



# **WHIRLPOOL AUSTRALASIA**

## **CONSUMER SERVICES**

### **SERVICE MANUAL**

#### **DISHWASHER**

**Model 6ADP962/3 IXM**  
**Version 8542 962 53420**

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This documentation is intended only for qualified technicians who possess the required qualifications and are aware of the regulatory requirements applicable to servicing electrical appliances.

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**TECHNICAL DATA****Dimensions**

Height	85.0	mm
Width	60.0	mm
Depth	59.2	mm
Mass	58.0	kg

**Decor Plate**

Thickness (Max)	4	mm
Width	583	mm
Height	595	mm
Mass (Max)	1.8	kg

**Electronic Circuit Boards**

Service Boards	See Spare Parts
----------------	-----------------

Serial Boards	
UB	4619 720 86181
DB	4619 720 78871
CB	097662
Dataset	097652

**Programs**

Programs	See Program Chart
Succession	1a-3b-4b-6d-6b-7a

**Alarms**

Rinse aid refill

**Options**

Zone Washing  
Delay function

**Program Indication**

Start indicator  
Pre wash  
Main wash  
Drying  
End

**Electrical Data****Base Data**

Voltage	230 - 240	V
Frequency	50	Hz
Total power	2.4	kW
Fuse	10	A

**Motors****Spray Pump Motor**

Voltage	230 - 240	V
Power consumption.	~160	W
HI (in series with cap)	81	•
HA	44	•
Capacitor	4	µF

**Drain Pump Motor**

Voltage	230 - 240	V
Input	30	W
Resistance	146	•

**Water Pressure/Temperature**

Inlet pressure, min.	30	kPa
max.	1400	kPa
Spray pump pressure	40	kPa
Hot Connection	60	°C max

**Flow rates / Inlet volume**

Flow meter calibration	208	Impulses/litre
(at 30 kPa pressure and 1.1 litres per min)		
Spray pump	~70	l/min
Drain pump	16	l/min
Pump height, max.	1.1	m
Inlet valve	4.5	l/min
Zone washing valve	30	l/min
Spray arm lower	33	l/min
Spray arm upper	27	l/min
Ceiling rotor	10	l/min

**TECHNICAL DATA (Cont.)****Heating**

Voltage	230 - 240	V
Power consumption	2.22	kW
Resistance	25	•
Heating rate	2	°C/min
Temperature on surface	~115	°C
Double safety element cut-out, self resetting	85	°C

**Water Valves****Single Valve at Inlet Hose**

Voltage	230 - 240	V
Frequency	50 - 60	Hz
Resistance	3.8	k•

**Zone Washing Valve**

Voltage	230 - 240	V
Frequency	50 - 60	Hz
Resistance	4.0	k•

**Dispenser Coil**

Voltage	230 - 240	V
Frequency	50 - 60	Hz
Resistance	2.0	k•

**Reed Contact**

Flow meter  
Rinse aid control

**NTC**

15 °C	75	k•
20 °C	62	k•
30 °C	43	k•
40 °C	28	k•
50 °C	19	k•
60 °C	13	k•
70 °C	9	k•
80 °C	6	k•
85 °C	5	k•

**Water Quantities and Levels****Measuring Water Level**

Remove the coarse sieve, place end of a ruler in the bottom of the sump to measure the depth of the water.

**Water Quantities (Normal Program (6a))**

Back Rinse (x3)	1.0 litre	68mm
Prewash	4.8 litres	122mm
Prewash/Zone wash	4.0 litres	120mm
Main Wash	4.5 litres	121mm
Main wash/		
Zone washing	4.0 litres	117mm
Intermediate rinse1	4.0 litres	120mm
Intermediate rinse1/		
Zone washing	3.5 litres	117mm
Intermediate rinse2	4.0 litres	120mm
Intermediate rinse2/		
Zone washing	3.5 litres	117mm
Clear rinse	4.0 litres	120mm
Clear rinse/		
Zone washing	3.5 litres	117mm
Safety / Overflow	8.5 litres	141mm

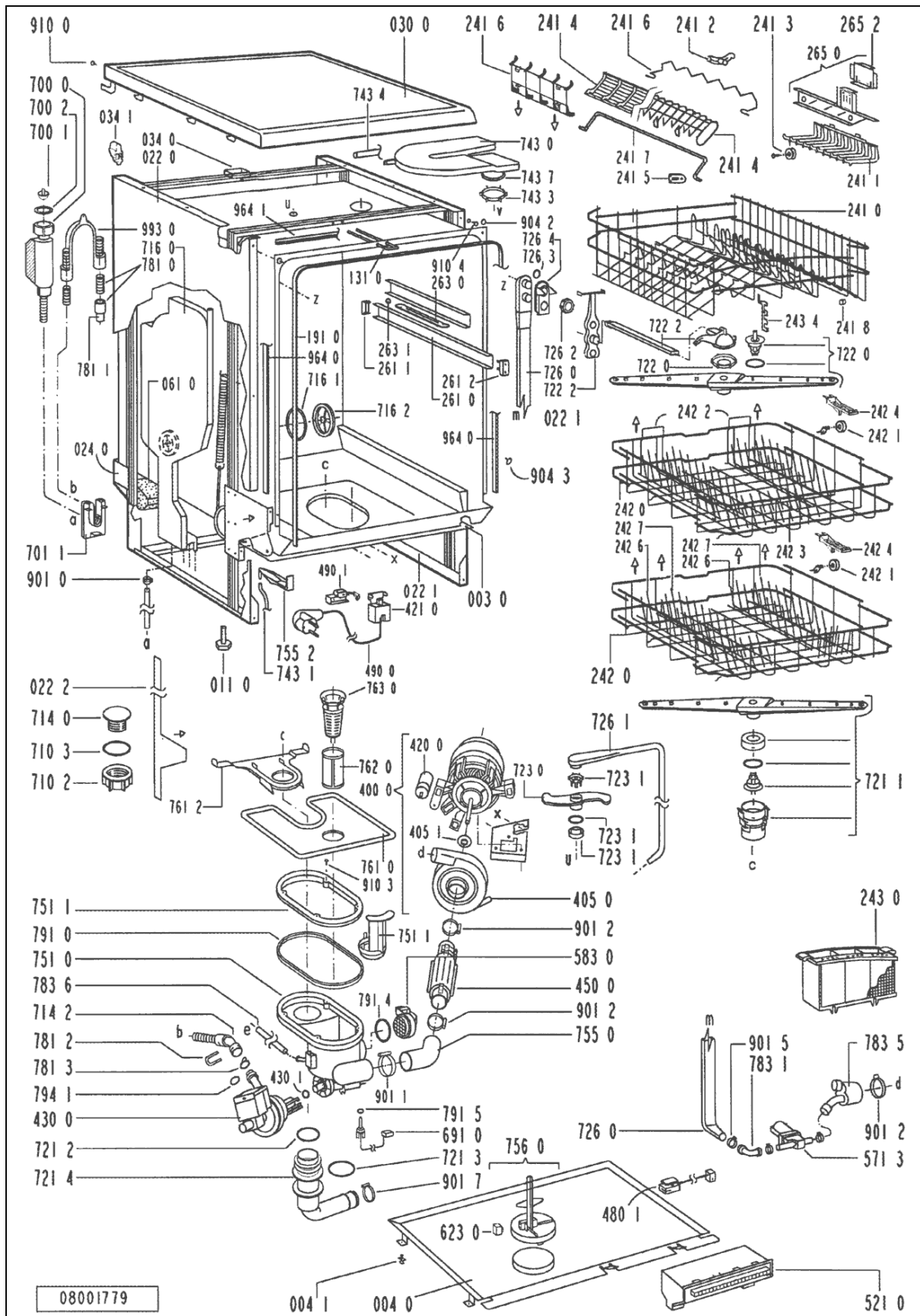
**Detergent max.**

Pre-wash	10	cm <sup>3</sup>
Main-wash	45	cm <sup>3</sup>
Rinse aid	125	cm <sup>3</sup>
6 Dosage steps	1 - 6	cm <sup>3</sup>

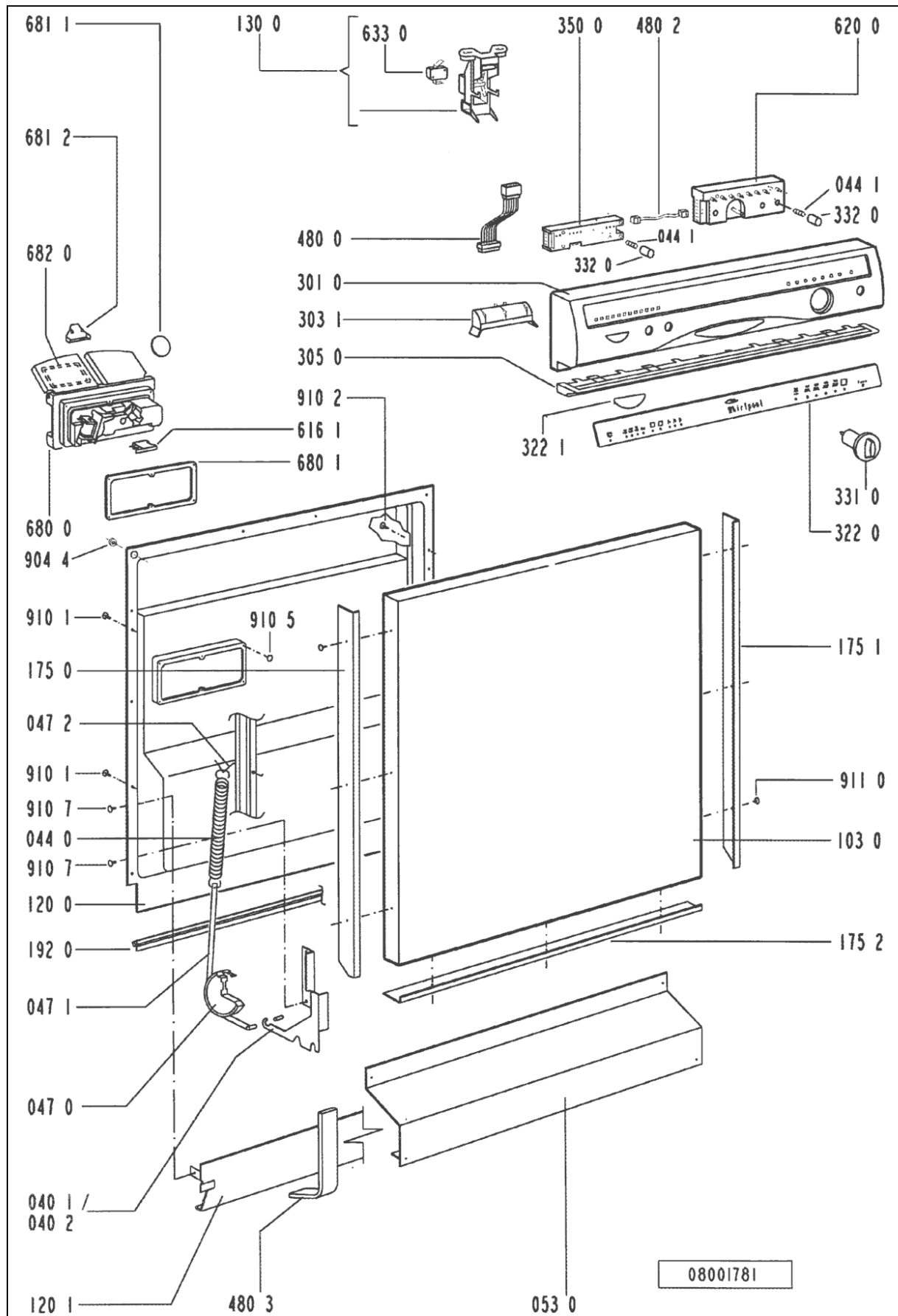
**Operating Speeds**

Spray pump motor	2800	rpm
Drain pump motor	3000	rpm
Spray arm, lower	20 - 40	rpm
Spray arm, middle	25 - 35	rpm
Spray arm, upper	45 - 65	rpm

## EXPLODED VIEW - CABINET



## EXPLODED VIEW - DOOR AND CONTROL PANEL



**SPARE PARTS LIST**

Item	Part No	Description
003 0	4812 440 19594	Traverse, over kickplate
004 0	4812 440 18952	Drip tray assy
004 1	4812 401 18402	Holder
011 0	4812 505 18357	Foot short
022 0	4812 440 19579	Side panel, left, Black
022 1	4812 440 19578	Side panel, right, Black
022 2	4812 440 18953	Spacer
024 0	4812 440 19463	Panel, rear
030 0	4819 310 18598	Table top kit, Black
034 0	4812 404 78237	Spacer
034 1	4812 404 78297	Fastener
040 1	4812 417 18774	Hinge left
040 2	4812 417 18773	Hinge right
044 0	4812 492 38358	Spring for door
044 1	4812 492 38364	Spring for cap
047 0	4812 404 48591	Brake for door
047 1	4812 401 18397	Band, brake
047 2	4812 404 68023	Hook
053 0	4812 440 88889	Plinth, Black
061 0	4812 466 88455	Counter weight
103 0	4812 440 19453	Door outer, Black
120 0	4812 440 19456	Door, inner
120 1	4812 440 18969	Batten (behind kickplate)
130 0	4812 417 58361	Door lock, complete
131 0	4812 401 18416	Hook lock
175 0	4812 310 18309	Door trim, ornamental, left, Black
175 1	4812 310 18308	Door trim, ornamental, right, Black
175 2	4812 310 18311	Door trim, ornamental, lower, Black
191 0	4812 466 68564	Gasket door
192 0	4812 466 68467	Gasket, door, lower
241 0	4812 458 18912	Basket, upper
241 1	4812 458 18324	Holder cups right wh
241 2	4812 535 78036	Bearing upper basket to Wk 00/01
241 3	4812 528 88068	Wheel, basket upper (set)
241 4	4812 458 18288	Cutlery basket WH to Wk 00/01
241 4	4812 458 18984	Holder dishes from Wk 00/01
241 5	4812 458 18921	Bearing to Wk 00/01
241 5	4812 535 78043	Bearing from Wk 00/01
241 6	4812 458 18333	Holder glasses to Wk 00/01
241 6	4812 458 18979	Holder glasses from Wk 00/01
241 7	4812 404 48639	Hoop to Wk 00/01
241 7	4812 404 48683	Hoop from Wk 00/01
241 8	4812 466 68553	Spacer cap set
242 0	4812 458 18923	Basket lower complete to Wk 00/01
242 0	4812 458 18974	Basket lower complete from Wk 00/01



**SPARE PARTS LIST (Cont.)**

Item	Part No	Description
242 1	4812 528 88069	Wheel, basket lower
242 2	4812 458 18262	Plate, support for lower basket to Wk 00/01
242 3	4812 458 18275	Plate, support for lower basket to Wk 00/01
242 4	4812 466 48059	Lower basket stop
242 6	4812 458 18977	Support plate left from Wk 00/01
242 7	4812 458 18978	Support plate right from Wk 00/01
243 0	4812 458 18272	Basket cutlery
243 0	4819 310 39859	Cutlery basket KIT
243 4	4812 458 18317	Bracket
261 0	4819 462 38271	Rail telescope, inner
261 1	4819 404 48819	Cap rail rear
261 2	4812 462 78995	Cap rail front
263 0	4819 520 18013	Ball cage complete
263 1	4812 520 48001	Ball Niro 8 D
265 0	4812 404 48637	Basket adjustment mechanism, complete
265 2	4812 404 48638	Grip basket adjustment
301 0	4812 453 70054	Control panel, Black
303 1	4812 460 38056	Plate, handle, Black
305 0	4812 440 18973	Batten, below control panel, Black
322 0	4812 453 70604	Insert, control panel, Black
322 1	4812 440 19468	Sticker, Multizone, blue
331 0	4812 413 58935	Knob, program, complete, Black
332 0	4812 410 28569	Push button cap, Black
350 0	4819 310 39832	Display board (DB)
400 0	4812 361 58126	Motor and spray pump complete
405 0	4812 360 18371	Spray pump
405 1	4819 515 28158	Gasket
420 0	4812 121 18132	Capacitor
421 0	4812 121 18161	Interference filter
430 0	4812 360 18357	Pump, draining
430 1	4812 466 68506	Shaft seal
450 0	4812 259 28684	Heating element
480 0	4812 321 28386	Cable harness set
480 1	4812 321 28371	Cable
480 2	4812 321 28383	Cable 6poles
480 3	4812 401 18418	Protector for wiring
490 0	4812 321 18051	Cable, mains
490 1	4812 321 28367	Strain relief
521 0	4812 214 78239	Control board (CB)
571 3	4812 281 28374	Valve for zone-washing
583 0	4812 271 28407	Switch diaphragm
616 1	4812 271 58161	Contact, reed rinsing agent
620 0	4812 218 38137	User board (UB)
623 0	4812 271 38356	Microswitch
633 0	4812 271 38355	Microswitch door

**SPARE PARTS LIST (Cont.)**

Item	Part No	Description
680 0	4812 418 68155	Combidosage
680 1	4812 466 68495	Gasket, combidosage
681 1	4812 466 68497	Gasket, rinse aid
681 2	4812 440 18975	Flap, combidosage
682 0	4812 466 68496	Gasket, detergent flap, combidosage
691 0	4812 282 68012	Sensor, NTC
700 0	4812 530 28804	Hose, inlet aqua stop 4,2m
700 0	4812 530 28848	Hose, inlet aqua stop 2m
700 1	4812 480 48019	Sieve
700 2	4812 520 58002	Gasket set
701 1	4812 310 18153	Yoke clamp set
710 2	4819 310 38536	Threaded ring
710 3	4819 466 69562	Gasket set, salt container blank
714 0	4812 462 78012	Threaded cap, salt container blank
714 2	4812 440 18963	Drain hose fitting, non-return flap
716 0	4812 418 68142	Reg. dosage (Air break)
716 1	4812 466 68475	Gasket, cover (Item 716 2)
716 2	4812 462 78994	Cover
721 1	4812 360 68061	Spray arm lower, complete
721 2	4812 466 68491	Gasket 25x2,3B
721 3	4812 466 68558	Gasket 30x3,0
721 4	4812 440 19455	Flange, to sump
722 0	4812 360 68044	Spray arm upper
722 2	4812 360 68056	Hub upper straight complete
723 0	4812 360 68049	Spray arm ceiling
723 1	4819 310 39831	Kit, ceiling spray arm bearing
726 0	4812 530 28786	Tube to centre spray arm
726 1	4812 530 28787	Tube to ceiling spray arm
726 2	4812 505 18358	Nut, docking station
726 3	4812 466 68512	Gasket, docking station
726 4	4812 462 79633	Guide, docking station
743 0	4812 511 48171	Condenser, steam
743 1	4812 530 28102	Hose, hinge drain to pan
743 3	4812 505 18364	Nut, condenser
743 4	4812 530 28807	Hose (condenser to sump) 9x1,5x270+10
743 7	4812 466 68514	Gasket for nut, Item 743 3
751 0	4812 418 18205	Sump
751 1	4819 310 39826	Sump top ring
755 0	4812 530 28849	Bend, heater to sump
755 2	4812 530 48148	Hinge, leak collector
756 0	4812 360 58099	Safety float switch assembly
761 0	4812 480 58082	Sieve fine
761 2	4812 418 18204	Cover sieve
762 0	4812 480 58084	Microfilter
763 0	4812 480 58083	Sieve coarse

**SPARE PARTS LIST (Cont.)**

Item	Part No	Description
781 0	4812 530 28737	Hose, drain
781 1	4819 530 28286	Sleeve, drain hose
781 2	4819 492 68405	Clip for non-return valve
781 3	4812 281 28364	Flap non-return
783 1	4812 530 28806	Hose connection, zone wash valve
783 5	4812 530 28851	Distributor hose, zone wash valve
783 6	4812 530 28824	Hose 10,3X3X245
791 0	4812 532 68067	Gasket, sump
791 4	4812 466 68503	Gasket, pressure switch
791 5	4812 466 68504	Gasket, sensor (NTC)
794 1	4819 530 58032	Gasket 20x2,5, drain hose
901 0	4822 401 10492	Clamp, hose 14-24 mm
901 1	4812 401 18424	Hose clamp, 050,0
901 2	4812 401 18157	Hose clamp, 32-50/9 C61
901 5	4812 401 48573	Hose clamp, 028,6
901 7	4812 401 18427	Hose clamp, 031,6
904 2	4812 462 79657	Screw cover, Black, 3,5x5
904 3	4812 462 79637	Screw cover, Black, 3,5x4
904 4	4812 462 79659	Threaded cap
910 0	4812 502 18384	Screw 4x35-H
910 1	4812 502 18394	Screw 3,5x14-H
910 2	4812 502 18363	Screw 4,0x12-H
910 3	4812 502 18389	Screw, Black A2
910 4	4812 502 18386	Screw 3,5x8-TORX T15
910 5	4812 502 18393	Screw 3,5x9-1 Tx15
910 7	4812 502 18397	Screw, stainless steel A2 M 5X12
911 0	4812 502 38149	Screw ST3,5x9,5-C-H
964 0	4812 466 68536	Gasket door right and left
964 1	4812 466 68469	Gasket door upper
993 0	4819 530 29028	Bow, drain hose

## PROGRAM CHART

Program Sequence : 1a - 3b - 4b - 6d - 6b - 7a

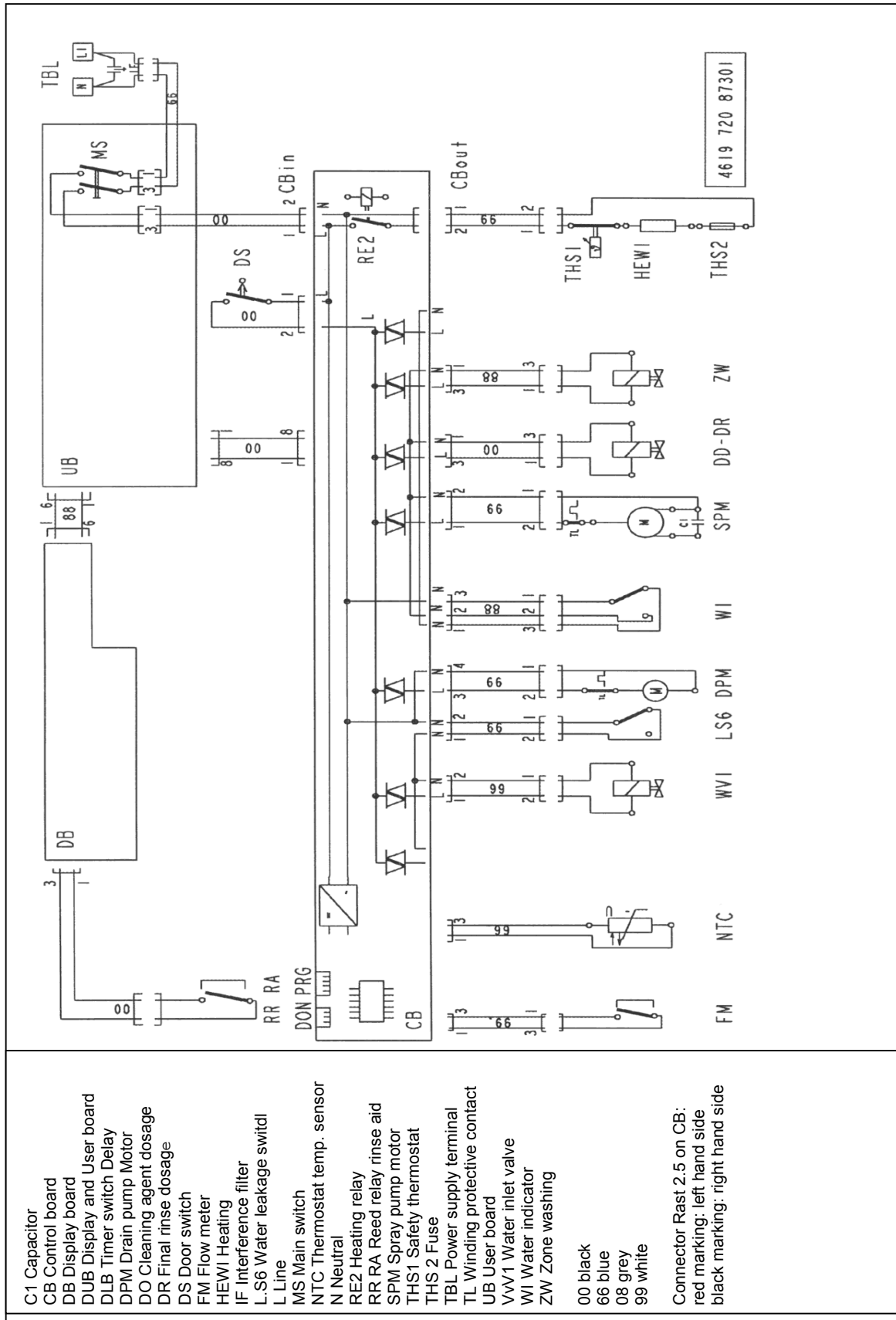
		contacts										program table									
		Ventilation drying (option)	Zone washing valve (option)	Dosage detergent + rinse aid	Spray pump	Heating relay	Water indicator	Drain pump	Regenerating valve	Inlet valve		Program Sequence LEDs									
		VM	ZW	DO-DR	SPM	REC	WI	OPM	WV2	WV1		1	2	3	4a	5a	5b	6a	6b	7	
												Interstiprogram 70 °C									
												Hybrid Program 65 °C									
												Normal Program 65 °C									
												Daily Program 65 °C									
												Bio Program 50 °C BK									
												Bio-ECO Program 50 °C WH									
												Bio-ECO Program 50 °C BK									
												Rapid Program 50 °C									
												Delicate Program 40 °C									
												Prewash Program cold									
												Back rinse									
												only after fine regeneration									
												Prewash									
												Mainwash									
												Interm. rinse									
												step 1 step2									
												Clear rinse									
												Drying									
												PS1									
												PS2									
												PS3									
												PS4									

function of the machine		VM	ZW	DO-DR	SPM	REC	WI	OPM	WV2	WV1	
Startposition for all Progr. draining	1										t3+30 s
filling + draining (1 lit.)	2										FM
pause	3										3 s
filling + draining (1 lit.)	4										FM
pause	5										3 s
filling + draining (1 lit.)	6										FM
pause	7										3 s
draining	8										10 s
filling - rinsing	9										FM
rinsing - heating	10										t2 = °C
rinsing	11										min
rinsing - draining	12										t3+30 s
filling - rinsing	13										FM
rinsing - dos. detergent	14										3 s
rinsing - heating	15										t2 = °C
rinsing	16										min
rinsing - heating	17										t2 = °C
rinsing	18										min
rinsing - draining	19										t3+30 s
filling - rinsing	20										FM
rinsing	21										6.5 min
rinsing - draining	22										t3+30 s
filling - rinsing	23										FM
rinsing	24										min
rinsing - draining	25										t3+30 s
filling - rinsing	26										FM
rinsing - heating	27										t2 = °C
rinsing - dos. rinse aid	28										1 min
rinsing	29										3 s
rinsing - dos. rinse aid	30										1.5 min
rinsing - heating	31										t2 = °C
rinsing	32										min
draining	33										t3+30 s
drying - without Fan	34										2 min
drying - regenerating	35										1 min
drying - regenerating - draining	36										t3+30 s
drying - regenerating	37										1 min
drying - regenerating - filling	38										1 s
drying - regenerating	39										3 s
drying - regenerating - filling	40										1 s
drying - draining	41										t3+30 s
drying	42										9 min
drying - draining	43										t3+30 s
End	44										End

Test-program Service		VM	ZW	DO-DR	SPM	REC	WI	OPM	WV2	WV1	
draining	1										t3+30 s
filling + draining (1 lit.)	2										FM
pause	3										3 s
filling + draining (1 lit.)	4										FM
pause	5										3 s
filling + draining (1 lit.)	6										FM
pause	7										3 s
draining	8										10 s
filling - rinsing	9										FM
pause - dos. detergent	10										3 s
rinsing - heating	11										65 °C
regenerating	12										30 s
regenerating - draining	13										t3
drying-regenerating-draining	14										30 s
End	15										End

**CIRCUIT DIAGRAM**

## **Program Sequence and Indication**

LED No. 1 (PS1) Rinse	Flushing Pre-wash
LED No.2 (PS2) Wash	Main wash Intermediate rinse Final rinse
LED No. 3 (PS3) Dry	Drying (Passive)
LED No. 4 (PS4) End	Extinguishes if any button is pressed - or Extinguishes after 30 minutes

## **Procedure for Diagnostic Service Test Program**

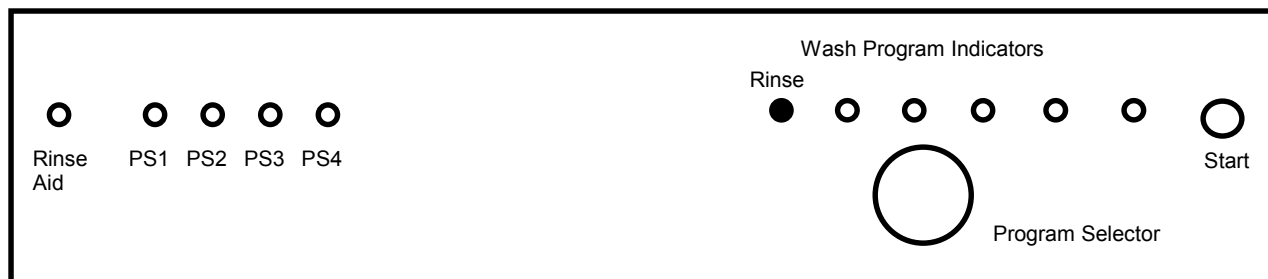
1. Start the passive test program. (See Page 14).  
If there is a defective component indicated, open the plinth and take out the control board (CB).
2. Check the component.  
Unplug the indicated component from the control board and check with a multi-meter. If resistance is comparable with the data sheet check cabling and connections and examine component.
3. Check control board.  
Dishwasher components are controlled via electronic devices. As a result, when checking component control board output voltages, the component connector must be connected to the control board to load the electronic device.
4. If the dishwasher appears totally dead, perform test point tests. (See Page 19).
5. After completion of any repair, run the test program again to confirm repairs have been effective.

**NOTE 1 :** The first step with test the program of the new service control boards is without backrinsing. Therefore if the machine contains any water at the start of the test there is a risk of overflow.

**NOTE 2 :** Indicated failures      F1 : NTC failure  
   F2 : Water leakage  
   F9 : Continuous water inlet  
will cause the diagnostic program to terminate, so these failures must be repaired before it is possible to continue with the test.

Once a wash program has been started it cannot be altered but must be cancelled by holding the start button for more than 3 seconds.

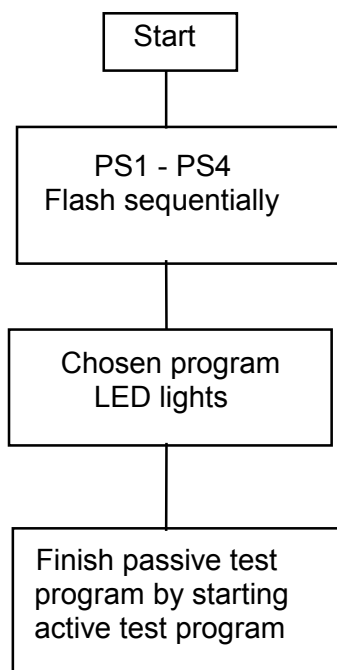
As the components are controlled by electronic devices, meaningful output voltage measurements from the control board can only be made with the component connected. Do not attempt to measure open circuit voltage output from the control board.



Failure	Failure No.	Indication	Test Program Indication
NTC failure	F1	Start LED flashes	PS1 LED Flashes
Water leakage	F2	Start LED flashes	PS2 LED Flashes
Heating system	F3	Start LED flashes	PS3 LED Flashes
Drain system	F4	Start LED flashes	PS4 LED Flashes
Water inlet closed	F6	Start LED flashes	PS2 & PS4 LED's Flash
Flow meter	F7	Start LED flashes	PS3 & PS4 LED's Flash
Water level	F8	Start LED flashes	PS2 & PS3 LED's Flash
Continuous water fill	F9	Start LED flashes	PS1 & PS3 LED's Flash
Rinse aid low		Red LED on	Red LED on

**NOTE:** The machine will not store Fault Code F6 located during normal operation, only during the active test. Therefore the active test **MUST** be run for the diagnostics to locate this fault. All Other Fault codes located during normal operation are stored by the machine and will be displayed by the passive test.

### Passive Test Program



Passive test program will indicate the mode of failure. If there is no failure, the test program will result in PS1 to PS4 flashing sequentially.

#### **Starting the Passive Test Program**

1. Turn the program selector to the off ("O") position
2. Push and hold the start button while turning the program selector to first cycle (rinse) until the START LED begins to flash.
3. Release the start button.
4. The LED's, PS1 to PS4, will now flash in sequence or light to indicate the mode of failure of the dishwasher.
5. Repair failure
6. Reset program by pressing start button for more than 3 seconds
7. Start passive test again and progress to active test by pressing the start button for less than 3 seconds

**FAULT CODES DISPLAY**

Failure	Indication to Customer	Passive/Active Test Program Indication
F1 NTC Fault	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>● PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>
F2 Water Leakage	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>● PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>
F3 Heating System Failure	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>○ PS2</div> <div>● PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>
F4 Draining Failure	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>● PS4</div> <div>START</div> <div>○</div> </div>
F5 Spray Arm Blocked	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>	<div> <div>● PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>● PS4</div> <div>START</div> <div>○</div> </div>
F6 Water Control Cock Closed	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>● PS2</div> <div>○ PS3</div> <div>● PS4</div> <div>START</div> <div>○</div> </div> <p><b>Note: This fault is not stored during normal operation. It is only displayed after the Active Test Program is run.</b></p>
F7 Flow Meter Failure	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>○ PS2</div> <div>● PS3</div> <div>● PS4</div> <div>START</div> <div>○</div> </div>
F8 Water Level Failure	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>○ PS1</div> <div>● PS2</div> <div>● PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>
F9 Water Inlet Valve Open Continuously	<div> <div>○ PS1</div> <div>○ PS2</div> <div>○ PS3</div> <div>○ PS4</div> <div>START</div> <div>●</div> </div>	<div> <div>● PS1</div> <div>○ PS2</div> <div>● PS3</div> <div>○ PS4</div> <div>START</div> <div>○</div> </div>

● LED Flashing

○ LED Off



## **Fault Diagnosis**

### **F1 NTC (Negative Temperature Co-efficient of Resistance) Device**

- Temperature is outside normal range -3°C to +85°C
- Temperature inside the wash chamber is over +85°C
- The device is either open circuit or short circuit.

### **F2 Water Leakage**

Water is in drip tray

- Float switch (LS6) operates, closes the water inlet valve and turns on the drain pump until the water Indicator (WI) reports empty.

### **F3 Heating System Defective**

Indicated after approximately 11 minutes of heating operation.

- Element (HEW) defective
- Relay (RE2) on control board is defective
- NTC resistance fluctuation
- Water indicator (WI) defective (open-circuit)
- Spray pump is not working

### **F4 Draining Failure**

Drain pump energised and after four minutes Water Indicator (WI) still detects water.

- Drain pump (DPM) defective
- Drain hose blocked
- Control board defective
- Water Indicator defective (Pressure switch contacts remain closed)

### **F5 Spray Arm Blocked. (Fault does not cause dishwasher to stop)**

SAB sensor sends less than 10 pulses/minute.

- SAB sensor defective
- Spray arm blocked or not located correctly
- Spray pump motor inefficient (insufficient water flow through pump).

### **F6 Water Control Cock Closed**

Water valve (WV1) is energised but flow meter (FM) sends no impulses to CPU (less than 10 impulses in 10 seconds) and the water indicator is at low level.

- Water inlet control cock closed
- Water inlet hose blocked or kinked
- Water inlet valve (WV1) blocked or defective
- Flow Meter (FM) or connecting leads defective

**F7 Water Flow Meter Failure**

Water inlet valve is energised and the water indicator is switched to high level.

- Flow meter (FM) sends no impulses to CPU (less than 10 impulses in 10 seconds).
- Water inlet control cock closed
- Water inlet hose blocked or kinked
- Water inlet valve (WV1) blocked or defective
- Flow Meter (FM) defective
- Water indicator defective

**F8 Water Level Failure**

Spray pump motor is energised and water indicator switches to low level more than 20 times in two minutes.

- Water indicator defective (switch should operate when machine contains approximately one litre of water)
- Sieve blocked
- Severe foaming
- Item in wash load has turned over and filled with wash water
- Spray pump pressure unstable

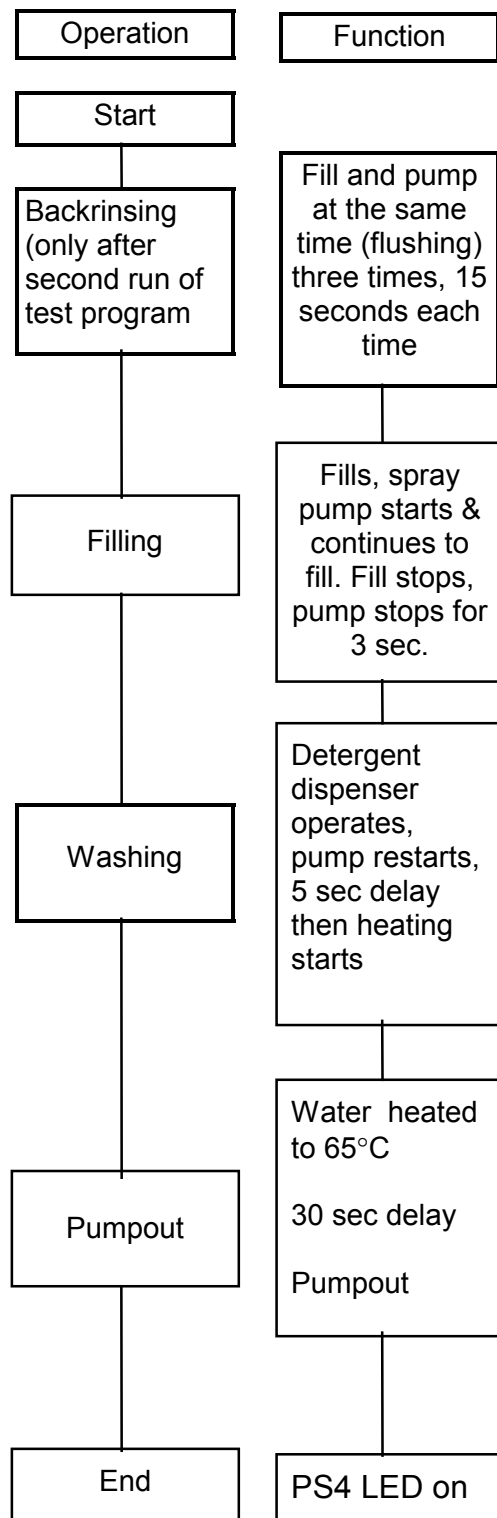
**F9 Continuous Water Inlet**

Water Inlet valve is switched off but water indicator is switched to high level and flow meter sends more than ten impulses to CPU in ten seconds.

- Water inlet valve defective
- Electronic control device for inlet valve failed

## Active Test Program

Start the active test procedure by first running the passive test then press the start button for less than three seconds.



### Notes :

When the machine detects a fault during normal operation the start light will begin to flash and the cycle may or may not stop.

When the control knob is turned to zero the fault is stored (**except Fault Code F6**) and the fault code will be displayed when the passive test is run. For the diagnostics to locate fault code F6, the active test procedure **MUST** be followed.

The active test programs runs for approximately 21 minutes or, if the heat cycle is bypassed the test runs for approximately 3 minutes and 45 seconds.

The active test program runs to the point of failure then stops. If there is no failure the test programs runs to the end.

The failure position is indicated by the flashing START LED extinguishing.

To exit the test program, press the START button for more than three seconds.

An empty rinse aid container will not cause the test program to stop, only illuminate the red LED.

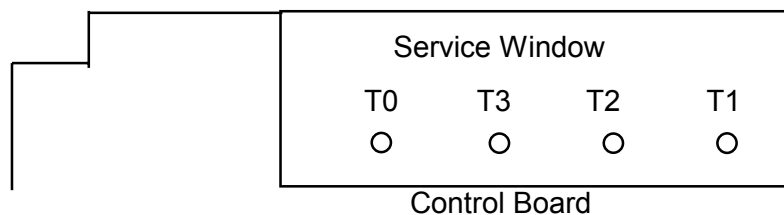
## Control Board Test Points

A pair of long, wire claw type probes are required to access the test points.

Checking voltages at the test points will determine the correct operation of the function push buttons and the rotary switch.

**Before** attaching test probes to the control board test points which are accessed via the control board service window, disconnect the dishwasher from the supply. Short circuiting of any of the electronic components will cause the control board to fail.

Test Points : T0 = Common  
T1 = Analogue voltage  
T2 = Analogue voltage  
T3 = Digital signal



A voltmeter with a high input impedance is required to measure the control board voltages.

The degree of agreement between the measured voltage and the nominated voltage will be dependent on the accuracy of the voltmeter.

### Test Point T0 to T1

Communication between control board and display board

<u>Operated Push Button</u>	<u>Voltage (V dc)</u>
All off	-5.24
ZW (1 or both LED's)	-3.43
Delay	-2.88
ZW and Delay	-2.88

### Test Point T0 to T2

Communication between control board and user board

<u>Rotary Switch</u>	<u>Voltage (V dc)</u>
O	0.00
Cycle 1	-1.32
Cycle 2	-1.75
Cycle 3	-2.20
Cycle 4	-2.90
Cycle 5	-3.36
Cycle 6	-3.80

### Test Point T0 to T3

Communication between control board and display board

Start button out (LED off)	-5.24 V dc
Start button in (LED on)	-3.87 V dc