

Smartwash 900

Professional Pass-Through Dishwasher

equipment & operating manual



CLEANING PRODUCTS

4. Machine Dish Wash - 5L

Eswood Auto Dish Wash is a non-caustic, non-chlorinated machine utensil washing liquid for use in commercial utensil/pot washers.

5. Glass Wash - 5L

Eswood Glass Wash is a low foaming detergent for use in glass washing machines.





6. Dishwasher Powder - 10kg

Eswood Dishwasher Powder is a quick dissolving dishwasher powder with chlorine bleach for use in commercial or domestic machines.

7. Rinse Aid - 5L

Eswood Rinse Aid is added to the rinse cycle of dishwashing machines to assist rapid drying and reduce spotting. Rinse Aid controls scale formation in the rinse section and reduces foam in the wash tank.





- Tailored specifically to suit Eswood Equipment
 - Easy to handle pack sizes Easy to use
 - Simple product choice Australian made



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PRODUCT WARNINGS

- This appliance is to be used only for the use for which it was designed.
- Only qualified, authorised technicians should install the machine and are obliged to instruct users on the appliance's operation and any safety measures that are to be complied with.
- Any type of service done on the machines, must be performed only by ESWOOD or authorised service personnel, using only original spare parts.
- Always disconnect or isolate the machine from the electric and water connections before performing maintenance or repairs.
- Untrained personnel must **NOT** use the machine.
- The machine must **NOT** remain powered on when it is not in use.
- **NEVER** open the machine door quickly if it has not finished the cycle..
- **NEVER** use the machine for objects other than food service ware.
- **NEVER** use the appliance or its parts as a ladder or support for people, objects or animals.
- **NEVER** overload the front-loading door. It is suitable to support only the intended rack size, loaded with kitchenware.
- **NEVER** immerse bare hands into dishwashing solutions.
- **DO NOT** turn the machine over after installation.

THE FOLLOWING IS ALSO IMPORTANT:

Never start a wash programme without the overflow in the tank.

Before you drain the tank, make sure you shut off the machine.

Never place magnetic objects near the machine, it may start when the door is open.

The machine may not be used by persons who are unauthorized or who have not been properly trained.



WARRANTY

Installation must be carried out according to local regulations by qualified trade persons. Isolating switch (es), shut-off valves etc must be within easy reach of the machine for future service and maintenance requirements. If in doubt call ESWOOD AUSTRALIA or their representative for further information. No responsibility will be accepted for defects or damages by improper installation, for changes to the product not authorised by ESWOOD AUSTRALIA, or for operation outside the technical specifications.

ESWOOD AUSTRALIA warrants their products to be free from defects in material and work-manship under "normal use and service". This does not include normal wear and tear of parts. ESWOOD AUSTRALIA will repair or replace any parts, which in ESWOOD AUSTRALIA's sole judgement are defective in material or workmanship, in accordance with the warranty offered.

This undertaking covers the provision of labour and parts for 12 months from the date of delivery to the purchaser. This undertaking applies only to state capitals. Remote areas are not covered by this commitment and special enquires should be made. (**Note: Travel time not covered by warranty).**

In no event will ESWOOD AUSTRALIA be liable for loss of facilities or other property and such things as, but not limited to, additional labour costs, loss of revenue or anticipated profits, and other damages of any kind whether direct, indirect, incidental or consequential.

Labour under warranty is supplied free of charge during normal working hours, Monday to Friday. Should warranty work be requested outside or our normal working hours a labour charge will be applied equivalent to a normal hour rate without out of hour's penalty rates. (Refer to last page of this manual for your closest branch for Warranty repair services)

Note: It is the responsibility of the owner to ensure the water feed to Eswood Dish and Glass washers is of a quality that will not form excessive build up of calcium and other dissolved minerals on the heating elements. Premature failure of heating elements that exhibit this cause of failure will not be covered under warranty, also if the filter valve is discarded from the detergent tube warranty will be voided. **PLEASE ENSURE SUITABLE DETERGENT IS USED.**

NOTICE PLEASE RETURN YOUR WARRANTY CARD



TECHNICAL SPECIFICATIONS

Machine Specifications

Total Installed Load:

400V / 50Hz / 3ph

Electrical Supply (V/Hz//ph):

 $721 \times 836 \times 1565 \pm 30 \text{ mm}$ Dimensions (WxDxH):

500 x 500mm Basket Size:

465mm Door Entry:

60 / 90 / 120 secs Cycle Length (3 wash cycles):

YES Self Cleaning Cycle:

2.3L per rack Water Consumption:

Door Construction: Stainless steel (double skin insulated optional)

Thermoplastic Parallel Wash / Rinse Arms:

Advanced Electronic Soft-Pad Control Panel:

YES Temperature Gauges:

YES Self-Diagnostic System:

YES Built-in Detergent Dispenser:

YES Built-in Rinse-Aid Dispenser:

YES Built-in Drain Pump:

YES Thermostop:

YES Tank Strainers:

6.7Kw

SW900



INSTALLATION

- 1. Position the machine.
- 2. Connect the hot water supply hose to a 3/4" B.S.P. isolating valve adjacent to the machine. The hot water input supply should be at 65°C and 200 to 400 kPa. A pressure reducing valve should be fitted for pressure above 400 kPa.

Do not make water or plumbing connections that will prevent the machine from being removed from position, for the purpose of servicing.

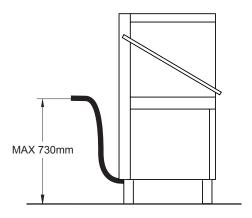
Note that all plumbing work is to be done in accordance with local plumbing codes.

3. Hardwire lead to a 400V, 50Hz, 3 phase power outlet.

Note that any electrical work is to be done in accordance with the rating plate on the lower panel.

- 4. Place the drain hose (supplied) into a drain line with a free water trap. The hose must easily reach the drain line and be free of any kinks.
- 5. The installation technician is required to check for proper earthing.
 When testing is complete, the installation technician must issue a commissioning report concerning correct installation and testing in accordance with all standards and acceptable working practises.

Note that the maximum drain height is 730mm from the ground.



WASHING OPERATION

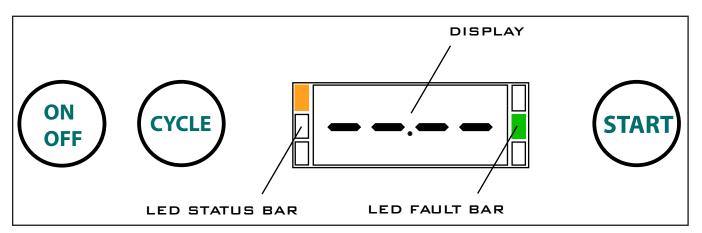


Fig.1

SWITCHING THE DISHWASHER ON

- 1. Turn on the main power switch and open the external water tap.
- 2. Press the **On / Off** button.
- On initial start-up, the LED FAULT BAR lights up, turning from RED to GREEN; checking for any errors.

Note: In the event of a serious fault, the **LED FAULT BAR** lights up in RED and interrupts any operations in cycle. A minor error is indicated in **ORANGE** and will not stop a cycle. For error codes turn to chapter **SELF-DIAGNOSTICS**, for further descriptions and possible remedies.

- 4. The flashing point on the display indicates that the wash tank is being filled. This disappears when it has reached working level and will take approximately 10mins as the wash water is preheated before filling. If the machine is 40% or lower the unit will drain the wash tank and refill.
- The STATUS BAR lights up from the top downwards to indicate that the dishwasher is heating up. When safe working temperatures are reached, the STATUS BAR remains lit in GREEN.

Note: If the rinse water temperature has not reached 85°C (factory set), the wash cycle is prolonged until the rinse temperature reaches safe levels. If the rinse temperature still does not reach safe temperature in the wash cycle, the error code (Er03) shows on the display. Proceed to chapter **SELF-DIAGNOSIS** for a list of error codes and possible remedies.



WASHING OPERATION

FILLING THE RACK

- 1. Ensure water supply and power are turned on.
- Use a suitable rack, fill it without overloading and without placing dishes one on top of the other.
 Always rinse off the dishes beforehand, and do not load dishes with dry or solid residue on them.
- 3. Place empty containers upside-down on the rack.
- 4. Wash dishes immediately after use, in order to prevent any residuals from hardening and sticking Load the rack into the machine and close the door.

CYCLE SELECTION & START-UP

- Press the CYCLE button to scroll through and select a suitable wash cycle. The display will show
 the cycle number chosen. Turn to section DISPLAY INFORMATION for information on the display codes and description.
- 2. To run the programme, press **START**; the **STATUS BAR** starts to flash ORANGE, indicating that the program is in progression.
- 4. When the cycle is finished, the **STATUS BAR** turns GREEN and 'End' shows on the display.
- For rapid drying, remove the rack from the machine as soon as the cycle is finished.
 To stop a wash cycle early, press START

CONTINUOUS WASH

1. This program is an extended wash cycle which runs for 6 minutes and 20 seconds. Select the wash cycle 'LonG' and press start to activate the continuous wash cycle. Press start button to rinse / drain and end cycle.

WASHING OPERATION

TURNING THE DISHWASHER OFF

 Press the On / Off button and four segments will light up on the display indicating the dishwasher is off with power being supplied.

DRAIN & EMPTY DISHWASHER

- 1. With the dishwasher turned on, press the **CYCLE** button until the message 'dr' shows on the display.
- 2. Press the **START** button.
- 3. Once the tank has drained, turn the machine off and four segments show on the display.

Note: Remove the tank filter and clean after draining.

END OF SERVICE

- 1. At the end of the day always drain the dishwasher as described above.
- 2. Disconnect the power supply at the main switch and close isolating valve.
- 3. Remove the tank filter and clean.
- 4. Leave the door open to prevent any unpleasant odours inside the chamber.



DISPLAY INFORMATION

With the dishwasher on, press **CYCLE** for 5 seconds to display the dishwasher temperatures and wash cycle count.

Message	Description		
door	Door open.		
b	Rinse temperature: Factory set to 85°C		
t	Wash temperature: Factory set to 60°C		
Pr 1	Short wash cycle		
Pr 2	Medium wash cycle		
Pr 3	Long Wash		
Long	Continuous Wash		
CC	Number of cycles carried out		
End	End of cycle		
AS	Automatic start enabled		
dr	Final drain		

MAINTENANCE

Before performing any maintenance procedures, drain all water, disconnect the electrical power supply, and close the isolating valve.

MAINTENANCE OF FILTERS

- 1. Remove and clean the baskets.
- 2. Remove the tank strainers as per the instructions in DRAIN & EMPTY section.
- 3. Carefully clean the integral filter.
- 4. Remove the standard filter by pulling it upwards as shown and clean it carefully.
- 5. Do not use abrasives for cleaning. Use a soapy dampy cloth.
- 6. Do not use pressurised jets to clean dishwasher.
- 7. Replace all removed parts after maintenance.

CLEANING OF WASH ARMS

- 1. Unscrew the stainless steel thrust screw (R)located at the centre of the wash arms.
- 2. Wash all parts under running water. Clean the nozzles carefully, using a toothpick or small tools if necessary.
- 3. Clean the arm rotation pins in the machine and the washing and rinsing water outlet area.
- 4. Put the arms back in place and check that they rotate freely.





SETTINGS

The following settings should only be configured by a qualified technician!

To activate settings menu:

- Put the machine in stand-by and open the door.
- Press and hold CYCLE and START buttons at the same time for 5 seconds and enter the key Ch12
- Press the **On / Off** button to cycle through the various functions of the dishwasher. Parameters can be enabled or changed using the **CYCLE** and **START** buttons.

Code	Description		
b	Boiler Temperature Indicates boiler temperature.		
t	Wash Tank Temperature Indicates wash tank temperature.		
th	Thermostop Enables or disables the thermostop function. Thermostop function guarantees correct rinse temperature and should never be switched off.		
ES	Energy Saving Enables or disables the energy saving function (factory set on and set 13°C lower than boiler temp.). Saves energy when dishwasher is turned on but not in use.		
dn	Detergent Pump Manual operation of detergent doser (runs for 20secs).		
rn	Manual Rinse Drains out the boiler (service only).		
dt	Detergent Dosage Time Sets the detergent dosing time. 1 sec = 0.83ml Max: 3L/hr		
bL	Rinse Aid Dosage Time Sets the rinse aid dosing time.		
AA	Auto-start Auto-enabling Enables or disables the auto-start function.		
CC	Cycle Counter Indicates the cycle counter.		
SR	Service Cycles 1 = 50 cycles / 0 = off		
Bn	Rinse Pump Prime Manual operation of rinse pump (runs for 20secs).		
	Once all necessary parameters have been set, to exit and save any changes simply press and hold the On / OFF button for a few seconds until the online dashes appear.		

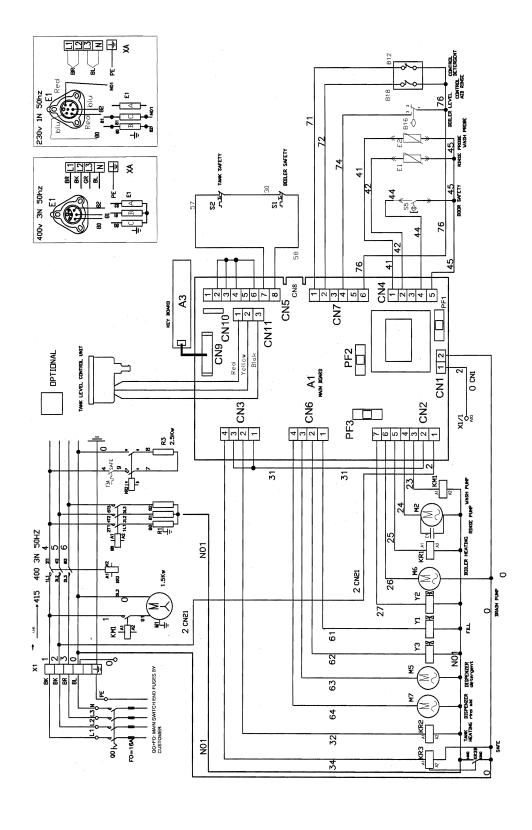
SELF - DIAGNOSIS

The dishwasher is equipped with a self-diagnosis system that can detect and signal a series of malfunctions.

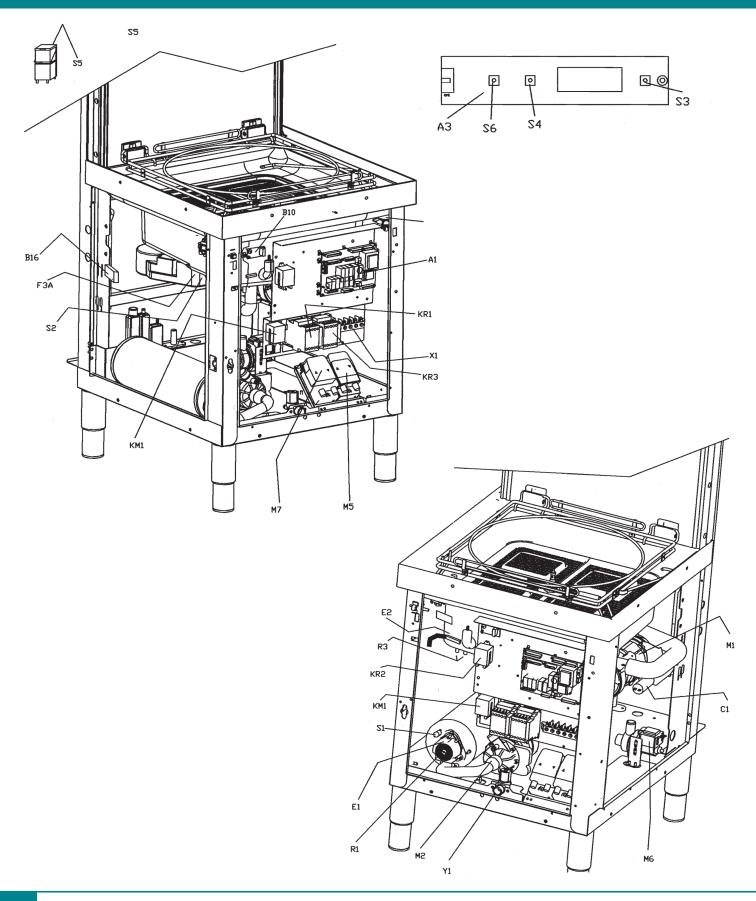
	of malfunctions.			
Problem	Description & possible remedies			
Er01	Not rinsing The rinsing cycle was not completed correctly or in time. Make sure that the rinse nozzles are clean.			
Er02	No drainage The water was not drained or drained incorrectly. Check that the drain pipe is free of kinks and that the siphon and filters are not blocked.			
Er03	Rinse temperature reset error thermostop has timed out - goes into emergency mode The boiler temperature did not reset in the set time during the wash cycle. Switch the machine off and on and run a new cycle.			
Er04	Wash tank not filling to level Make sure the water inlet pipes are connected correctly, and that the water tap is open. Switch the dishwasher off and then back on.			
Er05	Wash tank thermometer error (probe open) The machine does not read the tank temperature value 10K Ω =25°C. Switch the dishwash er off and on.			
Er06	Wash tank thermometer error (Probe shorted out) - goes into emergency mode Interrupt the programme in progress, and shut off the dishwasher. Turn it back on after a few minutes and start the cycle again.			
Er07	Boiler thermometer error (Probe open) - goes into emergency mode The machine does not measure the temperature in the boiler. Turn the machine off and then back on.			
Er08	Boiler thermometer error (Probe shorted out) - goes into emergency mode Interrupt the programme in progress, and shut off the dishwasher. Turn it back on and start the programme again.			
Er09	Boiler loading time out. Boiler not filled and therefore unable to carry out a rinse cycle. Check that the water tap is open. Switch the dishwasher off and on and run a new cycle.			
Er14	Boiler loading time out and reset Boiler not filled and unable to carry out rinse cycle. Unit will perform a reset at boiler level.			
Er21	Boiler did not empty during rinse			
ErSF	Electromechanical safety. The value of the temperature (of the boiler and wash tank). The electromechanical safety has tripped. Contact an authorised service technician.			
ErSL	Level safety switch. Incorrect water level in the wash tank.			
	CAUTION! Turning the machine off and then back on resets the notification. If, after following the instructions provided above the problem reoccurs, contact an authorised service technician. Note: When unit goes into emergency mode, the machine is still operational however, please contact an authorised technician.			



WIRING DIAGRAM - SMARTWASH 900



WIRING DIAGRAM - SMARTWASH 900

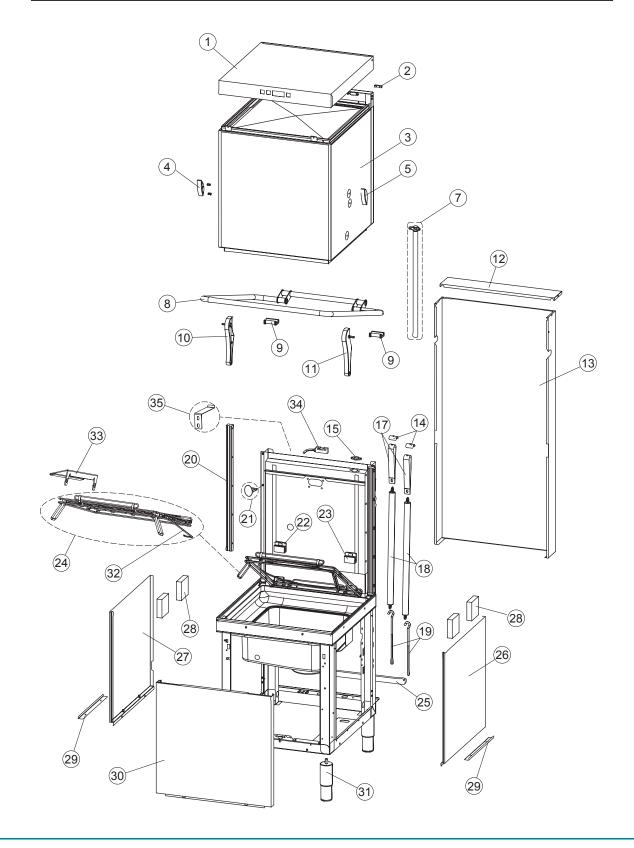






WIRING DIAGRAM - SMARTWASH 900

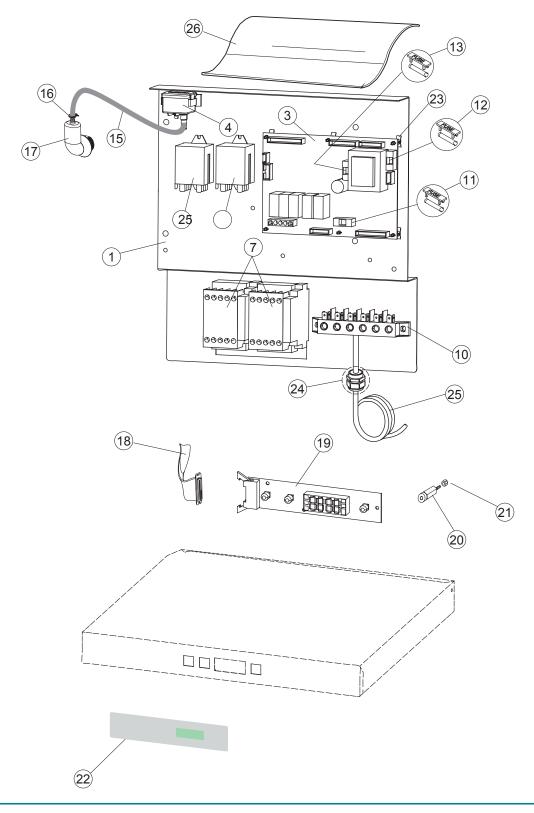
REF. NO.	PART DESCRIPTION
S6	MAIN SWITCH
S5	MAGNETIC SAFETY MICROSWITCH
S3	CYCLE SWITCH
S4	CYCLE COMMUTATOR
S4	SAFETY BOOSTER HEATER THERMOSTAT
F3A / S2	SAFETY TANK HEATER THERMOSTAT
R3	WASH TANK HEATING ELEMENT
R1	BOOSTER HEATER HEATING ELEMENT
M7	RINSE AID INJECTOR
M6	DRAIN PUMP
M2	RINSE BOOSTER PUMP
M5	DETERGENT INJECTOR
M1	ELECTRIC WASH PUMP
KR3	SAFETY BOOSTER HEATER CONTACTOR
KR2	BOOSTER HEATER CONTACTOR
Y1	RINSE SOLENOID VALVE
F: PF1/2/3	
E1	TANK HEATER PROBE
E2	BOOSTER HEATER THERMOSTAT
C1/C2	CAPACITOR
B16	BOILER PRESSURE SWITCH
B18	RINSE AID CONTROL LEVEL
B12	DETERGENT LEVEL
B10	TANK PRESSURE SWITCH
A1/A2	ELECTRONIC CONTROL UNIT
A3	KEYBOARD







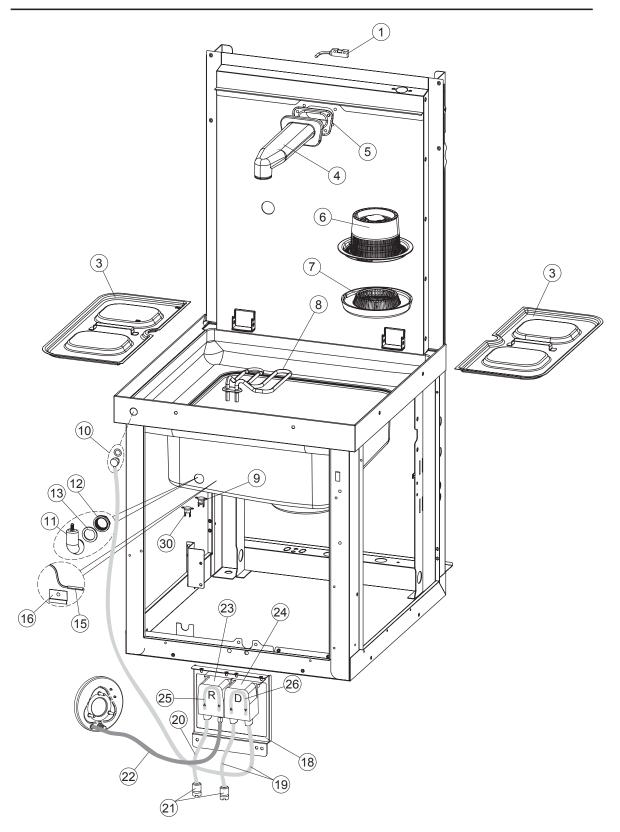
REF. NO.	PART NO.	PART DESCRIPTION
1	73441	COVER PANEL
2	927088	MAGNET FOR MICROSWITCH
3	73139	CAP
4	70202	HOOD LATCH LEVER LEFT
5	70203	HOOD LATCH LEVER RIGHT
7	70094	TUBE
8	73120	HANDLE
9	70192	HANDLE SUPPORT
10	70200	HOOD LEVER LEFT
11	70201	HOOD LEVER RIGHT
12	73064	REAR PANEL CAP
13	73063	REAR PANEL
14	70277	SPRING SLIDE
15	70092	FLANGE PIPE
17	70031	SPRING HOOK
18	926108	SPRING
19	926009	SPRING ADJUST HOOK
20	70065	HOOD DRIVE
21	70998	SPACER
22	70036	SUPPORT LEFT
23	70035	SUPORT RIGHT
24	73255	RACK FRAME
25	73019	SPRING SUPPORT BEAM
26	70072	RIGHT SIDE PANEL
27	70071	LEFT SIDE PANEL
28	41042	STICKY SOOR SIDE THICKNESS
29	80078	UNDER SHELF BRACKET
30	73079	FRONT PANEL
31	926117	HFOOT ADJUSTABLE
32	70265	PIVOT
33	70250	RACK HANDLE
34	80871	MAGNETIC DOOR SWITCH
35	70300	STIRRUP







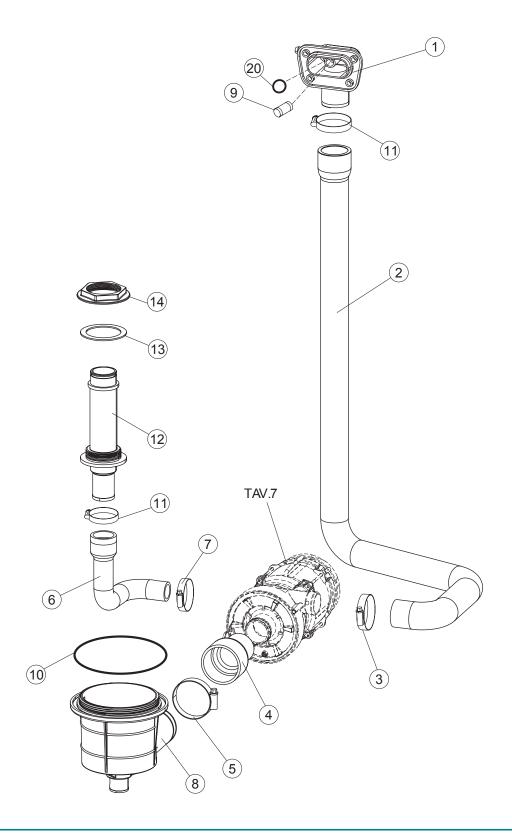
REF. NO.	PART NO.	PART DESCRIPTION
1	70459	ELECTRICAL SUPPORT PANEL
2	DER111	RELAY 30A 230V
3	215032-4	MAIN BOARD
4	70561	PRESSURE SWITCH
5		RELAY 16A 230V
7	73350	CONTACTOR 230V
10	220011	TERMINAL BOARD
11	228004	FUSE 5x20 4A FAST
12	228012	FUSE 160mAT
13	228011	FUSE 2AT
15	143235	PIPE 4x7 SILICONE
16	423011	CLAMP, SPRING TYPE
17	107012	AIR TRAP
18	80933	CABLE FLAT CAPOT
19	80944	CONTROL KEYBOARD
20	419036	SPACER M3
21	417119	NUT M3 PLASTIC WHITE
22	73710	CONTROL PANEL STICKER
23	CWP2	FEET, ELECTRIC CARD SUPPORT
24	DEP521	CABLE GLAND
25	69803	POWER CABLE
26	80731	CURTAIN, PVC EL. COMP. PROTECTION





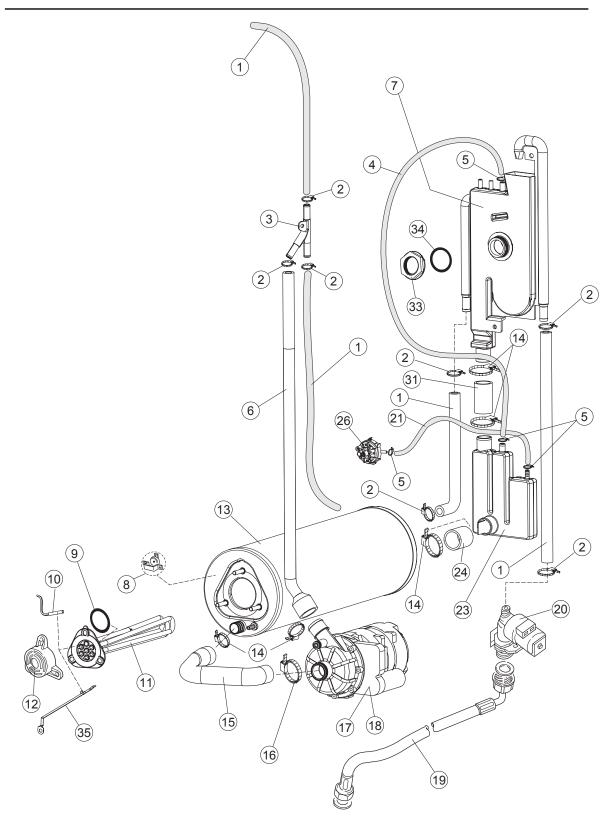


REF. NO.	PART NO.	PART DESCRIPTION
1	80871	MAGNETIC DOOR SWITCH
3	121123	INTEGRAL PLASTIC TANK FILTER
4	80177	PIPELINE, UPPER DRIVER
5	80178	GASKET
	121135	FILTER ASSEMBLY
7	429072	FILTER ASSEMBLY LOWER
8	73069	RESISTOR 2500W
9	926189	THERMOSTAT BOILER
10	468151	UNION
11	107012	AIR TRAP
12	417120	PLASTIC NUT
13	437098	PACKING FOR AIR TRAP OF PRESS. SWITCH
15	231016	TEMP. PROBE
16	H.775489-00	1CLIP FOR TEMP SENSOR
18	80675	BRACKET
19	143194	PIPE 4x6 CRYSTAL
20	H.775601	PIPE 4x6 CRYSTAL BLUE PVC
21	121993	FILTER GROUP
22	143005	PIPE PRESSURE SWITCH
23	209036	RINSE AID PUMP
24	209039	DETERGENT PUMP
25	143266	TUBE 5x10
26	143267	TUBE 6x10
30	236052	THERM. COND. BOILER





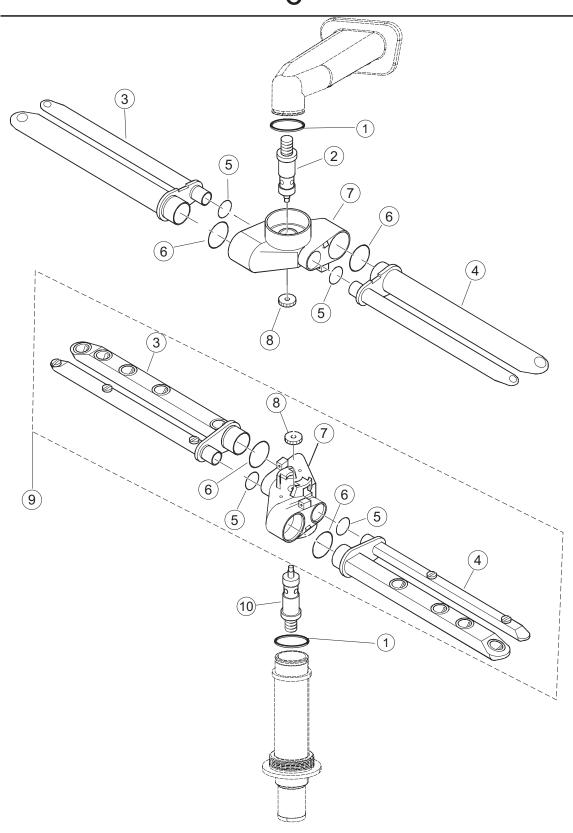
REF. NO.	PART NO.	PART DESCRIPTION
1	80174	UNION, UPPER WASH
2	69020	FLOW HOSE
3	CFS1	HOSE CLAMP
4	73008	INLET HOSE
5	CFS3	HOSE CLAMP
6	73024	RUBBER SLEEVE
7	CFS18	HOSE CLAMP
8	70040	DRAIN TRAP
9	441009	SEAL INSERT
10	456076	O-RING
11	CFS1A	HOSE CLAMP
12	73061	COLUMN
13	437102	GASKET
14	429073	PIPE NUT
20	CGR3037	O-RING





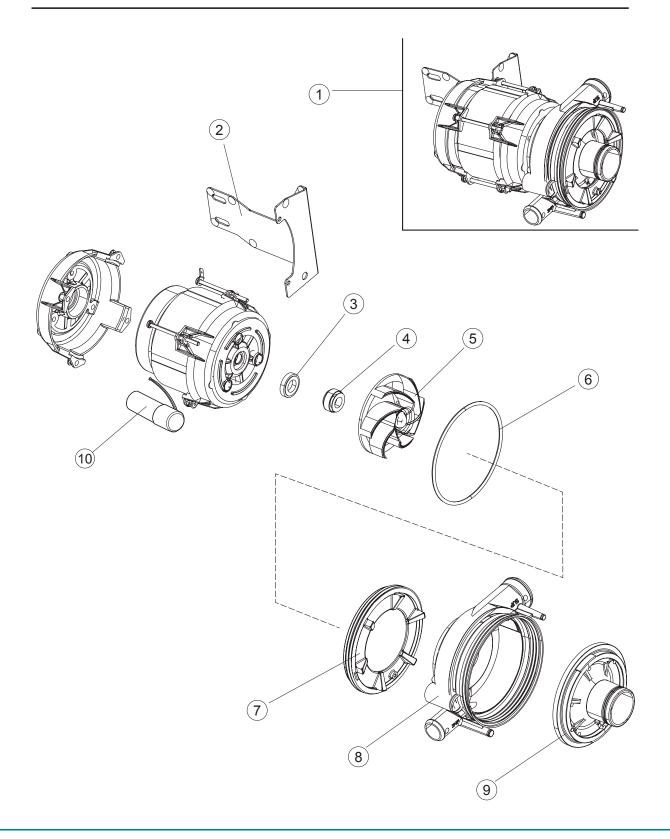


REF. NO.	PART NO.	PART DESCRIPTION
1	143010	PIPE, PRESSURE SWITCH
2	927322	CLAMP, TAPE 14-24
3	143268	RINSE MANIFOLD
4	H.165168	PVC PIPE
5	00.0	
6		RINSE DELIVERY PIPE
		PLASTIC AIRGAP
8	926189	
_	456002	
10		TEMP. PROBE
	230083C	
	69870	
	104061	
14	CFS18	
15		INTAKE COUPLING
	423008	
17	80627	
18		PUMP 60HZ
19		WATER INLET PIPE
		LOADING S. VALVE
		PIPE PRESSURE SWITCH
23		PLASTIC AIRGAP
24	127095	
	224002	
	929171	,
33		
	437104	
35	698/1	PROBE HOLDER



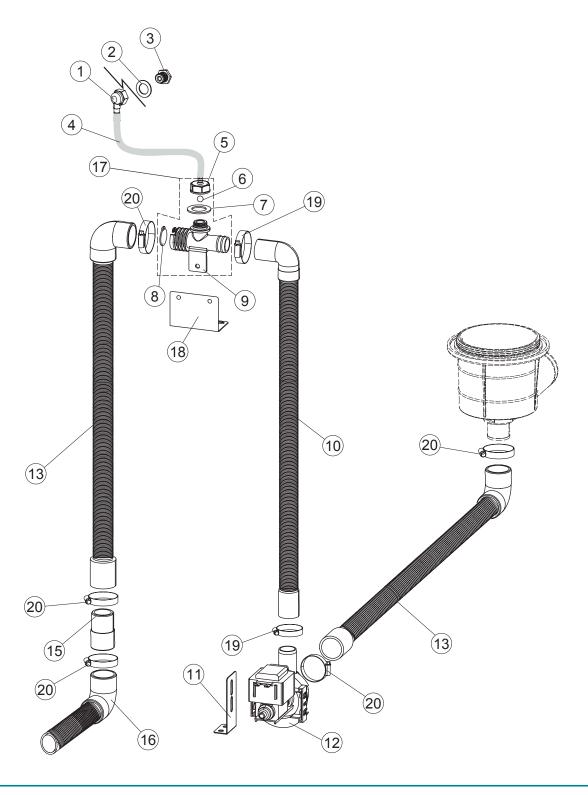


REF. NO.	PART NO.	PART DESCRIPTION
1	80184	FIXING RING WASHING SUPPORT
2	80640	RINSE ARM SPINDLE UPPER
3	106172	WASH/RINSE ARM CAP 5 NOZZLE
4	106171	WASH/RINSE ARM CAP 4 NOZZLE
5	456070	O-RING
6	456071	O-RING
7	129068	COMPLETE WASH & RINSE ARM BODY
8	80365	RING NUT, INOX RINSE PIN
9	990118	COMPLETE WASH & RINSE ARM ASSEMBLY
10	325087	RINSE ARM SPINDLE LOWER





REF. NO.	PART NO.	PART DESCRIPTION
1	73048	ELECTRIC PUMP 500W 230V
2	73070	WASH PUMP BRACKET
3	141008	WASH PUMP SHAFT SEAL
4	141009	WASH PUMP SHAFT SEAL
5	73053	WASH PUMP IMPELLER
6	456078	PUMP O-RING
7	73051	WASH PUMP CAP
8	73052	WASH PUMP HOUSING
9	480148	PUMP CAP
10	73055	WASH PUMP CONDENSER







REF. NO.	PART NO.	PART DESCRIPTION
1	468165	LUG, PLASTIC UNION
2	75402	RINSE PIPE GASKET
3	429075	NUT
4	H.775611-00	1 PIPE, PVC GLASS CRYSTAL
5	468205	CONNECTION LA50
6	476008	BALL VALVE
7	437083	RUBBER GASKET
8	499092	MEMBRANE
9	144022	VALVE LA50
10	80702	HOSE
11	80712	BRACKET
12	130177	DRAIN PUMP 50HZ
13	70097	DRAIN HOSE
15	70167	DRAIN FITTING
16	143252	DRAIN HOSE
17	144991	DRAIN PUMP VENT VALVE LA50
18	80637	BRACKET
19	CFS18	HOSE CLAMP
20	CFS1	HOSE CLAMP

GOLDSTEIN/ESWOOD SPARE PARTS & SERVICE

For inquiries and access to 24/7 service backup, please call our Toll-Free Number:

(Applicable to landline only charges apply for calls made from a Mobile Phone)

1800 013 123

This number will automatically access your nearest State office, or the technician on duty if after hours. After hours charges apply.



NOTES

AUSTRALIA'S PREMIER FOOD SERVICE EQUIPMENT MANUFACTURER

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