

Washtech UDC

Equipment Operation Manual



This equipment chapter is to be inserted in the appropriated section of the *Equipment Manual*.

Manufactured exclusively for

McDonald's®

By

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TABLE OF CONTENTS

WARRANTY.....	3
1. INTRODUCTION.....	6
1.1 Description.....	6
1.2 Standard Features.....	6
1.3 Specifications.....	7
2. SAFETY.....	8
3. EQUIPMENT SET-UP AND CLOSE PROCEDURES.....	9
3.1 Description of Controls.....	9
3.2 Operating Instructions.....	9
4. INSTALLATION.....	10
4.1 Installation.....	10
4.2 Installation Checklist.....	11
4.3 Installation Diagram.....	12
5. DISHWASHING PROCEDURES.....	13
6. TROUBLESHOOTING.....	15
6.1 Installation Troubleshooting.....	15
6.2 Other Troubleshooting.....	15
7. ORDERING PARTS/SERVICE.....	17
8. PREVENTATIVE MAINTENANCE.....	18
9. WIRING DIAGRAM.....	21

Warranty

These conditions must be read in conjunction with the Moffat Limited's Terms of Sale and Delivery for Business Customers, section 9 "Warranty".

WARRANTY

Moffat Limited warrants that the equipment, as supplied by Moffat Limited to the original purchasers, is free from defects in materials and workmanship. Should any part thereof become defective as a result of normal use within the period and limits defined below, then at the option of Moffat Limited such parts will be repaired or replaced by Moffat Limited or its Nominated Service Provider. The warranty time period shall be 24 months parts and labour warranty from the date of installation.

This warranty is subject to the following conditions:

- Repairs under this warranty should be performed by a Moffat Nominated Service Provider. Moffat Limited will not be held responsible for charges incurred or service performed by Non-Moffat Nominated Service Providers unless prior approval to the repair has been given by Moffat Limited.
- Repairs pursuant to this warranty should be carried out between the hours of 8.00am and 5.00pm Monday to Friday. Out of hours call-out rates and charges may not be accepted without prior agreement.
- All installations must be carried out in accordance with local Installation Code and Local Authority requirements covering electricity, gas, fire, health. Installation and commissioning procedures are to be carried out in accordance with the instructions in the manuals supplied with all units.

EXCLUSIONS

The Equipment warranty specifically relates to component failure. Consumables, component adjustments and the resetting of safety devices are covered under warranty only for the first 30-days from date of installation except items listed in 1, 2, 3.

The warranty does not extend to nor will Moffat Limited be liable for the following;

1. Installation issues – i.e.) Adjusting and correcting installation issues, including;

- Adjustments associated with the commissioning of the machine or requirements specified in the products user manual, e.g./ checking operation of door switches, setting switches in correct position, checking drive chains, etc.
- Incorrect installation not carried out in accordance with the instructions in the manuals supplied with all units.

2. Connecting services – i.e.) any connecting service that does not meet the equipment specification, including;

- Electrical supply cabling and/or mains connections made by other parties.
- Electrical connecting plugs made by others and/or wall socket outlets.
- Gas supply pipe work and or connections made by other parties.
- Gas flow or pressures issues.
- Water supply (hot or cold) pipe work and or connections made by other parties.
- Water quality and/or water temperature outside equipment specification.
- Drains and or connections made by others and/or pipe work not specifically part of the equipment supplied.

3. Abuse associated with wilful and/or deliberate damage – i.e.) any part of the unit which has been subject to;

- Misuse and/or wilful damage.
- Neglect.
- Incorrect operation.
- Accidental damage.
- Damage caused by movement or transportation by other parties.
- Freight damage (where freight is not paid for by Moffat)
- Use of abrasive or incorrectly specified cleaning chemicals.
- Water ingress and/or damage due to incorrect cleaning procedures.

4. Glass – including the following;

- Door glass panels.
- Globes/bulbs and fuses when blown due to globes/bulbs failure
- Lens covers.
- Gauge glasses.

5. Seals – i.e.) Rubber/silicon products - including;

- Door seals.
- O-rings.
- Light seals.
- Drive belts.
- Cabinet Sealants

6. Cleaning and maintenance – including;

- Costs associated with cleaning the equipment so as to gain access to relevant fixtures and components.
- All lubricants and any cleaning materials used.
- Rusting and/or corrosion.
- Descaling.
- Blocked gas pilots and/or injectors.
- Blocked solenoid body's.
- Blocked drains, drain pipes and/or failure of components due to a blockage.
- Failure of the equipment's components where directly due to the lack of cleaning and/or maintenance.
- Costs associated with performing general equipment servicing.
- Tightening and/or adjusting tension of drive chain or v-belts.
- Tightening, adjusting tension and/or tracking of conveyor belts.

7. Missing items – including;

- Lost components, fittings and/or attachments.

8. Resetting of tripped safety devices where equipment and where no other fault exists – including;

- Tripped over temperature devices.
- Tripped overload devices.
- Tripped circuit breakers.

9. General exclusions – including;

- Supply hoses and/or drainage lines not supplied by Moffat Limited.
- Fitting of any non-genuine Moffat Limited component will void warranty.
- Any modifications or alterations to equipment not approved by Moffat Limited.
- Addition labour costs associated with poor access.
- No-Fault found calls.
- Where operator error is established.

10. General exclusions for remote sites – including;

- Travel charges outside 100km travel distance or 2 hours travel time, round trip from nearest service centre
- Additional costs incurred (without prior approval) for any;
 - Accommodation.
 - Ferry/barge charges.
 - Associated waiting time relating to attending remote sites.
 - Car hire.
 - Personnel allowances
 - Flights

1. Introduction

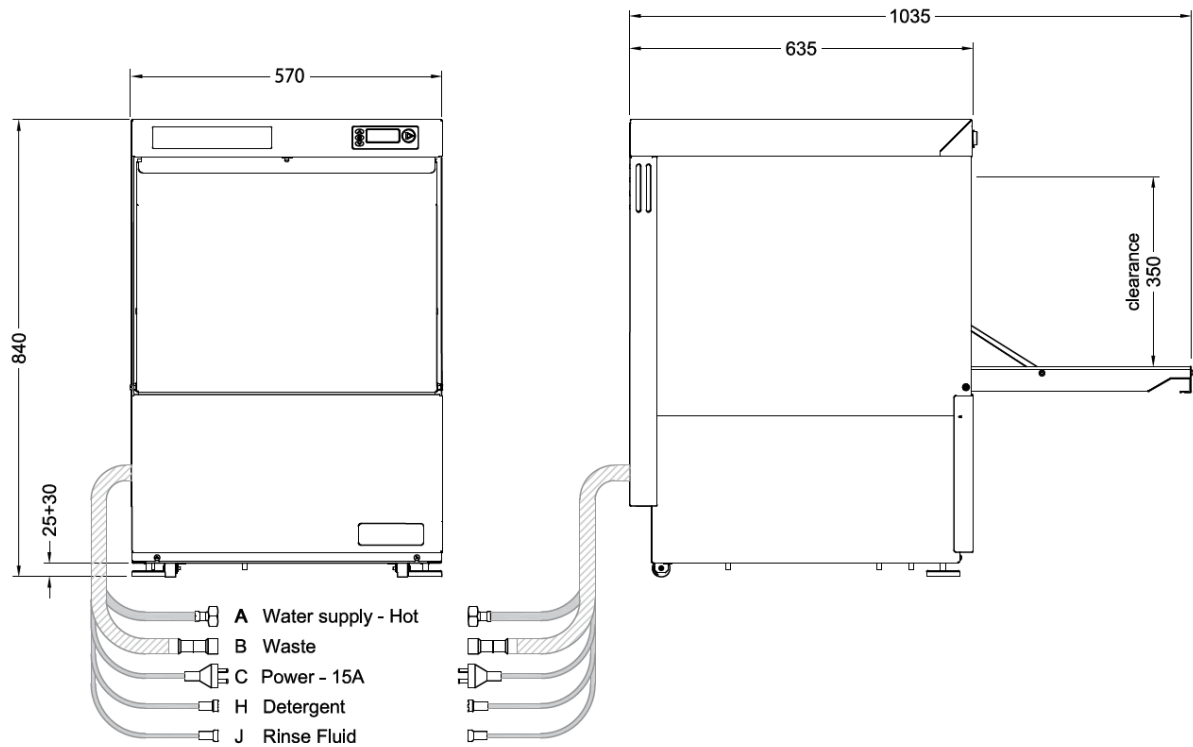
1.1 Description

- Professional Undercounter Glasswasher/Dishwasher - 500mm Rack
- W 570mm x D 635mm x H 840mm

1.2 Standard Features

- 2.6 litres per cycle hot water consumption
- Up to 1000 glasses per hour / 800 plates per hour
- Electronic controls with enhanced functionality
- Multi-cycle options – 1, 2 and 3 minute cycles with manual cycle mode, Ecopower, Soft Start and Self Cleaning cycle
- Service diagnostics for error recognition
- Double filtration via scrap trays and separate wash inlet filter with hot rinse retention
- Dual chemical injectors
- Drain pump
- Stainless steel upper and lower wash & rinse arms with removable cleaning caps
- Recirculates wash water at nominal 200 litres per minute
- 2.5kW wash & 3kW rinse heating
- Cool machine front and sound dampened door
- 350mm door clearance
- Suits 500mm international standard racks
- Magnetic door safety switch
- Stainless steel construction
- 316 grade stainless steel rinse tank
- QuickConnect
- Water supply hose
- Dual chemical injector lines
- Drain pump outlet hose
- 15 amp plug set
- No commissioning required
- Watermark certified
- Includes:
 - 1 x 6007028 - 500mm dish rack
 - 1 x 6007029 - 500mm cup rack
 - 1 x C660503 - cutlery container

1.3 Specifications



A Hot Water
 temperature 65°C
 connection 3/4" hose supplied
 pressure 200-350kPa
 flow 20 litres per min
 quality potable & soft

B Waste
 connection 1.5 BSP
 hose supplied

C Electrical
 Single phase 250V 50Hz 15 amp
 plug set supplied

Dimensions

Width 570mm
 Depth 635mm
 Height 840mm
 Weight 74kg

Packed Dimensions

Width 720mm
 Depth 690mm
 Height 970mm
 Weight 77kg
 Cubic metres 0.48m³

2. Safety



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.

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

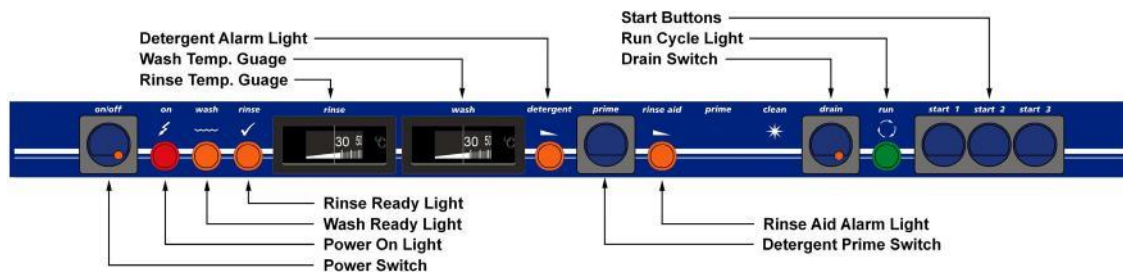
- ◆ Do not hose down the machine or splash water over the exterior
- ◆ Watch for broken glass etc. when cleaning the inside of the machine

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

3. Equipment Set-up and Close Procedures

3.1 DESCRIPTION OF CONTROLS



3.2 OPERATING INSTRUCTIONS

Start up

- Fit drain up stand with filter, scrap trays and shut door.
- Turn wall and machine power switches on.
- Power light glows red and machine fills automatically
- When Wash Ready light (water symbol) and Rinse ready light (tick symbol) glow amber, the machine is ready to run and may be started.

Operation

- Load rack into machine and shut door.
- Press Start button (1, 2 or 3) for 1 for 2 minutes, 2 for 3 minutes and 3 for 6 minutes cycle accordingly.
- Cycle light glows green while machine operates.
- When Cycle light goes out, cycle is complete.
- Remove rack. Close door.

NOTE: Machine will not operate unless Ready lights are on.

Detergent and Rinse Aid

When detergent or rinse aid containers are empty the relevant indicator light will glow amber. And the container must be replaced. After replacement of detergent press and hold Detergent Prime switch until supply pipes are refilled.

Shut down every night

- Open the door and turn Drain switch on.
- After drain starts remove scrap trays and drain up stand when the top of the up stand is above the surface of the water.
- Allow to drain for approximately 1 minute.
- Turn Drain and Power switches off.
- Rinse clean scrap trays and up stand filter and replace

4. Installation



WARNING

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



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

4.1 Installation

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

Temperature	65°C ± 5°C
Connection	20 mm (3/4" BSP) male – flexible hose supplied
Flow rate minimum	20 litres per minute
Consumption per cycle	2.5 litres approximately
Backflow prevention	DCV = Dual Check Valve supplied with machine
Pressure	200-400 KPa = 30-60 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. 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. The machines with 15A 240V 60Hz or 10A 240V 50Hz power requirements are available on request.

Detergent

If detergent pump is fitted insert pump inlet hose into container of commercial low foam detergent. Open machine door and switch machine on. Press and hold detergent prime switch until chemical flows into machine. Commercial detergents can be hazardous – read instructions and handle with care.

Rinse Aid If rinse aid injector is fitted 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.

4.2 Installation Checklist

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

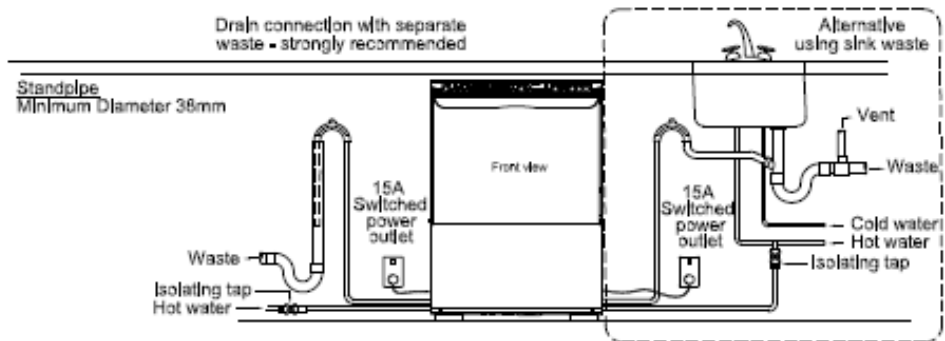
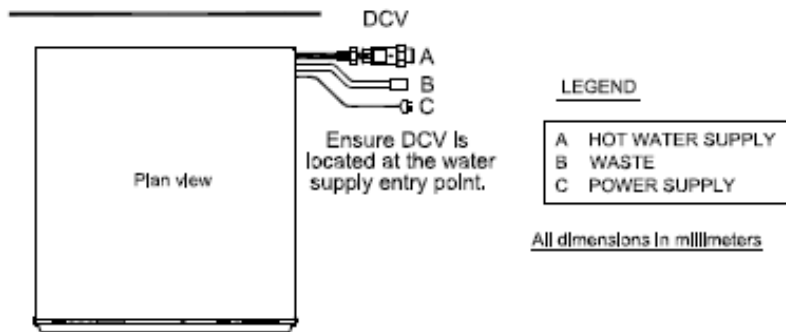
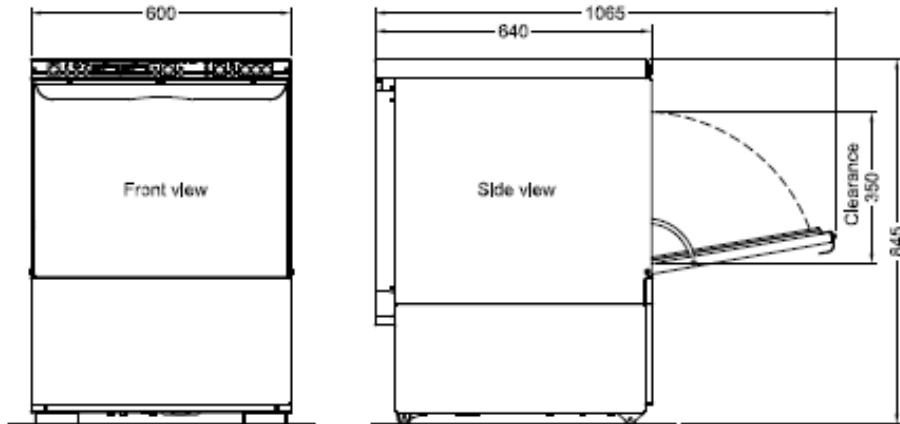
CHECK	OK	NOTES
Delivery		
Supplied Complete		No transit damage
Position		
Level and stable		On sound, waterproof, self-draining floor
Water		
Isolator valve fitted		Accessible, all fittings sound, no leaks
DCVs fitted (Washtech only)		Correct direction
Temperature		65 ± 5°C
Flow rate		Minimum 20 litres per minute
Pressure		200-350 kpa, limiter fitted if above this range. Booster fitted if below this range
Cold water when required		Pressure not above 350kpa
Hardness		Filter or softening if required
Power		
Isolating switch		Fitted, functional and accessible
Supply as specified		Voltage, current, circuit breaker
Waste		
Usually 40mm		Sound, no leaks
Air gap on pumped drain		

Chemicals						
	Product Name		Container	No Leaks	Primed	Conc. OK
Detergent						
Rinse Aid						
Machine Operation						
Run several cycles						
Confirm correct operation						Including correct fill levels
Operator Training						
Confirm operator has copy of operator manual and is familiar with procedures						
Start-up				Model/Serial		
Pre-rinse & racking				Owner		
Machine operation				Location		
Drain				Technician		
Clean				Date		
Shut-down				Signed		

4.3 Installation Diagram

INSTALLATION DIAGRAM UDC

UDC SERVICE INST 28-03-11 1B



5. Dishwashing Procedures

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

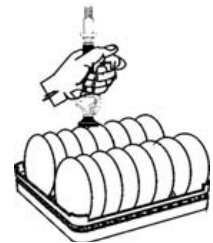


Read the Operator Manual. Correct installation, including an adequate supply of water at the correct temperature and pressure is essential for effective operation of your machine. Refer installation instructions for details. Drain hose outlet height is important on some models. Always install on a sound 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 a scraping or dunking in water.

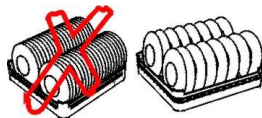


Cutlery Procedures



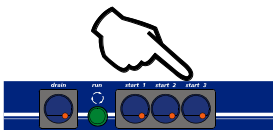
Pre-soak cutlery in warm water, preferably containing cutlery pre-soak compound - refer your chemical supplier. Do not overfill cutlery containers. Cutlery should be loose with handles down. Sort after washing rather than before. Cutlery of only one type nests together and obscures wash water.

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.

Drying

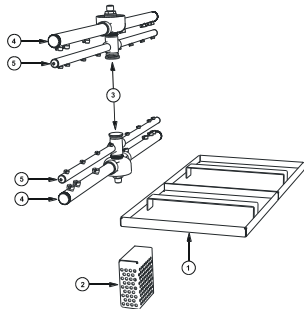


Single tank commercial dishwashers do not have a drying cycle. However, the machines do rinse at high temperatures which promote fast drying particularly when drying agents are used. We recommend prompt removal of the rack from the machine - leave the rack on the bench for 2 to 3 minutes before emptying. 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^① and wash pump inlet filter^②, where fitted, and rinse or brush clean.

Remove wash and rinse arms by undoing the central thumbscrews^③. If necessary, remove the end cap screws^④ from the wash arms and the end screws^⑤ 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.

6. Troubleshooting

6.1 Installation 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).

6.2 Other Troubleshooting

PROBLEM	POSSIBLE CAUSES	REMEDY (Check/Adjust/Replace)
Drainage		
Flooding	Drain waste blocked	Drain waste
Leaks		
Leak from pumps	Seal failure	Pump seal
Leak from hoses	Hose damage	Hoses
	Hose clamp loose	Hose clamps
Splash from door	Wash arm end caps missing	End caps
	Wash jets blocked	Wash arm jets
	Wash jets missing	Wash arm jets
	Arms not rotating	Arms and bushes
	Arms not level	Arms
Wash Arms		
Not rotating	Wash jets not clean	Wash jets
	Arm bushes worn	Bushes
	Wash pump not working	Wash pump
Rinse Arms		
Not rotating	Rinse jets not clean	Rinse jets
	Arm bushes worn	Bushes
	Water supply pressure low	Water supply
	Rinse pump not working (if fitted)	Rinse pump (if fitted)
Noise		
Noisy rinse cycle	Rinse pump squeals	Low pressure / blocked water Supply
Noisy wash cycle	Wash pump noisy	Wash pump including inlet filter
Performance		
Poor wash result	Detergent not used	Use quality low foam product
	Detergent pump faulty	Detergent pump
	Squeeze tube to be replaced	Detergent pump squeeze tube
	Overloading racks	Do not overload racks
	Not pre-rinsing	Use Fisher pre-rinse

	Wash arms not rotating	Remove and clean arms/check bushes
	Wash jets blocked	Remove arms and clean jets
	Low wash pressure through arms	Wash pump impellor
	Wash temperature low	Check wash /rinse heating
	Excessive soiling	Pre-rinse/use long cycle
	Unrealistic expectation	E.g. baked on soiling requires pre-soaking
Poor rinse results	Rinse jets blocked	Remove arms and clean jets
	Rinse arms not turning	Remove arms, clean jets, check bushes
	Poor racking procedures	Do not overload racks
	Excessive wash tank soil build up	Pre-rinse, change wash water regularly
Not drying	Poor wash/rinse performance	Refer above
	Low temperatures	Check heating systems
	Drying agent not used	Use quality drying agent/rinse fluid

7. Ordering Parts/Service





Important

Only genuine authorized replacement parts should be used for the servicing and repair of this unit. The instructions supplied with the parts should be followed when replacing components. For further information and servicing instructions, contact your nearest authorized service provider.

When ordering replacement parts, please quote the part number and the description as listed. If the part number is not listed, request the part by description and quote model number and serial number which is shown on the Technical Data Plate.

8. Preventative Maintenance

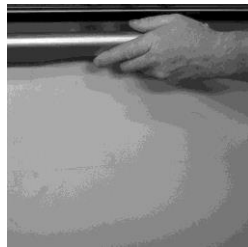
8.1 Clean Wash & Rinse Arms - Weekly

Why	To ensure efficient and correct operation of the dishwasher. Blocked Wash Arms can affect the dishwasher performance.
Time Required	1 minute to prepare, 5 minutes to complete
Time of Day	During low volume period
Hazard Icons	 Chemicals  Hot Liquids/Steam  Hot Surfaces  Slippery Floors

TOOLS AND SUPPLIES:

Procedure –

1. Open door



-  Hot Liquids/Steam
-  Hot Surfaces
-  Chemicals

2. Remove lower wash and rinse arms

Undo thumbscrew used to hold lower arms and remove arms



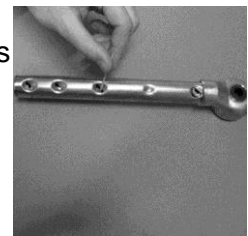
3. Remove upper wash and rinse arms

Undo thumbscrew used to hold upper arms and remove arms.



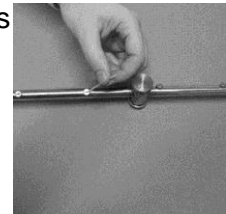
4. Clean wash arms

Flush arms with water. If jets are blocked clean using a toothpick or similar



5. Clean rinse arms

Flush arms with water. If jets are blocked clean using a toothpick or similar



6. Refit lower wash and rinse arms

Replace lower wash and rinse arms and tighten thumbscrew

7. Refit upper wash and rinse arms

Replace upper wash and rinse arms and tighten thumbscrew

8.2 Drain dishwasher and clean filters – Daily

Why

To ensure efficient and correct operation of the dishwasher. Not draining the machine regularly or cleaning filters can affect the dishwasher performance and cause problems with water filling. Dishwasher must be left drained with the power turned off when the restaurant is closed.

Time Required

1 minute to prepare, 5 minutes to complete

Time of Day

During low volume period

Hazard Icons



Chemicals



Hot Liquids/Steam



Hot Surfaces

TOOLS AND SUPPLIES:

Procedure –

- 1** Open door and press “drain “ button



- 2** Turn “drain” and “power” switches off



Hot Surfaces



Hot Liquids/Steam



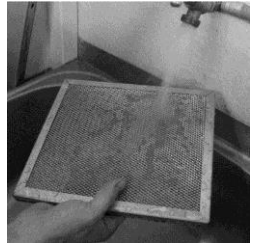
Chemicals

Wash water may be hot and contain detergents.

- 3** Remove scrap trays
Remove the two scrap trays



- 4** Wash scrap trays
Wash scrap trays under running water to remove any food particles



- 5** Remove drain up stand and filter
Remove drain up stand and filter
And allow dishwasher to drain for approximately one minute



- 6** Turn “drain” and “power” switches off



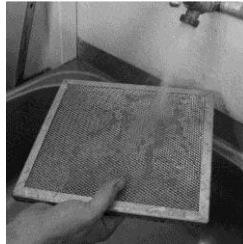
7 Turn “drain” and “power” switches off



8 Wash scrap trays
Wash scrap trays under running water to remove any food particles



9 Wash scrap trays
Wash scrap trays under running water to remove any food particles



Daily maintenance tasks

XX 00 D00 Drain dishwasher and clean filters

XX 00 D00 Clean wash and rinse arms

A. Control Panel B. Door C. Roller feet



9. Wiring Diagram

