Service Manual
MSDW15070

Models:

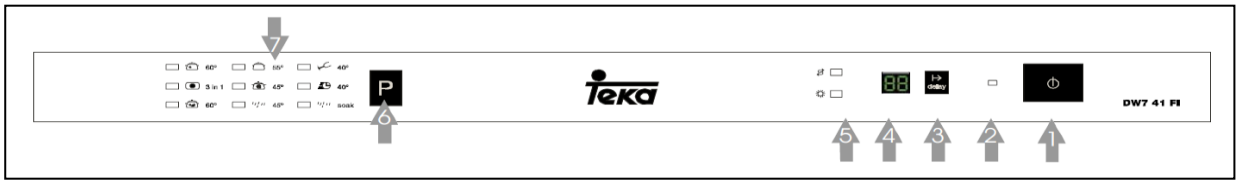
DW7 57 FI **DW7 41 FI** **LPI 759**

Contents

1. Introduction

This document explains how to perform the Service Test for the related Dishwasher.

2. Control Panel



1.ON/OFF button
2.Power on light
3.Delayed start button
4.Display
5.Salt and rinse aid warning light
6.Program button
7.Program indicator light

3. Service Test

To activate test program, with the door opened and machine off, hold down the Program button and press the POWER button until the machine enter into Test Program. The appliance will pause and stand by(as step 00). Then close the door to start the Test Program.

During test program running you can press Program button to jump into next step (except inlet valve step).

No.	Proceso	Display	Estado
0	Initialization	88	Power on, stand by
1	Inlet valve	0A	Open inlet valve and feeds with 3.6L wáter (3.0L in 45 cm models)
2	Washing pump and dispenser	09	Dispenser will act once and washing pump will run for 60 sec. in this step
3	Heating element	08	Run washing pump and heating element until the water temperatura reaches 57ºC. Then the machine will pause
			Press Program button to jump into the next step
4	Drain pump	07	Drain for 30 sec.

5	Pause	06	Pause for 10 secs.
6	Inlet valve	99	Open inlet valve and feeds with 3.6L (3.0 in 45cm. models)
7	Washing pump	04	Run washing pump for 2 mins.
8	Pause	03	Pause for 5 secs.
9	Washing pump and half load valve	02	Run washing pump for 1 min. If model is equipped with half load valve, it would be working during this step
10	Drain pump and regeneration valve	01	Open regeneration valve and drain for 30 secs.
11	Finish	F1	Buzz one sound, stop, and stand by.

4. Error codes

E1 Water filling exceeds pre-set time.

If the inlet valve has been opened for 4 minutes but the water quantity hasn't reached the desired value (measure by pulses).

When E1 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately.

At the same time, the buzzer will sound for 30 seconds and E1 will be shown.

E3 Heating exceeds pre-set time.

If the heating element has been working for 60 minutes but the water temperature detected by NTC hasn't reached desired value.

When E3 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately.

At the same time, the buzzer will sound for 30 seconds and the eE3 will be shown.

E4 Overflow

At any time, if overflow micro-switch act and keep for longer than 2 seconds, the E4 error will appear.
When E4 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately.

At the same time, the buzzer will sound for 30 seconds and error 4 will be shown.

Note: Priority level of E4 is the highest. E4 operation is valid after other error operations. When E4 operation has done, all the others are invalid.

E6 Open-circuit failure of NTC Sensor

In test program, once open-circuit failure of NTC sensor is detected by controller, the E6 will appear.

When E6 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately.

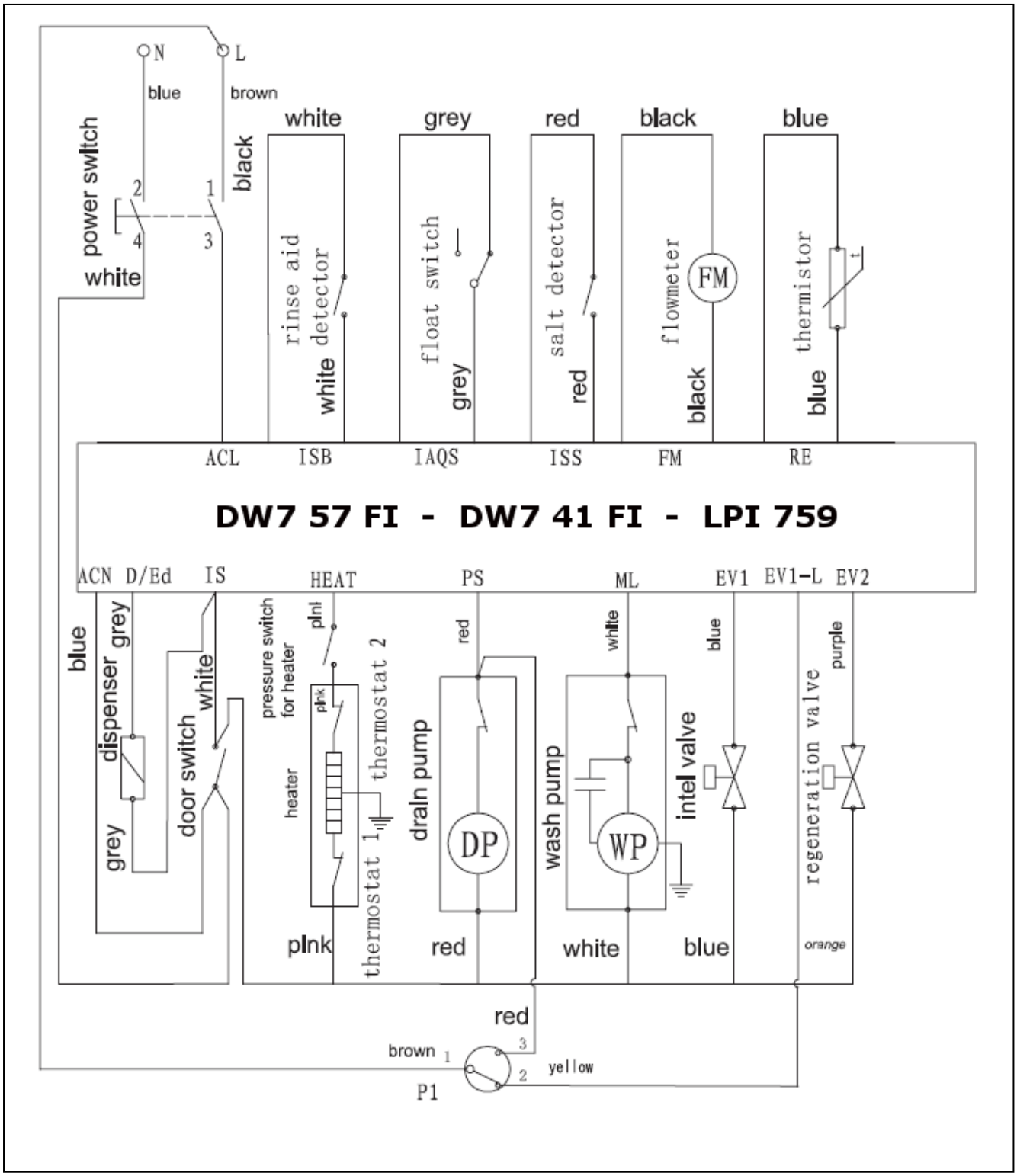
At the same time, the buzzer will sound for 30 seconds and error 6 will be shown.

E7 Short-circuit failure of NTC sensor

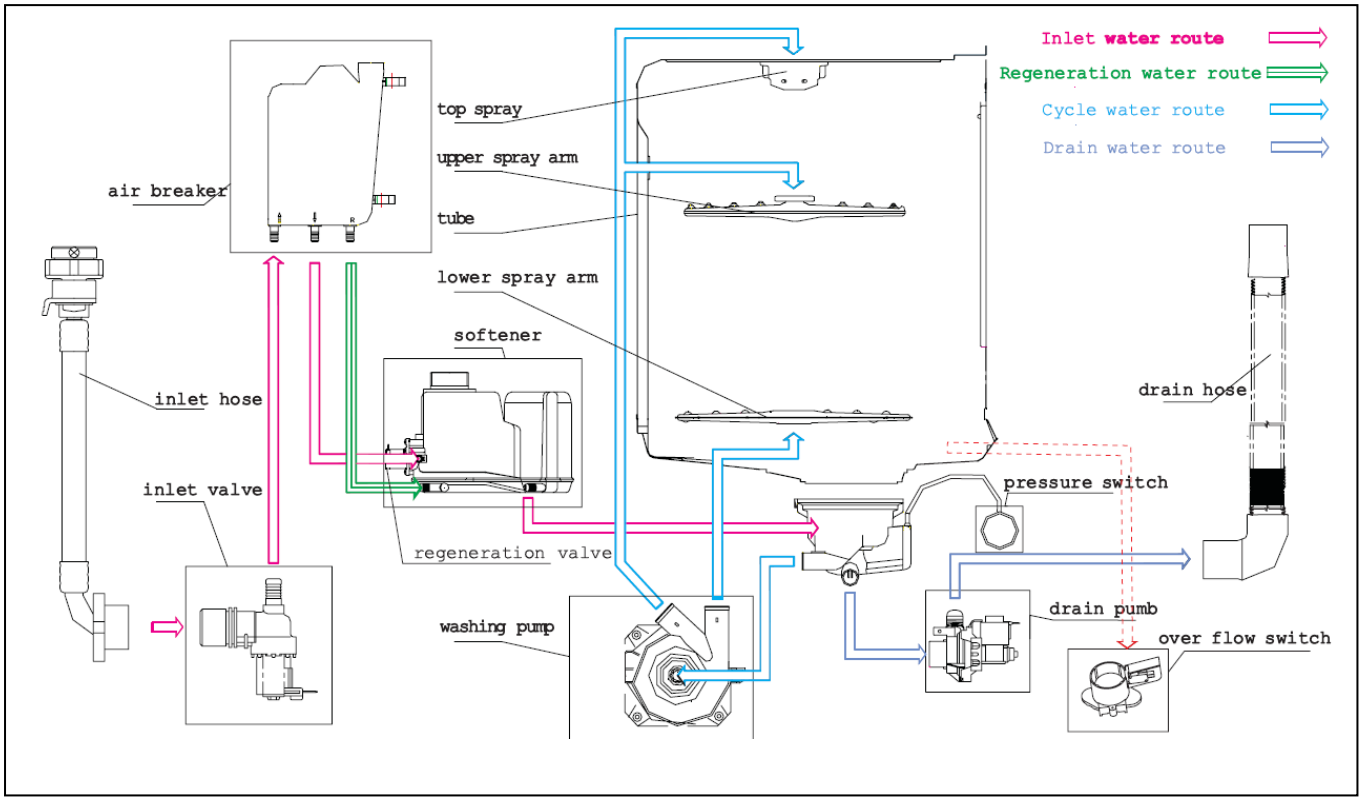
In test program, once short-circuit failure of NTC sensor is detected by controller, the E7 will appear. When E7 occurs, the drain pump will run until flowmeter keep motionless for 2 minutes and all the other components will be stopped immediately.

At the same time, the buzzer will sound for 30 seconds and error 7 will be shown.

5. Wiring diagram



6. Water circuit scheme



7. Electrical components

Inlet valve
Voltage = 220 – 240 V
Resistance = 3.4 – 4.3 KΩ

NTC sensor

NTC	15°C	17.48KΩ
	20°C	12.12KΩ
	25°C	10KΩ
	30°C	8.299KΩ
	40°C	5.807KΩ
	50°C	4.144KΩ
	60°C	3.011KΩ
	70°C	2.224KΩ
	80°C	1.667KΩ
	85°C	1.451KΩ

	**Flowmeter** Using a multi-meter in Diode testing mode, there should be electrical pulses sent out while water is passing through the flowmeter.
	**Washing pump** Voltage = 220 – 240 V Resistance = 131.4 Ω (±10%) Capacitor = 3µF
	**Drain pump** Voltage = 220 – 240 V Resistance = 150 – 220 Ω
	**Heater** Voltage = 230 V Power = 1800 W Resistance = 29.3 Ω ± 1.47 Ω