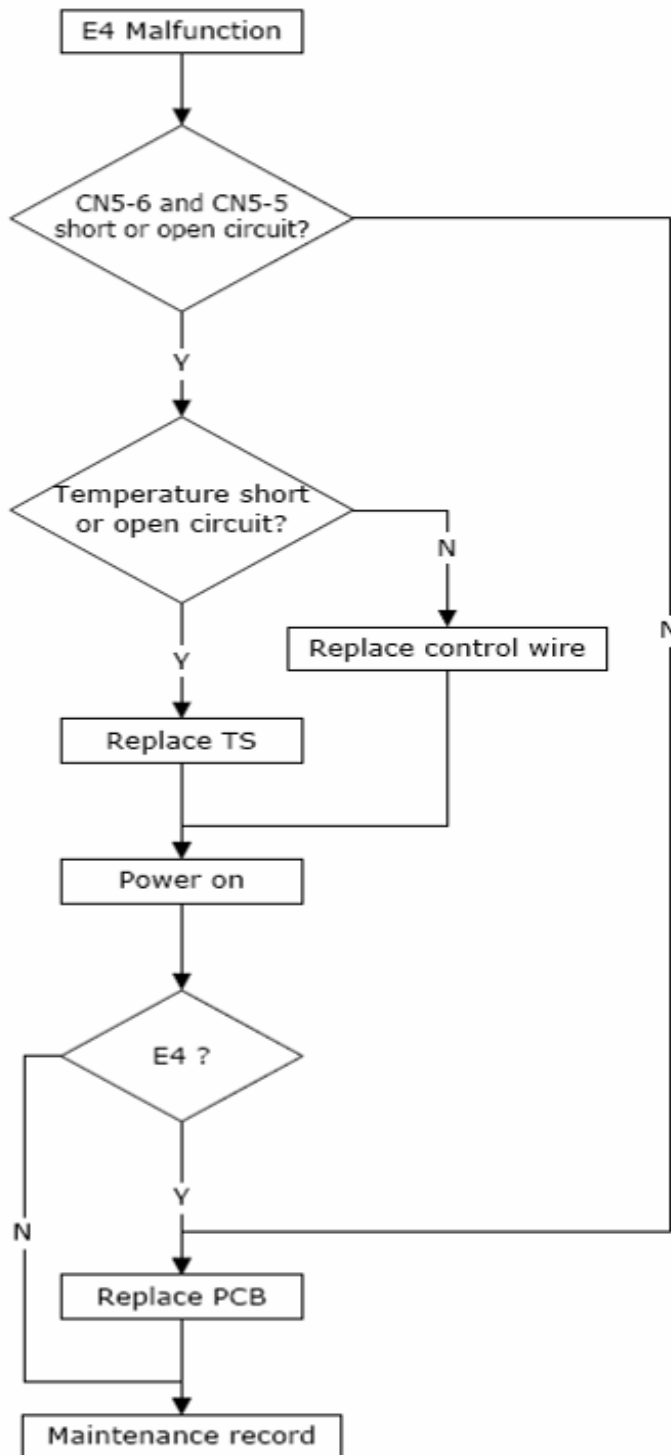
### Water inlet malfunction



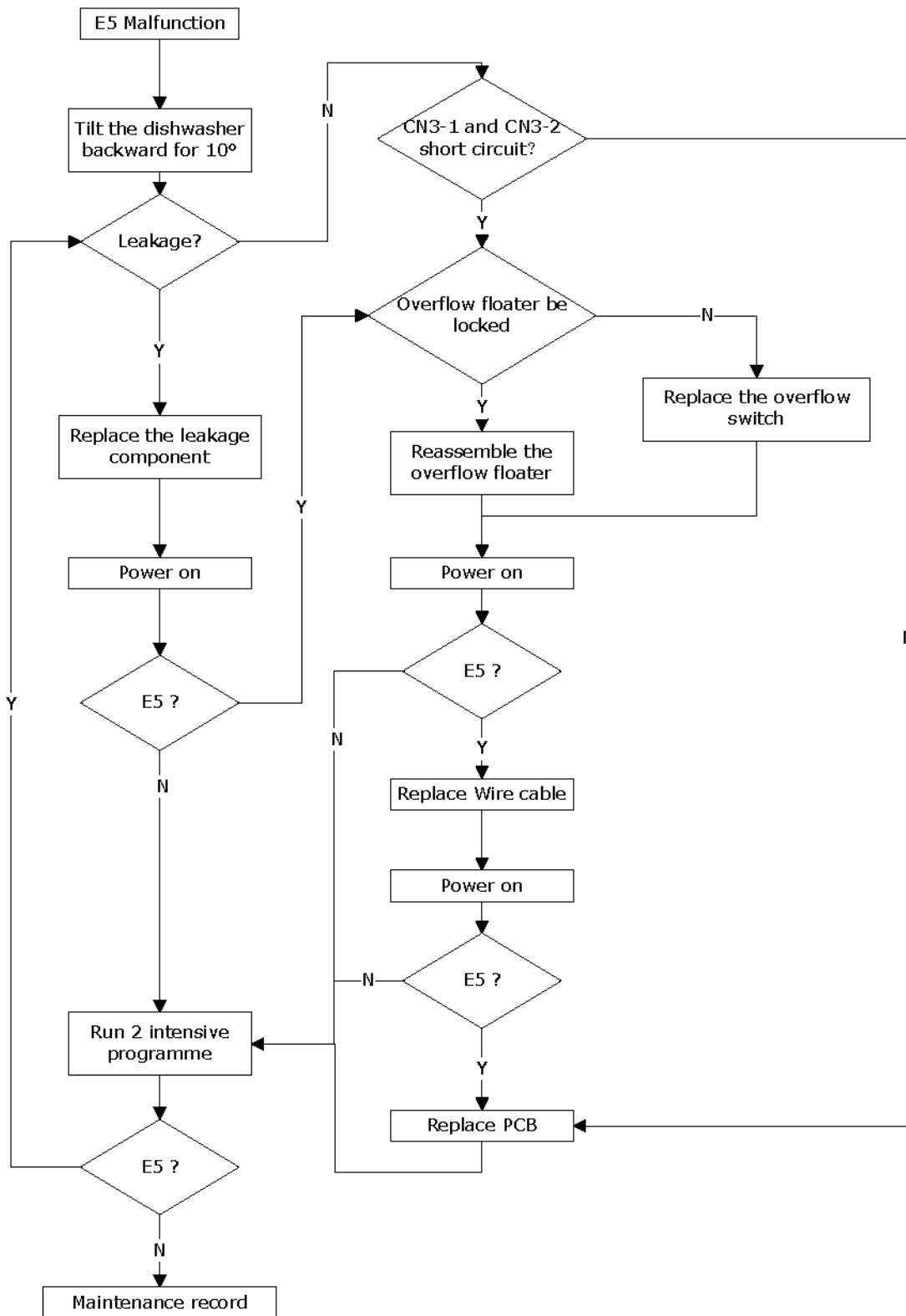
### Water drainage malfunction



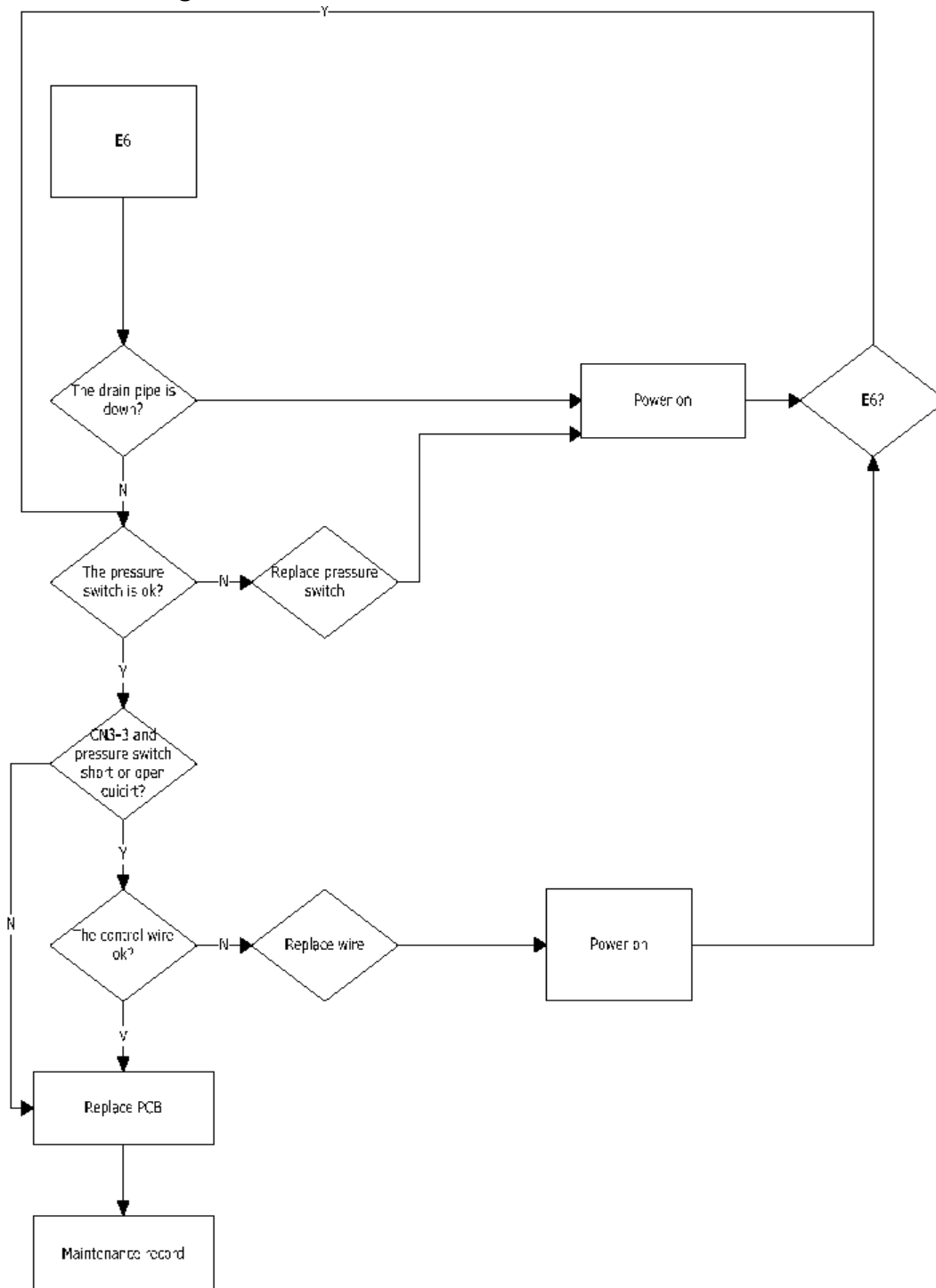
## Temperature malfunction



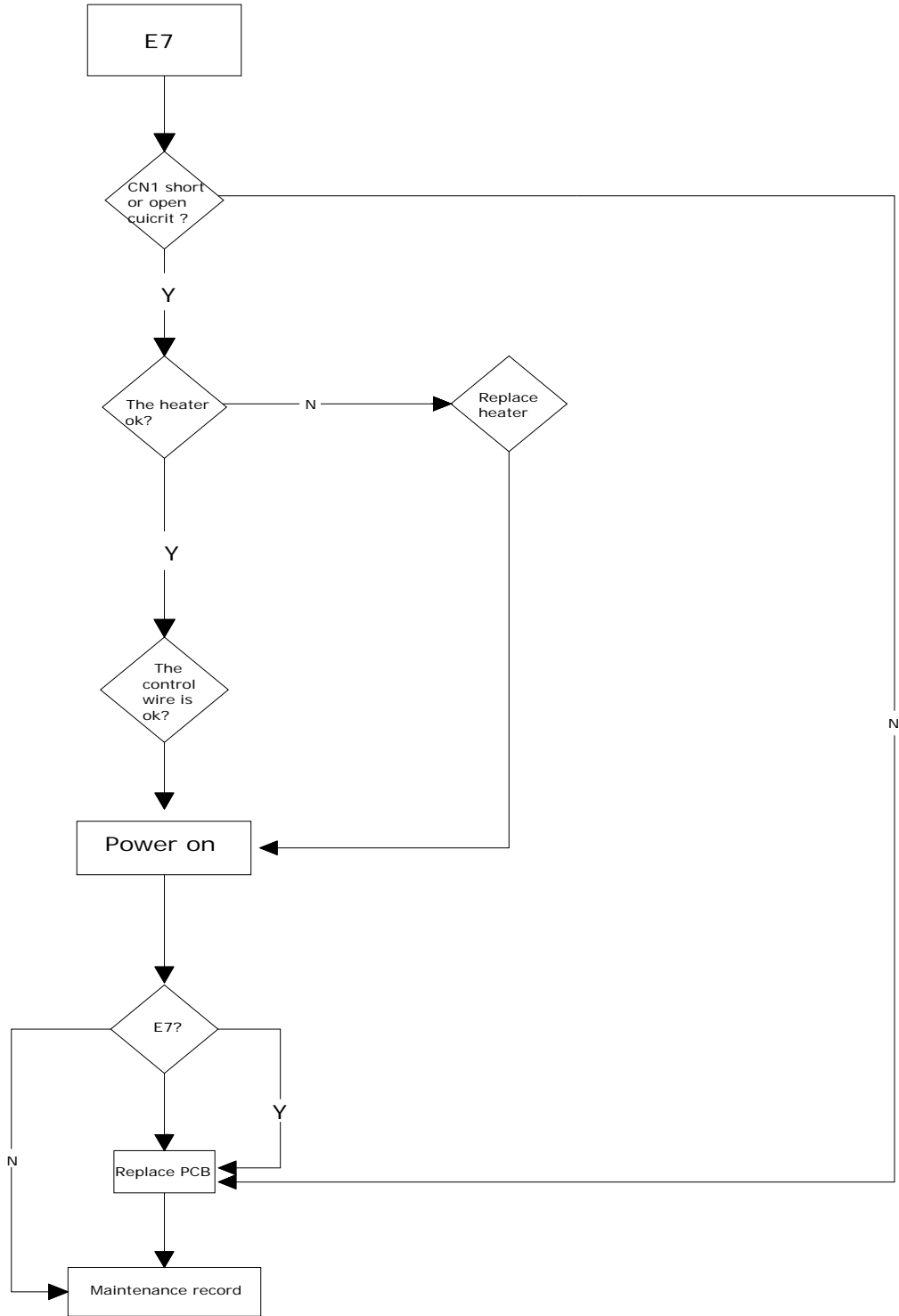
### Overflow Malfunction





### Water leakage malfunction



### Heating element malfunction





 <b>Warning</b>	
	<p><b>Electrical Shock Hazard!</b> <b>Disconnect electrical power before installing dishwasher.</b> <b>Failure to do so can result in death or electrical shock.</b></p>

## Specifications

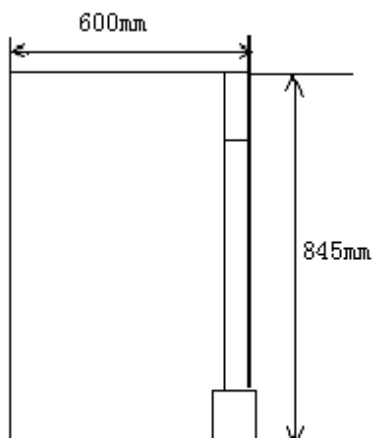
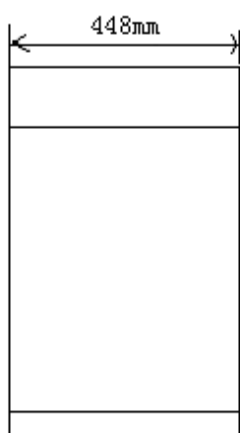
Electrical Supply:  
(Under load) 50Hz, 220-240VAC

Upper Spray Arm Rotation: 15 to 25rpm

Supply Water Flow Rate:  
To fill about 4.0L in 1 minute

Lower Spray Arm Rotation: 20 to 30rpm

## 9. Net dimension



## Technical data

<b>Width</b>	<b>44.8cm</b>
<b>Depth</b>	<b>60.0cm</b>
<b>Height</b>	<b>84.5cm</b>
<b>Capacity</b>	<b>9 standard place settings</b>
<b>Mains water pressure</b>	<b>0.04-1.0MPa</b>
<b>Power voltage</b>	<b>220-240V~ 50Hz</b>
<b>Total absorbed power</b>	<b>1850W</b>
<b>Maximum current intensity</b>	<b>10A</b>

# Sincere Forever

**ZhongShan Galanz Consumer Electric ApplianceCo.,Ltd**

Maxin Industrial Zone Huangpu Town, Zhongshan, Guangdong 528429, P.R. China

<http://www.galanz.com>