

XP

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



# Operator Manual

**XP** Passthrough 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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# 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 codes and standards including AS/NZS3500.1.

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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. 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.

## **Benchwork**

Refer Bench Details diagram.  
In corner installations the front of the machine must face to the left of the corner. In corner installations high or angled bench return off wall may clash with door handle. Level and secure machine and benches. Adjust to ensure smooth travel of rack through machine.

## **Water Supply**

Hot water temperature	65°C ± 5°C
Connection	20 mm (3/4" BSP Male)
Flow rate minimum	20 litres per minute
Consumption per cycle	2.6 litres approximately
Backflow prevention	DCV = Dual Check Valve fitted standard
Pressure	200-350 KPa = 30-50 Psi.

Above this range fit pressure limiter. Don't use small diameter plastic supply lines especially below this range when optional rinse booster pump may be required. FLUSH supply line before connection. Poor quality supply or excessive water hardness may affect performance or damage machine – filtration and/or softening is recommended.

## **Waste**

40 mm gravity drain – refer point B on installation diagrams – run waste directly behind the machine or through open base.

## **Power**

15A 240V 50Hz via switched outlet adjacent to machine, which is supplied with cord set including 15A plug. Machine may also be installed on 3 Phase, Neutral and Earth, 415V 50Hz 15A/ph, permanently wired via wall switch mounted adjacent to machine – refer schematic diagram for this requirement.

## **Detergent**

Insert detergent pump inlet hose into container of commercial low foam detergent. Open machine door and switch machine on. Press and hold detergent prime switch behind front cover until chemical flows into machine.

## **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.

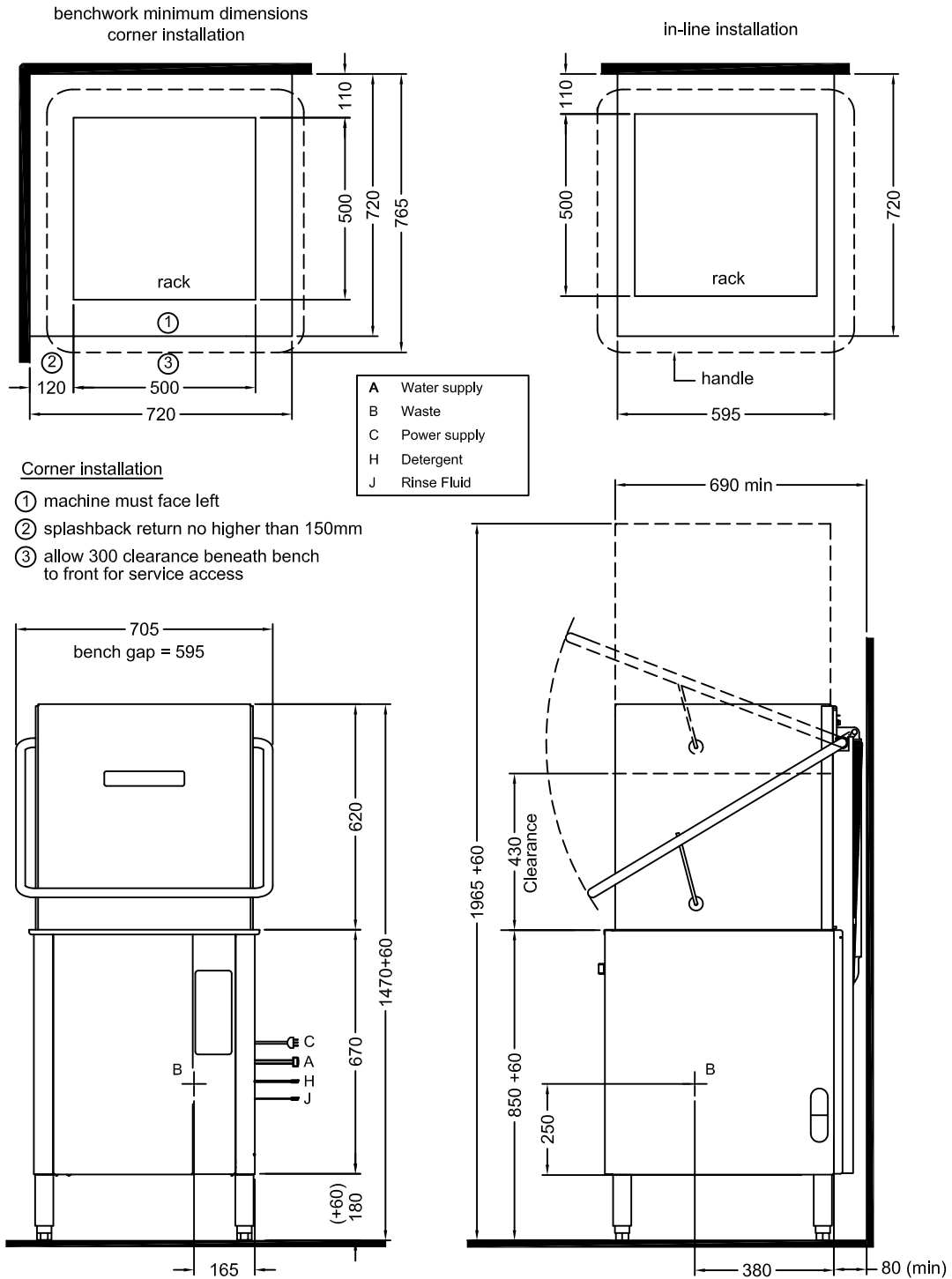
## **Troubleshooting**

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

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# XP INSTALLATION DIAGRAM

XP INST 30-07-13 3 A

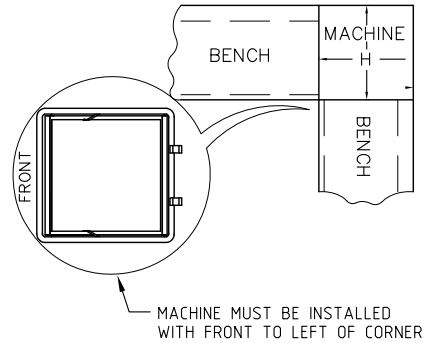


# PASSTHROUGH BENCH DETAILS

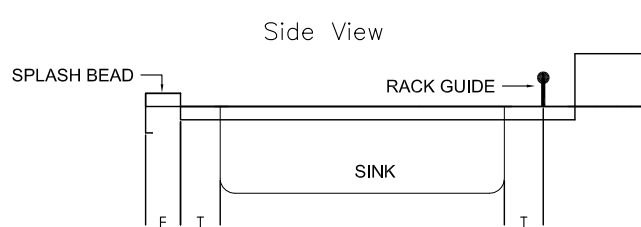
M2 0006 1-08-13 1 J

		M1	M2/XP	AL	AL8
M	BENCH DEPTH MINIMUM - for straight through only	600	700 (650)	750 (700)	750 (700)
R	RETURN MINIMUM - for straight through only	115	125 (90)	150 (125)	150 (125)
G	BENCH GAP	510	595	640	790
B	BENCH OPENING	460	535	550	550
F	SPLASH BEAD MINIMUM	25	40 (25)	50 (25)	50 (25)
D	RACK SIZE	435	500	500	500
E	RACK PATH	450	520	520	520
S	SINK WIDTH	350	450	450	450
T	CLEARANCE	35	35	35	35
H	DISTANCE TO WALL FOR CORNER INSTALLATION	620	720	760	N/A

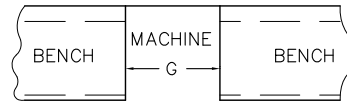
Corner Detail



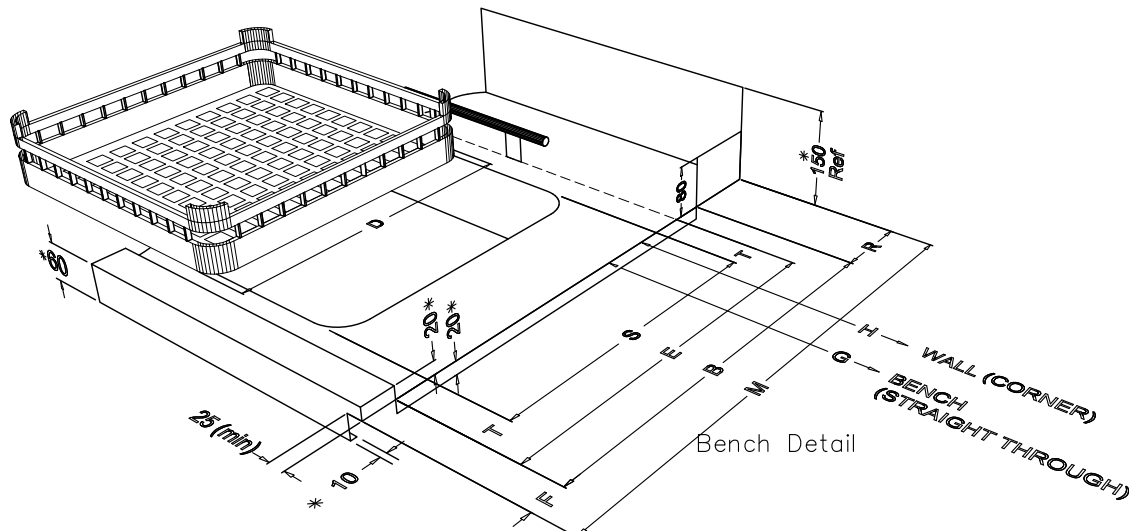
Side View



Straight through detail



All dimensions in millimetres



- Notes:**
1. These dimensions are recommendations. They apply to straight through or corner installations. They are designed to ensure that the dishrack slides over an adjacent sink directly into the dishwasher. We recommend use of the sink size shown and a rack guide to keep the rack up against the splash bead and prevent it from falling into the sink. This arrangement is particularly suitable when a pre-rinse gun is used (as recommended).
  2. Bench depth can be reduced by reducing the size of the splash bead and in straight through installations (only) dimension R can be reduced to the minimum shown.
  3. Drawing is for the left of the machine - other side is mirror image (sink may be to either side).
  4. Dimension with \* are suggestions only and not critical.

# Installation Checklist

CHECK	OK / NOTES				
<b>Delivery</b>					
Supplied complete	<input type="checkbox"/> no transit damage				
<b>Position</b>					
Level and stable	<input type="checkbox"/> on sound, waterproof, self draining floor				
<b>Water</b>					
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"/> $65 \pm 5^{\circ}\text{C}$				
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				
<b>Power</b>					
Isolating switch	<input type="checkbox"/> Fitted, functional and accessible				
Supply as specified	<input type="checkbox"/> Voltage, current, circuit breaker				
<b>Waste</b>					
Usually 40 mm	<input type="checkbox"/> Sound, no leaks				
Air gap on pumped drain	<input type="checkbox"/> Very important GLV and UD models				
<b>Chemicals</b>					
	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"/>
<b>Machine operation</b>					
Run several cycles	<input type="checkbox"/>				
Confirm correct operation	<input type="checkbox"/>	Including correct fill levels			
<b>Operator training</b>					
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"/>		

# 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

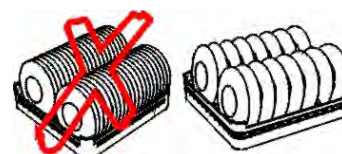


Pre-soak cutlery in warm water, preferably containing cutlery pre-soak compound - refer your chemical supplier.

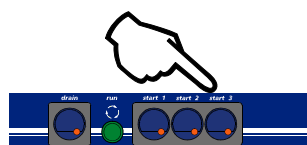
Do not overfill cutlery containers. Cutlery should be loose with handles down. Sort after washing rather than before. Cutlery of only one type nests together and obscures wash water.

## 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

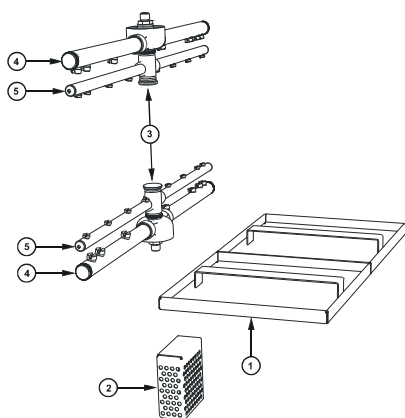


Single tank commercial dishwashers do not have a drying cycle. However, the machines do rinse at high temperatures which promote fast drying particularly when drying agents are used. We recommend prompt removal of the rack from the machine - leave the rack on the bench for 2 to 3 minutes before emptying. 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 trays① and wash pump inlet filter②, where fitted, and rinse or brush clean.

Remove wash and rinse arms by undoing the central thumbscrews③. If necessary, remove the end cap screws④ from the wash arms and the end screws⑤ 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.

# XP Operation

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## Start up

Fit drain upstand, wash pump filter, scrap tray and shut door.

Turn wall power switch on and select any cycle (1, 2 or 3).

Power light glows red and machine fills automatically.

Wash Ready light (water symbol) glows amber when wash tank is ready.

Rinse Ready light (tick symbol) glows amber when the machine is up to required temperature.

## Operation

Select required cycle (1, 2 or 3 for 1, 2 or 3 minute cycle accordingly).

Try cycle 3 initially and switch to faster cycles only if necessary.

Load rack into machine and close door to start the machine.

Cycle light glows green while machine operates.

When Cycle light goes out, cycle is complete

NOTE: Machine might operate longer than specified above if hot water supply temperature is below required.

**After removing rack from machine, DO NOT shut door as machine will start up again.**

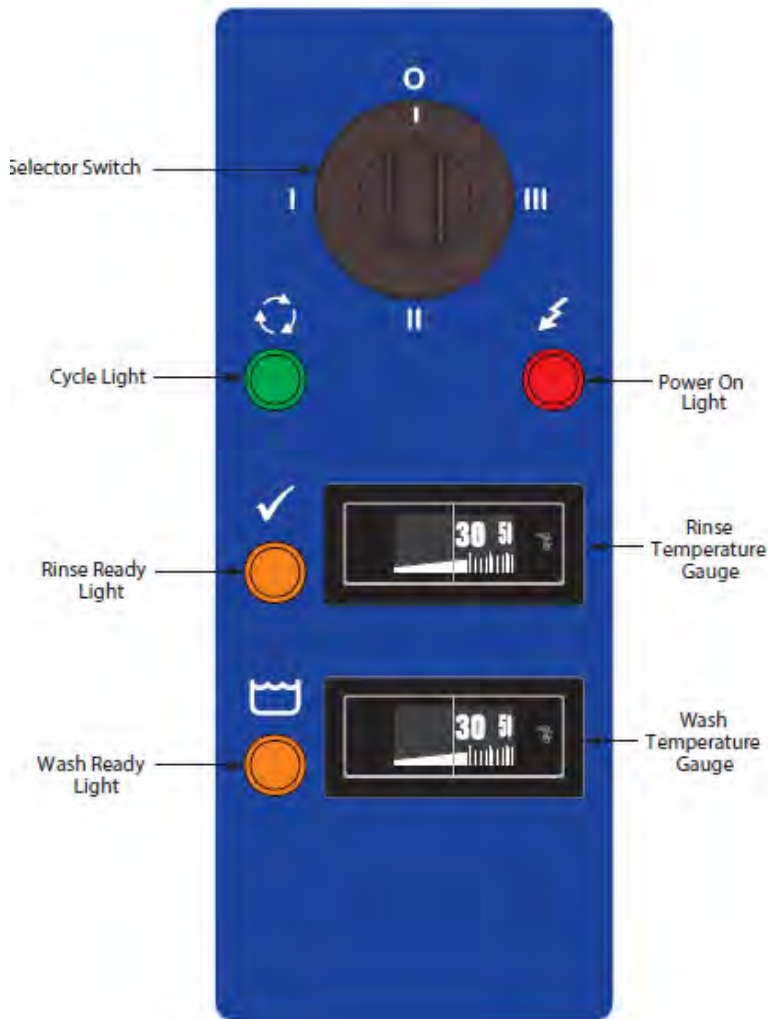
## Shut down every night

Turn machine and wall power switches off.

Remove drain upstand to drain wash tank.

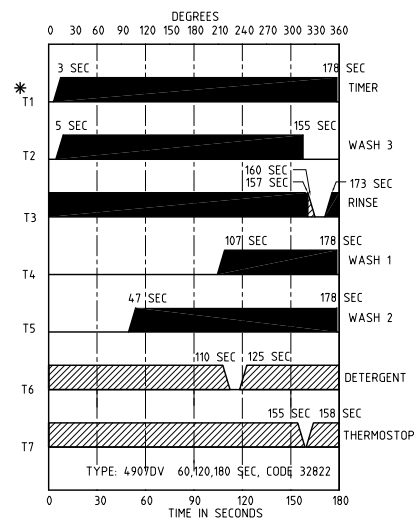
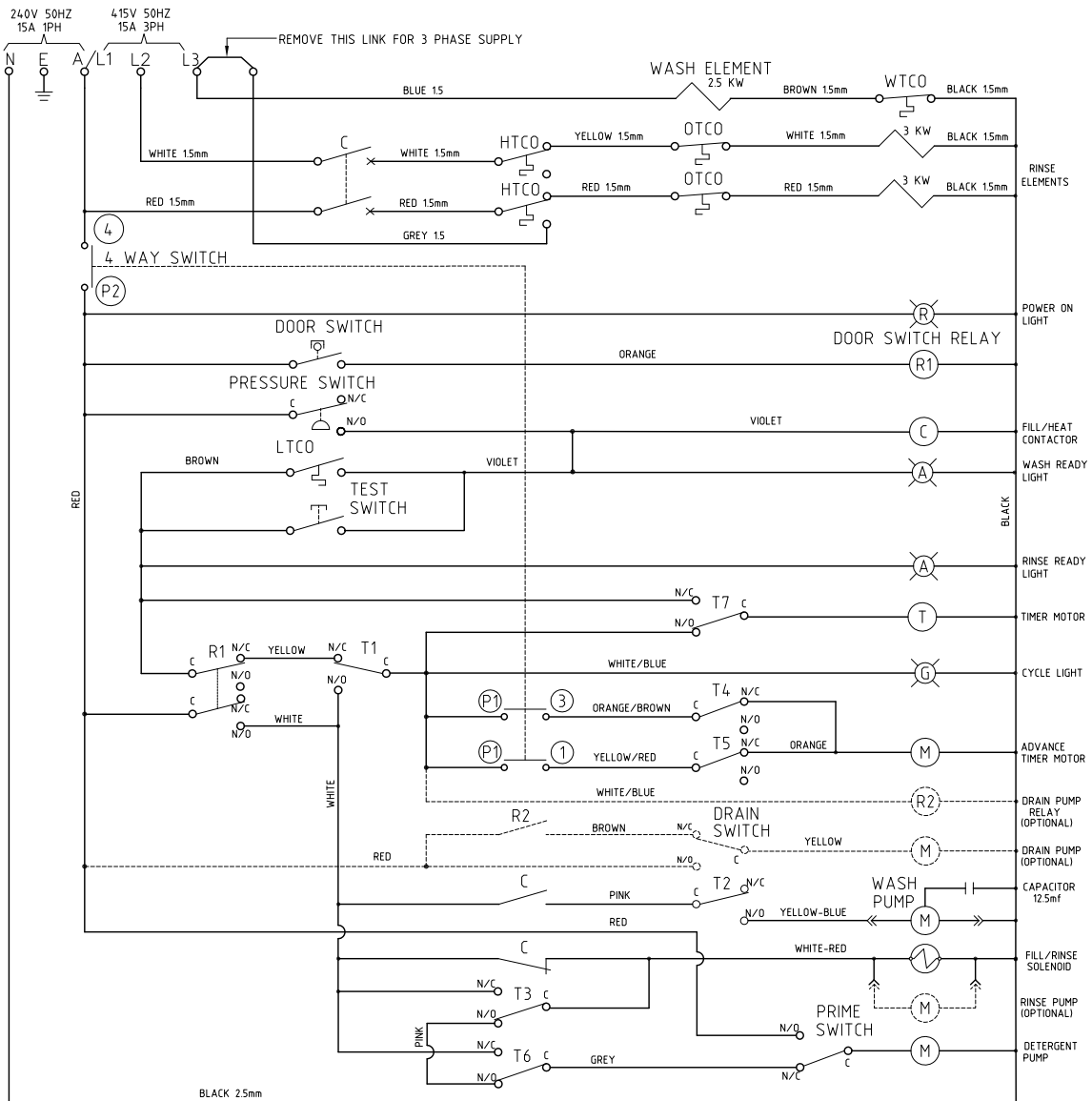
Remove scrap tray and wash pump filter and rinse clean.

Replace drain upstand, filter and scrap tray.



# XP SCHEMATIC DIAGRAM

090131 26/03/13 1 A





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