

UD

**WASHTECH**<sup>®</sup>  
PROFESSIONAL WASH SYSTEMS



# Operator Manual

**UD** High Performance Undercounter  
Dishwasher



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**WARNING**

Before installation and commissioning, you must read the safety instructions and warnings carefully and all the warning labels attached to the equipment.

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**IMPORTANT**

Failure to comply (even partially) with the instructions given in this manual will invalidate the product warranty and relieves the manufacturer of any responsibility.

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**IMPORTANT**

The alteration of machine operation, design or the replacement of parts not approved by the manufacturer may void warranties and approvals.

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We have checked that the contents of this document correspond to the model described. There may be discrepancies nevertheless, and no guarantee can be given that they are completely identical. The information contained in this document is reviewed regularly and any necessary changes will be included in the next edition. We welcome suggestions for improvement.

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Service 1 800 622 216  
Parts 1 800 337 963

# Safety Instructions

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## **WARNING**

Equipment contains dangerous voltages and can be hazardous if installed or operated incorrectly. Non-compliance with **Warnings** or failure to follow the instructions contained in this manual can result in loss of life, severe personal injury or serious damage to property.

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### **Installation**

- ◆ Use qualified, skilled personnel
- ◆ Follow installation instructions
- ◆ Connect to correct voltage and supply current
- ◆ Provide fully accessible Electrical Isolation Switch & water supply valves

### **Training and Supervision**

- ◆ Read and Understand the Operating instructions and train all staff
- ◆ This appliance must not be operated by children or infirm persons
- ◆ Machine panels must only be removed by suitably qualified and trained personnel – internal hazards include live electrics and very hot surfaces
- ◆ This appliance is not intended for use as a stepladder

### **Hot Surfaces**

- ◆ Some surfaces may be hot or very hot

### **Chemicals**

- ◆ Commercial dishwashing detergents are hazardous – handle with care
- ◆ Read and follow the safety information found on the labels of detergent containers and Material Safety Data Sheets
- ◆ Use protective eyewear and clothing if decanting containers

### **Hot Water**

- ◆ Do not put hands in wash water which may be over 60°C and contain hazardous caustic detergent
- ◆ Rinse water can be over 90°C
- ◆ Door safety switches are designed for emergency use only

### **Cleaning**

- ◆ Do not hose down the machine or splash water over the exterior
- ◆ Watch for broken glass etc when cleaning the inside of the machine

### **Power Cord Replacement**

- ◆ If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard
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# Installation

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**WARNING**

Installer must be suitably qualified and ensure compliance with all local codes and standards including AS/NZS 3500.1.

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Failure to comply even partially with installation instructions may void the warranty.

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## Positioning

Unpack machine, check for damage and complete delivery. Install machine on sound waterproof self-draining floor and use adjustable feet to level machine. Adjacent surfaces should be heat resistant and moisture proof, especially benchtop lower surfaces above undercounter machines. Allow room for detergent to one side of machine or in adjacent cupboard. 20litre container requires about 450H x 250W x 350D, but smaller containers are available from many suppliers.

## Hot Water Supply

Temperature	65°C ± 5°C
Pressure	200 KPa = 30 Psi.
Connection	20 mm (3/4" BSP) male
Flow rate minimum	20 litres per minute
Water consumption	2.6 litres per cycle approximately
Backflow prevention	DCV = Dual Check Valve supplied with machine

Pressure limiter may be required. Don't use small diameter plastic supply lines. FLUSH supply line before connection. Connect supplied DCV to water supply. Poor quality supply or excessive water hardness may affect performance or damage machine – filtration and/or softening is recommended.

## Waste

Drain pump is fitted – refer installation diagram.

## Power

Electrical supply required is 15A 240V 50Hz via switched outlet adjacent to machine, which is supplied with cord set including 15A plug.

## Detergent

Insert detergent pump inlet hose into container of commercial low foam detergent. The detergent hoses will be primed during filling of the wash tank.

Detergent pump is set to operate for 12 seconds at the beginning of the wash cycle. This time can be adjusted in User Settings of the keypad controller. Press both Up and Down keys on the keypad for a few seconds to access the User Setting menu and follow onscreen instructions.

Commercial detergents can be hazardous – read instructions and handle with care.

## Rinse Aid

Insert injector inlet hose into rinse aid container. Check amount of fluid rising up inside pipe during pulse at start of rinse cycle. Rotate Adjusting screw clockwise to reduce flow and anticlockwise to increase flow.

## Installation Checklist

Complete attached Installation Checklist to ensure machine is installed and running correctly, and operator is familiar with operating procedures.

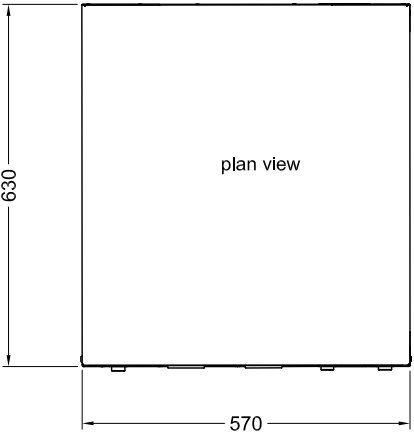
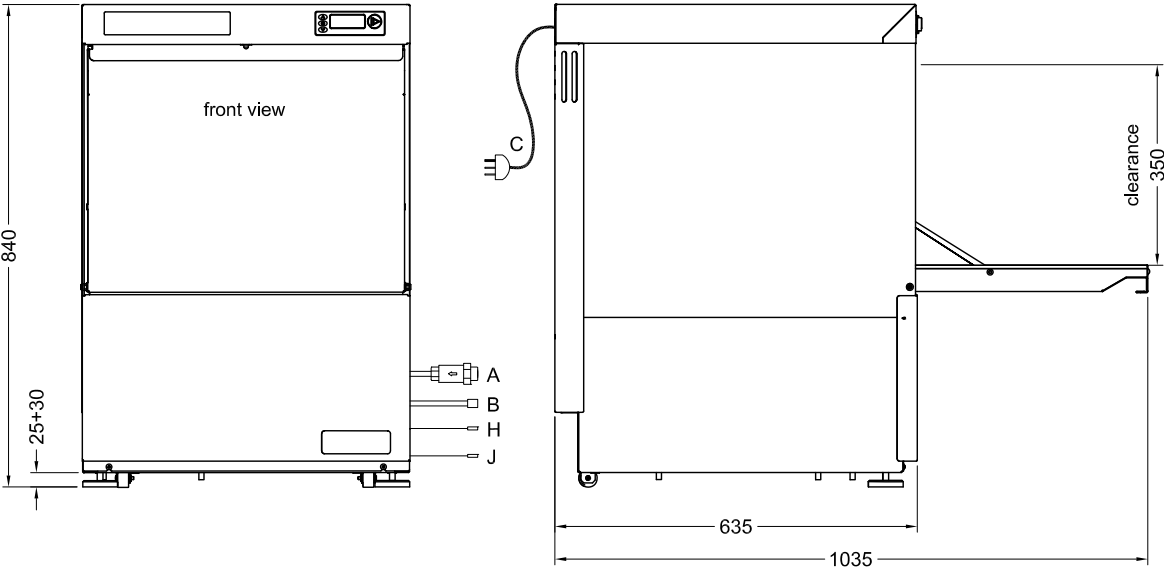
## Troubleshooting

If machine doesn't fill after switching on power, check and ensure that hot water supply tap is open, water supply pressure is not below specification and Dual Check Valve is correctly installed (arrows on the dual check valve's body specify water flow direction).

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# UD INSTALLATION DIAGRAM

UD INST 19-07-13 3 A



ensure dual check valve is located at water supply entry point.

- |   |              |
|---|--------------|
| A | Water supply |
| B | Waste        |
| C | Power supply |
| H | Detergent    |
| J | Rinse Fluid  |

# Installation Checklist

CHECK OK / NOTES

## Delivery

Supplied complete  no transit damage

## Position

Level and stable  on sound, waterproof, self draining floor

## Water

Isolator valve fitted	<input type="checkbox"/>	Accessible, all fittings sound, no leaks
DCVs fitted (Washtech only)	<input type="checkbox"/>	Correct direction
Temperature	<input type="checkbox"/>	65 ± 5°C
Flow rate	<input type="checkbox"/>	Minimum 20 litres per minute
Pressure	<input type="checkbox"/>	200-350 kpa, limiter fitted if above this range
	<input type="checkbox"/>	Booster fitted if below this range
Cold water when required	<input type="checkbox"/>	Pressure not above 350 kpa
Hardness	<input type="checkbox"/>	Filter or softening if required

## Power

Isolating switch	<input type="checkbox"/>	Fitted, functional and accessible
Supply as specified	<input type="checkbox"/>	Voltage, current, circuit breaker

## Waste

Usually 40 mm	<input type="checkbox"/>	Sound, no leaks
Air gap on pumped drain	<input type="checkbox"/>	

## Chemicals

	product name	container	no leaks	primed	conc.OK
Detergent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rinse Aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Machine operation

Run several cycles	<input type="checkbox"/>	
Confirm correct operation	<input type="checkbox"/>	Including correct fill levels

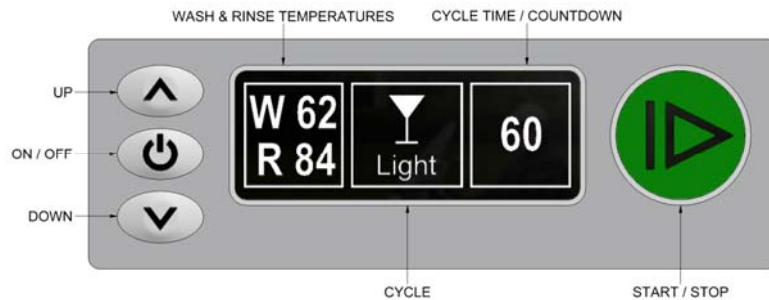
## Operator training

Confirm Operator has copy of Operator Manual and is familiar with procedures

Start-up	<input type="checkbox"/>	Model / Serial	<input type="checkbox"/>
Pre-rinse and racking	<input type="checkbox"/>	Owner	<input type="checkbox"/>
Machine operation	<input type="checkbox"/>	Location	<input type="checkbox"/>
Drain	<input type="checkbox"/>	Technician	<input type="checkbox"/>
Clean	<input type="checkbox"/>	Date	<input type="checkbox"/>
Shut-down	<input type="checkbox"/>	Signed	<input type="checkbox"/>

# UD Operating Instructions

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## Start up

Fit scrap tray, wash pump filter and upstand, and shut door.  
Turn wall power switch on and press machine ON/OFF Button for 1 second.  
START/STOP button glows white and machine fills automatically.  
Machine starts heating when wash tank is full.  
START/STOP button glows orange while heating.  
START/STOP button glows green when machine ready for operation.

## Operation

Select Light, Medium, Heavy or Manual cycle by pressing UP or DOWN keys.  
Light, Medium and Heavy cycles correspond to 60, 120 and 180 seconds cycles accordingly.

Load rack into machine and shut door.

Press START/STOP button to start the cycle.

The START/STOP button glows red while machine operates.

Pressing the START/STOP button during operation will terminate the cycle.

When red light goes out, cycle is complete.

If Manual cycle is selected machine will continue washing until START/STOP button is pressed again. The following rinse will complete the cycle.

Remove rack. Close door.

NOTE: The cycle time might be longer than specified if water supply temperature is below required.

## Shut down every night

Select Drain cycle by pressing UP or DOWN keys.

Remove drain upstand, close door and press START/STOP button.

Machine will drain for 100 seconds with a cleaning rinse in a middle of cycle.

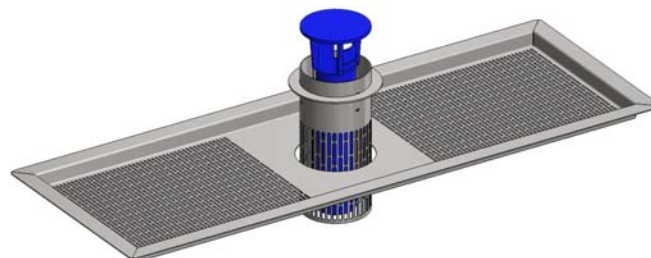
When drain & clean are complete machine will go in to standby mode.

Remove filter, scrap tray, and rinse clean.

Replace scrap tray, filter and drain upstand.

## Scrap tray & filter arrangement

Ensure scrap trays, upstand bracket, filter and upstand are placed as shown



# Dishwashing Procedures

for best results

Note: these are general instructions to assist in getting the best performance from Washtech dishwashers – some comments and / or illustrations may not apply to every unit.

## Installation



Read the Operator Manual. Correct installation, including an adequate supply of water at the correct temperature and pressure is essential for effective operation of your machine. Refer installation instructions for details. Drain hose outlet height is important on some models. Always install on a sound self-draining floor. Water softening is recommended in hard water areas - especially for glasswashing

## Pre-rinsing



Pre-scraping of dishes is required by hygiene regulations. The best method is to pre-rinse with a pre-rinse spray unit - or alternatively by scraping or dunking in water.



## Cutlery Procedures

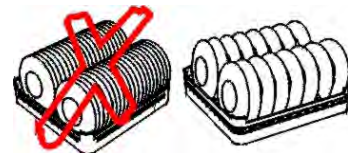


Pre-soak cutlery in warm water, preferably containing cutlery pre-soak compound - refer your chemical supplier.

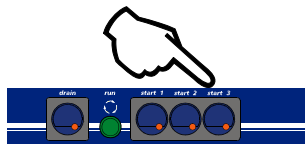
Do not overfill cutlery containers. Cutlery should be loose with handles down. Sort after washing rather than before. Cutlery of only one type nests together and obscures wash water.

## Racking Procedures

Do not overload racks, minimize the overlap of crockery. Cycle times are short and water consumption per cycle low - so there is no advantage in overloading racks.



## Cycle Times



For multi-cycle machine use the longest cycle whenever possible. Note that water consumption does not increase with longer cycles. Only choose shorter, faster cycles when necessary.



## Detergent

Use of correct type and quantity of low foaming detergent is essential to machine performance. Ask a professional chemical supplier to recommend the best types and concentrations of detergent, rinse fluid and cutlery soak for your situation. Note that detergents are hazardous. Poorly formulated detergents, particularly those containing chlorine, can shorten the life of dispensing systems and the machine itself.





# Dishwashing Procedures

for best results

## Drying

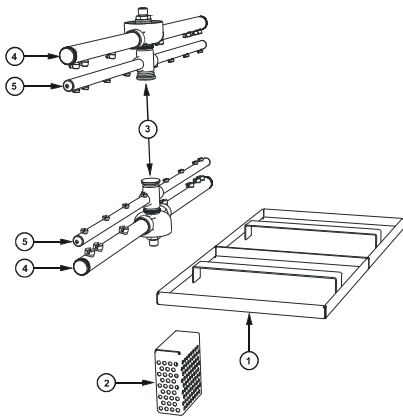


Single tank commercial dishwashers do not have a drying cycle. However, the machines do rinse at high temperatures which promote fast drying particularly when drying agents are used. We recommend prompt removal of the rack from the machine - leave the rack on the bench for 2 to 3 minutes before emptying. This time will be reduced with correct use of drying agent (rinse fluid) which reduces water surface tension and allows water to drain quickly from washware. For advice on drying agents and injectors refer to your chemical supplier.

## Daily Cleaning

It is essential that the machine is drained and cleaned at the end of each day. Drain the machine then remove, clean and replace filters as per the operating instructions. Regularly check the wash and rinse jets and clean them if necessary – see below.

## Regular Cleaning



Remove scrap trays<sup>①</sup> and wash pump inlet filter<sup>②</sup>, where fitted, and rinse or brush clean.

Remove wash and rinse arms by undoing the central thumbscrews<sup>③</sup>. If necessary, remove the end cap screws<sup>④</sup> from the wash arms and the end screws<sup>⑤</sup> from the rinse arms and flush the arms with water and/or use a toothpick or paperclip to clear jets.

Note: arms and filters vary with model and may appear different from this illustration e.g. those models with plastic wash arms have removable jets for ease of cleaning

## Regular Servicing

Regular servicing is essential for optimum performance and long machine life. Maintenance is recommended at least once every six months – especially when chemical injectors are fitted.

Please contact Moffat or your Authorised Service Provider to organize regular servicing of the dishwasher - discuss a Preventative Maintenance Agreement.

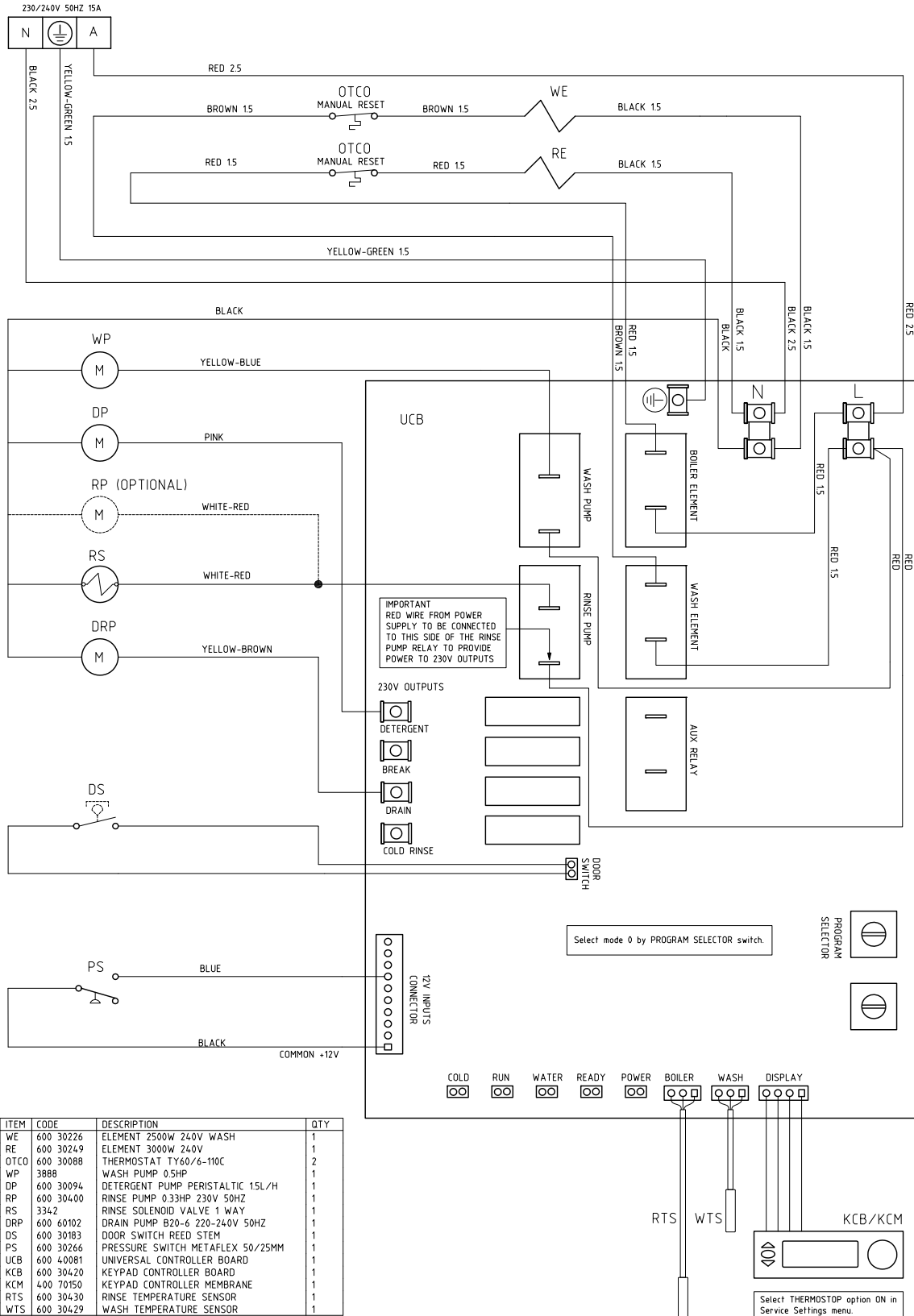


Note: these are general instructions to assist in getting the best performance from Washtech dishwashers – some comments and / or illustrations may not apply to every unit.

# EU/UD7 WIRING DIAGRAM

030313 1/08/13 3B

## POWER SUPPLY TERMINAL



ITEM	CODE	DESCRIPTION	QTY
WE	600 30226	ELEMENT 2500W 240V WASH	1
RE	600 30249	ELEMENT 3000W 240V	1
OTCO	600 30088	THERMOSTAT TY60/6-110C	2
WP	3888	WASH PUMP 0.5HP	1
DP	600 30094	DETERGENT PUMP PERISTALTIC 15L/H	1
RP	600 30400	RINSE PUMP 0.33HP 230V 50HZ	1
RS	3342	RINSE SOLENOID VALVE 1 WAY	1
DRP	600 60102	DRAIN PUMP B20-6 220-240V 50HZ	1
DS	600 30183	DOOR SWITCH REED STEM	1
PS	600 30266	PRESSURE SWITCH METAFLEX 50/25MM	1
UCB	600 40081	UNIVERSAL CONTROLLER BOARD	1
KCB	600 30420	KEYPAD CONTROLLER BOARD	1
KCM	400 70150	KEYPAD CONTROLLER MEMBRANE	1
RTS	600 30430	RINSE TEMPERATURE SENSOR	1
WTS	600 30429	WASH TEMPERATURE SENSOR	1

# Notes

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