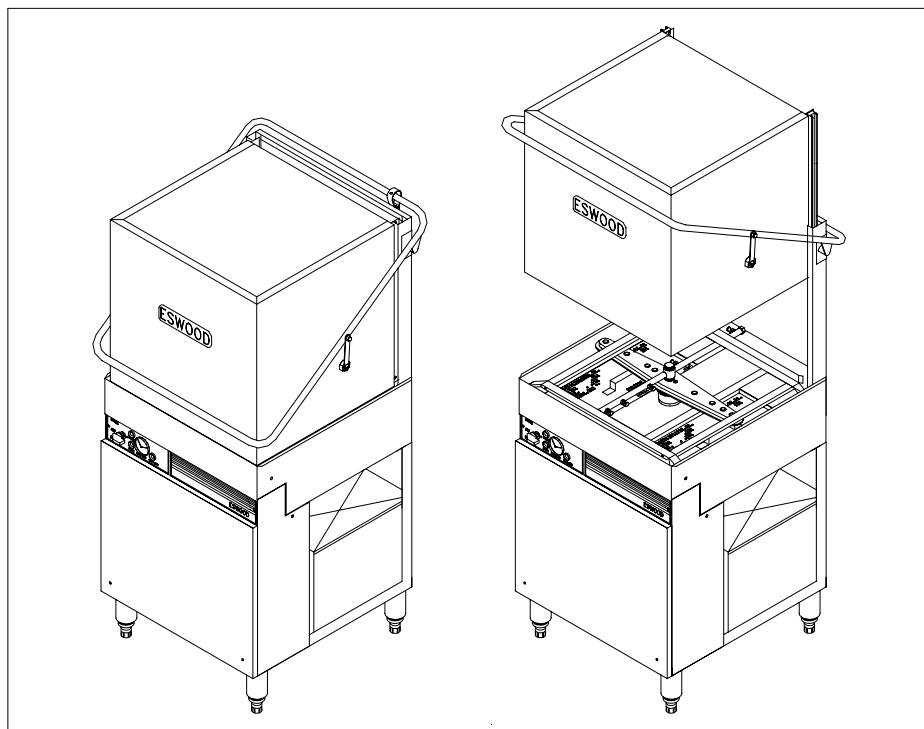




**EQUIPMENT MANUAL  
FOR  
ES25 PASS THROUGH  
DISHWASHER**



**OCTOBER 2009**



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## **IMPORTANT: PRIOR TO INSTALLATION**

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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 workmanship 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 of 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.



## GENERAL DESCRIPTION

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**Economical and Efficient Performance:** The ES25 is an economical and efficient pass-through dishwasher that provides excellent performance of up to 400 plates per hour. It has two powerful pumps for washing and rinsing, and high flow washes and rinse jets that provide fast and efficient cleaning performance.

**No Fuss Automatic Operation:** Just slide the loaded rack in and the cycle starts automatically when the hood is closed, and stops automatically if the hood is opened at any time. The ES25 features a rinse water temperature gauge, cycle status light and cycle selection control, all conveniently located for easy use, a full wrap around handle with smooth acting polymer guides for ease of operation.

**Convenient Design:** The bench height pass-through operation is efficient and safe, with operators simply sliding racks in and out of the wash chamber from an adjoining bench. The ES25 easily adapts to in-line or corner feed layouts, and the compact size will easily fit smaller kitchens. Furthermore, a generous opening height of 340mm caters for bulky kitchen utensils and large 305mm plates.

The ES25 has an attractive and easy to clean satin finish stainless steel cabinet. Strainer pans prevent pump, drain and wash arm blockages. Strainer pans and overflow tube are easily accessible from the front of the machine and are all removable by hand.

**Fast Low Cost Installation:** Simply connect the hot water supply, connect the trap to the drain outlet, and connect the wiring.

**Powerful Wash and Rinse Systems:** Independent wash and rinse arms, both above and below the rack, provide fast and thorough washing, while the auto-spin drain system gives a sparkling finish by preventing suds from dripping from the wash arm during the rinse cycle. The wash and rinse water supply tanks are fitted with automatic level and temperature controls to ensure hygienic operation, even during high-demand situations.

**Quality, Reliability and Performance:** Eswood has a reputation for product reliability that is second to none. The finest of stainless steel and durable synthetic materials are used, and all Eswood products are fully guaranteed and backed by a national support network.



## TECHNICAL SPECIFICATIONS

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### Machine Specifications

Net Weight	103kgs
Hourly Capacity	400 plates/hour
Wash Cycle Time	105 seconds
Dwell/Rinse Cycles	5 seconds/13 seconds
Standard Equipment	Cup Rack 500x500mm (1) Plate Rack 500x500mm (1) Cutlery Container (1)

### Wash Pump, Tank and Element

Wash Pump	400 L/min, 0.55 kW
Wash Tank Capacity	30 Litres
Wash Tank Heater	2400 Watts
Wash temperature	60°C to 65°C

### Rinse Pump, Tank and Element

Rinse Pump	0.35 kW
Rinse Tank Capacity	12 Litres
Rinse Tank Heater	3100 Watts
Rinse Temperature	82°C minimum
Water Consumption	3 <sup>1</sup> / <sub>2</sub> Litres per cycle

### Electrical and Water Connections:

Electrical Input	240V, 3.5 kW
Water Input	65°C minimum @ 200-400 kPa
Hot Water Inlet	1/2" B.S.P. fitting
Drain Outlet	2" B.S.P. gravity fed



## INSTALLATION

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1. Remove the packing materials from the machine, including inside the chamber.
2. The machine is supplied ready for straight-through operation. If corner use is required remove the three screws holding the front rack track guide and bolt to the right hand side of the rack track.
3. Remove the lower panel, position the machine and level by screwing the adjustable feet.
4. Fit the line strainer supplied to the water supply.
5. Connect the 2" B.S.P. gravity drain via a 2" trap to the drain outlet.

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

6. Connect the hot water inlet to a  $\frac{1}{2}$ " B.S.P. isolating valve adjacent to the machine. The hot water input supply should be between 100 to 400 kPa and a minimum of 65°C. A pressure reducing valve should be fitted for pressure above 400 kPa. Open isolating valve and allow rinse tank to fill. Fill will stop when level is reached.
7. Ensure that the rotary switch is "OFF" and then connect the three pin plug lead to a 15 Amp, 240V, 50Hz, 1 phase power outlet.

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

8. Connect the benching so that there is a fall back towards the machine to allow water to drain back into the machine.



## INITIAL START-UP PROCEDURE

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1. With the rotary switch and isolator “OFF”, and the hot water supply to the machine turned on, check that the break tank is full. The water level should be approximately 20mm below the overflow slot in the rear of the tank. The level can be inspected by removing the lid from the break tank.
2. With the rotary switch still off, turn the power on at the isolator.
3. Check that the drain overflow pipe is pushed into the drain hole at the bottom of the wash tank.
4. If the machine is fitted with an automatic detergent injector, place the free end of the 10mm clear plastic tube, located under the machine, into a 4 Litre or other suitable container of liquid detergent. The unit will prime itself after a few cycles.

If no automatic detergent injector is fitted, add half a cup of non-foaming dishwashing detergent to the wash tank.

Do not use wrong products as they will void the warranty, and use product in accordance with the manufacturers' recommendations.

5. With the hood open, turn the rotary switch to “FILL” and close the hood. The machine will begin filling and the pilot light will illuminate until the cycle is complete. Open the hood and check that the water is up to the overflow level (at or near top of the drain overflow pipe). If not, repeat the “FILL” cycle until the overflow level has been reached.
6. Open the hood and select the wash cycle using the rotary switch (on front of control panel) place the perforated strainer pans on each side of the lower wash arm.
7. Close the hood to start the wash cycle. The pilot light illuminates until the cycle is complete. When finished, check for leaks.
8. Turn the rotary switch “OFF”, open the door and remove the overflow tube to drain the machine. Also check for leaks.
9. Replace the lower front panel.



## WASHING OPERATION

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1. Place the overflow pipe into the bottom of the wash tank. Check that the strainers are clean and place in position on either side of the lower wash arm.
2. With the hood raised, turn the switch to "FILL" and then close the hood. The cycle light illuminates while the machine is filling.
3. When the machine has finished filling, open the hood and check that the water is up to the overflow level (at or near the top of the overflow tube). Repeat step 2 if the level has not been reached
4. Turn the Rotary switch to wash cycle. This also activates the wash heater element.
5. Scrape off any loose food matter from the dishware and place plates face up and deep bowls can be angled face down in an appropriate peg rack. Invert cups and glasses into the open rack. (If no automatic detergent dispensing equipment fitted (see detergent companies) add  $\frac{1}{3}$  of a cup of non-foaming commercial dishwashing detergent into the wash tank after initial fill.

When loading racks, face the plates in the direction of feed into the machine. Load the small items at the front and the large items at the back. Slide the rack into the machine close the hood. The cycle light illuminates during the cycle.

**Note that the cycle will not begin until the water in the break tank has reached 82°C.**

6. When the washing is finished, lift the hood and remove the clean rack. To wash another rack repeat from step 5. If no automatic detergent dispenser is fitted, add one teaspoon of detergent every four or five washes.

Note that the hood should not be opened until the wash and rinse cycle is complete, otherwise the cycle will reset and continue longer than necessary.





## SHUTDOWN AND MAINTENANCE

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1. Turn the rotary switch "OFF".
2. Remove the overflow tube to drain the wash tank.
3. To flush out food scraps from the inside of the machine, close the hood and turn the rotary switch to "FILL". At the end of the cycle turn the switch to "OFF" and lift the hood.
4. Clean the strainer and overflow tube under a tap. Then allow to air dry.
5. Check that the rinse and wash arms and jets are free of foreign matter (maybe use a small paperclip to prick the jets). If necessary, remove the arms to clean the jets and clean them.
6. Clean the exterior of the machine with a damp sponge. Do not pass water over the electrical controls and avoid abrasive or strong detergents.
7. Check for leaks and ensure that the lower and upper arms rotate freely.
8. Leave the hood open to allow the machine to air.



## TROUBLE SHOOTING

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### Problem

### Possible cause and remedy

When machine is turned on, red power light does not illuminate

- (a) Check that main isolating switch is turned on and fuses are okay.
- (b) Power light may be burnt out. If so, replace it (this will not stop machine from operating though).

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Machine will not start

- (a) Ensure that the rinse temperature has reached 82°C.
- (b) Check operation of the door switch.

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Machine not filling correctly

- (a) Check if water isolating valve is fully open, and check for obstructions in the water supply line, or line strainer needs cleaning.
- (b) Check if overflow pipe is seated correctly in wash tank, and check for foreign matter under the O-ring of the pipe.
- (c) Check that rinse pump is not damaged internally and that motor is functioning correctly.
- (d) Check operation of the ball float valve.

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Poor wash

- (a) Check that detergent feeder to machine is operating correctly, if fitted. If operational, adjust the injector to increase dosage.
- (b) If hand-feeding with detergent, increase dosage.
- (c) Check for foreign matter in wash arm jets. Clean if necessary.



## **Problem**

(d) Check that items to be washed are correctly placed in racks.

## **Possible cause and remedy**

(e) Check temperature of tanks. If incorrect check thermostat settings and heating elements.

(f) Check that the wash pump is functioning.

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Incorrect temperature of wash tank

(a) Check thermostat setting. (60°-65°C)

(b) Check heating element.

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Poor rinse

(a) Check that water pressure to machine is not less than 100 kPa and ensure that the water isolating valve is fully open.

(b) Check rinse arm jets for foreign matter and clean if necessary.

(c) Check that the rinse pump is functioning correctly.

(d) Check that the line strainer is not partially blocked. If so, remove and clean filter.

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(e) Check operation of the ball float valve.

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Insufficient rinse temperature

(a) Ensure that temperature of incoming water supply is at least 65°C.

(b) Check that rinse booster element and thermostat are functioning correctly.

Rinse temperature 80° - 88°C



## **ES25 *EXPORT* MODEL**

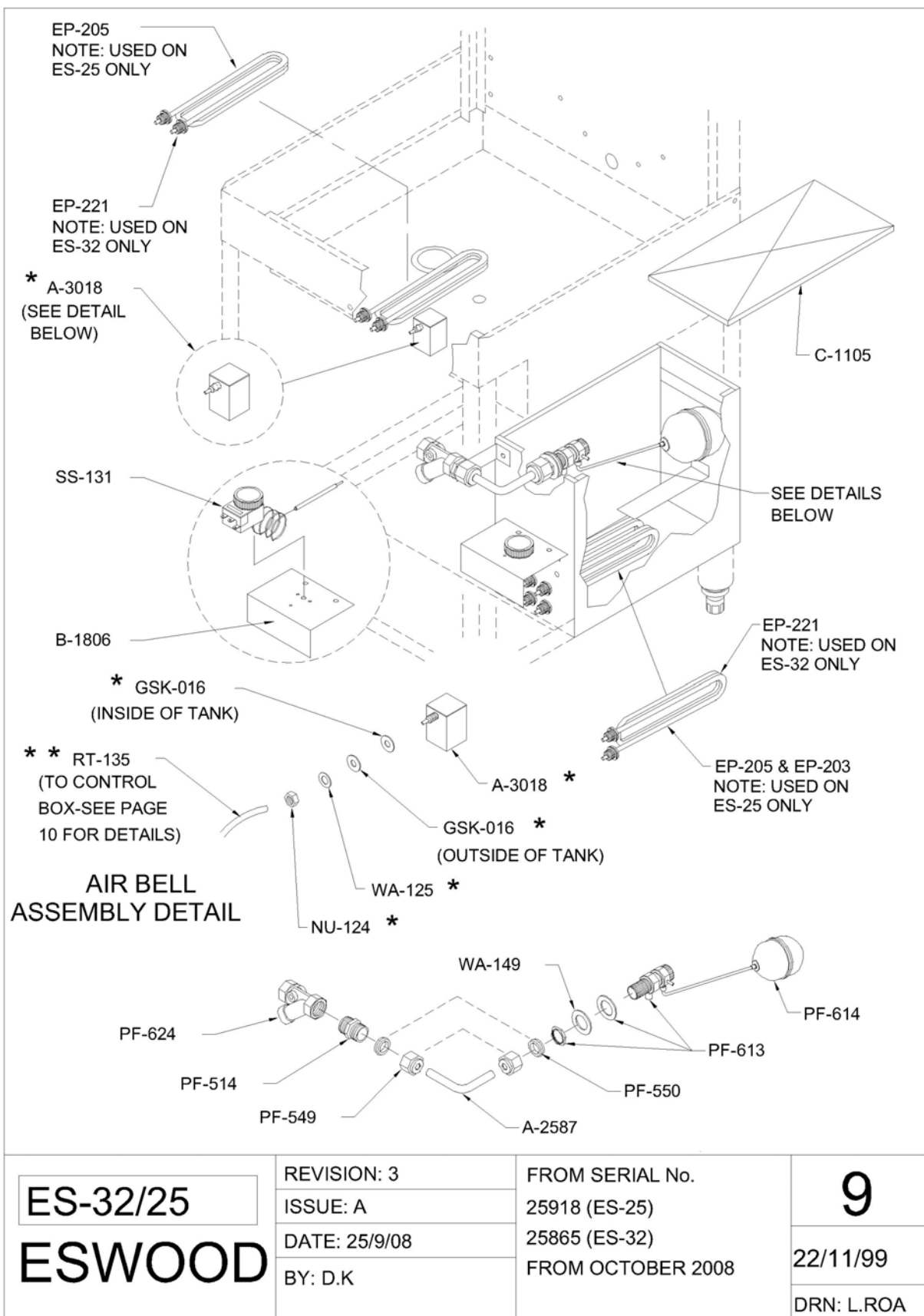
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The ES25 supplied for export differs from Australian models as follows:

A detergent injector is fitted as standard.

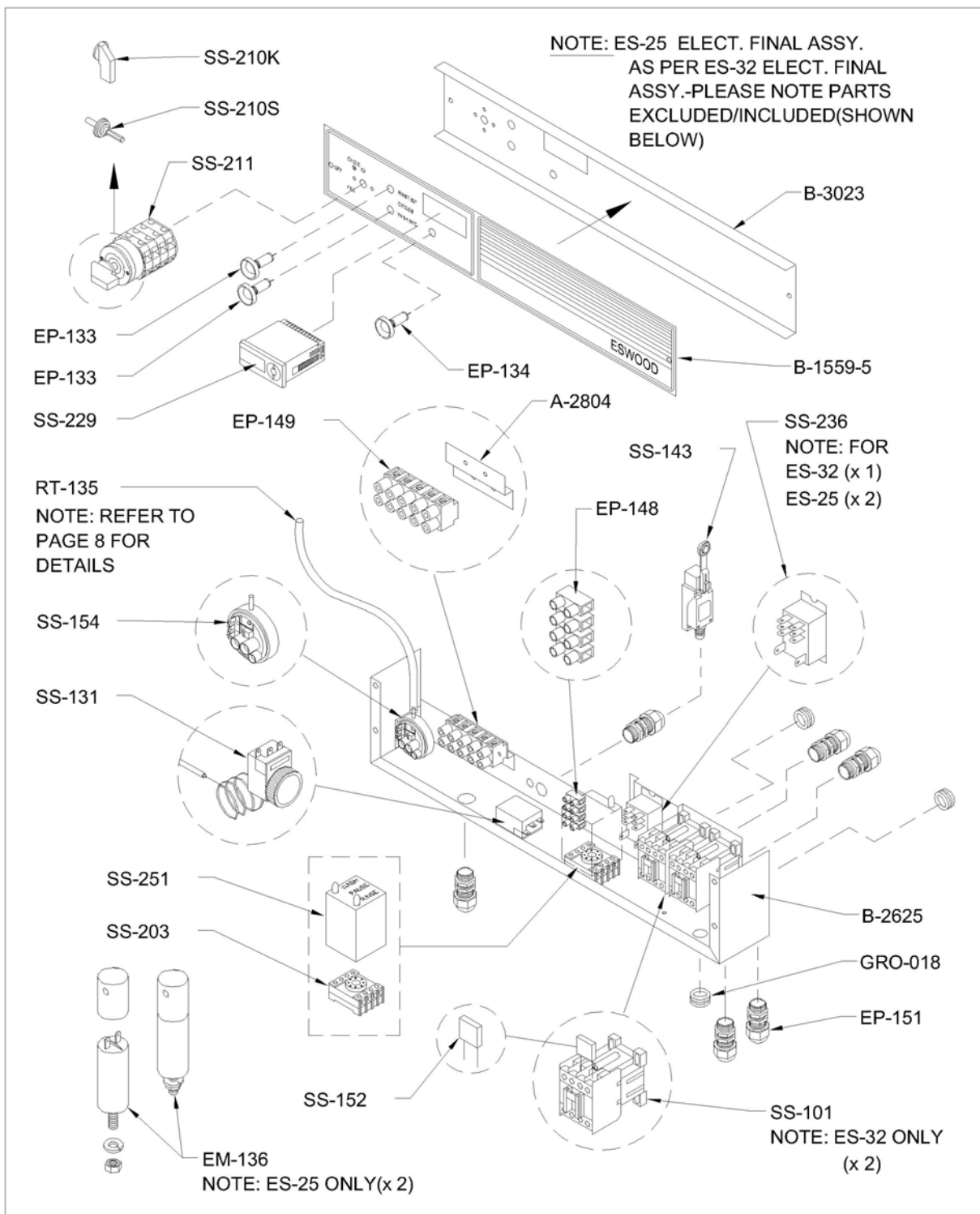
# DRAWINGS

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# DRAWINGS

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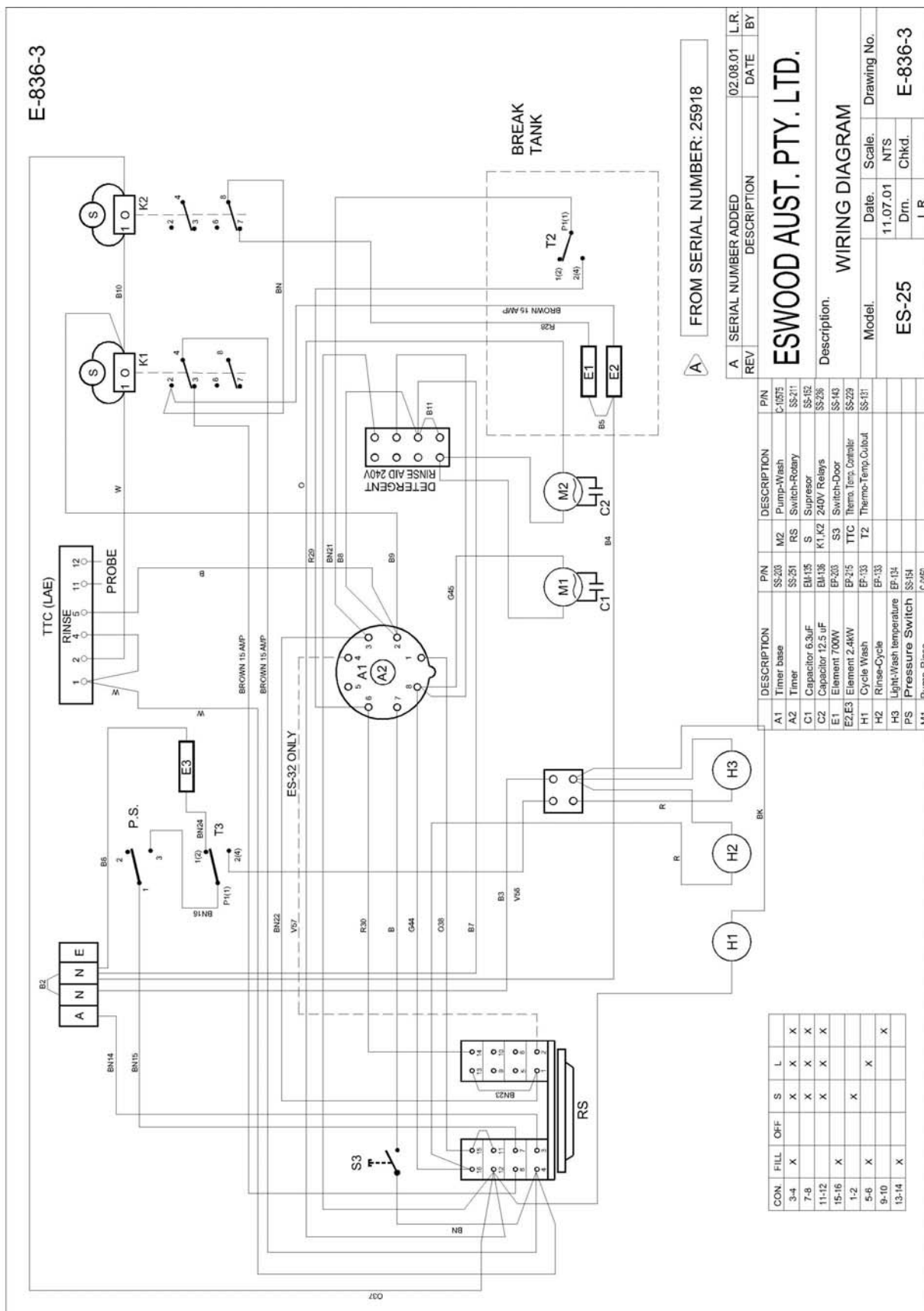


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# WIRING DIAGRAM

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## **GOLDSTEIN/ESWOOD AUSTRALIA BRANCHES**

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For inquiries please call your nearest state branch:

### **Goldstein-Eswood (Head office)**

211-213 Woodpark Road,  
Smithfield,  
New South Wales, 2164.  
Phone: (02) 9604 7333  
Fax: (02) 9604 5420

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Phone: 03 9372 6577  
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