WES 600L Packaged Pump Station

Installation Guide

Sewage - Model WES PPS-S

Grey Water - Model WES PPS-GW





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1. IMPORTANT

- Never allow cable ends to be submerged
- Only qualified personnel should install, operate and repair your pump station system. Any wiring
 of pumps should be performed by a qualified electrician.
- Before installation local authorities must be consulted for all applicable codes and regulations.

2. GENERAL

The Sewage Ejection Pump Station is to be installed, by a licensed plumber, as per these instructions and local authority requirements.

Pumps, other pipe and electrical requirements are to be supplied and carried out by the relevant licensed tradesperson.

The Sewage Ejection Pump Station is of 600L capacity. The Pump Well Vessel is approved to the requirements of the Australian Standard AS/NZS1546.1:2008 Onsite domestic wastewater treatment units – Septic tanks. Lic SMK1651. Approvals and additional information on the Sewage Ejection Pump Station operation and maintenance can be obtained from <u>www.wastewaterequipment.com.au</u>



3. EXCAVATION

The Sewage Ejection Pump Station is to be sited:

- i. Away from building foundations,
- ii. Away from traffic areas, both vehicular and pedestrian,
- iii. Away from or fenced off from animal stock pastures and areas.

The requirements for excavation are:

- 1. Excavate site for installing tank in ground as per building code and local authority requirements.
- 2. Ensure adequate pipe fall to inlet of the Sewage Ejection Pump Station, Refer to the tank dimensions diagram for correct levels.
- 3. The Sewage Ejection Pump Station requires an excavation approximately 1300mm deep and 1400mm in diameter (the exact depth will vary due to land fall and depth of bedding sand used)



- 4. Do not bury tank lid. Manhole cover must be finished at normal ground level to allow ongoing Sewage Ejection Pump Station inspection and maintenance. (The inlet pipe is 303mm below ground level.)
- 5. In the base of the excavation prepare a level 50mm bed of compacted sand or soft compactable fill, free of large and/or sharp objects to allow full support of the specially shaped base.
- 6. Carefully lower tank base into excavation do not drop.
- 7. Ensure the Sewage Ejection Pump Station is level.

4. CONNECTIONS

Inlet

- 1. Inlet Connection to the Sewage Ejection Pump Station is via 100mm PVC DWV Sewer pipe through the pipe seal connection.
- 2. Ensure the pipe seal is clean and correctly seated. Use a standard jointing lubricant.
- 3. Apply lubricant to spigot of pipe and ease the pipe through the seal until the pipe protrudes inside the Sewage Ejection Pump Station at least 150mm.

Pump

- 1. Remove the Manhole Cover to install the pump. Carefully lower and position the pump into the Sewage Ejection Pump Station.
- 2. Connect the discharge pipe via the barrel union
- 3. Connect the pump power cable to a general power outlet
- 4. Seal any connection ports made in the top of the Sewage Ejection Pump Station with silicone.
- 5. Check correct operation of pump and floats The floats attached to the pump switch the pump on when the level of fluid inside the Sewage Ejection Pump Station is at the High level line. The pump should switch off to ensure the pump remains primed i.e. liquid level is no lower than the bottom of pump. The high level alarm should activate if the level reaches the high alarm level.
- 6. Remove tape from high level alarm float and connect liquid level alarm box to general power outlet.

Discharge

1. Discharge connection is via a threaded 40 mm BSP connection

5. TANK ANCHORING

- 1. The Sewage Ejection Pump Station is provided with a large 125mm wide anchoring flange. In normal conditions this flange will anchor the tank when backfilled with correctly compacted clean fill.
- 2. In areas of high water table the underside includes 6 mounting points which can be used with M12 reo-bar in concrete for additional anchorage.

6. COMPLETION

- 1. Fill the Sewage Ejection Pump Station with water to the level of the invert of the inlet pipe (pump to be switched off), prior to any backfilling and compaction.
- 2. Fit Manhole Cover. Manhole cover should always be fitted to prevent unauthorised entry.
- 3. Ensure that under the base and flange is fully supported prior to backfilling. Backfill around the Sewage Ejection Pump Station with clean fill. Only use clean fill and ensure full compaction in layers of the clean fill until the top. Do not use excavation waste, rubble rocks or large objects.
- 4. The Sewage Ejection Pump Station must not be buried when finished. The Manhole Cover must be at ground level to ensure access for maintenance. The Sewage Ejection Pump Station can be covered with light mulch or garden bark only. Ensure all surface water run-off is directed away from pipe trenches septic tanks and the Sewage Ejection Pump Station.
- 5. Upon completion pump out the water used for the backfilling process and check correct operation of pump floats and level alarm.

7. MAINTENANCE

Installation conditions will determine regularity of maintenance intervals. However, all installations should be serviced once every 12 months. More regular servicing is required for applications where there are abrasive particles in the sewage, excessive silt or debris entering the pit, or where the pumps are subject to heavy usage.

Particular care should be taken to keep the pit clean while construction works are in progress.

In addition to the requirements in the included in the pump manufacturer's installation and operating instructions:

- 1. Avoid electric shock. Isolate pumps and controls before starting work.
- 2. Check external condition of pumps and control gear.
- 3. Check pumps for wear.
- 4. Check condition of electrical equipment.
- 5. Check pit for sludge build-up/presence of foreign objects remove if necessary.
- 6. Check that pump cables are securely tied up and that float switch movement is not obstructed.
- 7. Check system operation.

8. SAFETY WHEN SERVICING

- Be aware of "Confined Spaces" guidelines.
- To reduce the risk of electrical shock, always disconnect the pump from the power source before handling or servicing. Lock out power and tag.
- Do not wear loose clothing that may become entangled in the impeller or other moving parts.
- Keep clear of suction and discharge openings. DO NOT insert fingers in pump whilst power is connected.
- Always wear appropriate safety gear such as safety glasses when working on the pump or piping.
- Cable should be protected at all times to avoid punctures, cuts, bruises and abrasions.
- Never handle connected power cords with wet hands.
- To reduce the risk of electrical shock, all wiring and junction connections should be made in accordance with local codes and regulations.

9. DIAGRAM



10.TROUBLE-SHOOTING GUIDE

- A: Pump Motor does not run
- 1. Water level in pit below off float level.
- 2. Power failure check isolating switches and circuit breakers or fuses.
- 3. Thermal motor protection set too low adjust and reset.
- 4. Loose terminal connection.
- 5. Float Switch movement obstructed.
- B: Motor trips circuit breakers or thermal overload after short time of operation
- 1. Temperature of pumped liquid too high.
- 2. Impeller jammed or partly jammed by foreign objects.
- 3. Phase failure.
- 4. Voltage too low.
- 5. Thermal overload set too low.
- 6. Impeller corroded to cover plate from lack of use or moisture entry during storage.
- C: Pump runs but does not pump
- 1. Gate valve closed.
- 2. Suction strainer or discharge line blocked.
- 3. Pump too small for applications.
- 4. Incorrect direction of rotation.
- 5. Air lock in pump check that pump does not suck air before switching off. Check bleed hole, located

at base of pipe work on pump line is not blocked.

- D: Pump will not switch off after emptying tank
- 1. Pump float switch adjusted too low.
- 2. Incorrect wiring
- 3. Float switch fused.
- 4. Pump float switch movement obstructed.
- E: Tank continues emptying after pump switches off
- 1. Discharge line syphoning check that discharge point is not lower than pump.

11.WARRANTY

Statement of the warranty and service life.

The WES Sewage Ejection Pump Station warranty and service life:

- Vertical axis type cylindrical (tapered) injection molded polypropylene pump well and lid. Manufactured by Reln Pty Ltd, Ingleburn, NSW, with a capacity of 600 L. Manufactured to AS/NZS1546.1, service life 15 years.
- Pump
 - Sewage Model WES PPS-S
 - Davey D75GA grinder pump (or equivalent), fitted with Hi and Lo level float switches. Service life 5 years warranty period 2 years.
 - Grey Water Model WES PPS-GW
 - Davey D40A Vortex pump (or equivalent), fitted with Hi and Lo level float switches. Service life 5 years warranty period 2 years.
- 40 mm diameter pump discharge piping fitted with a barrel union, non-return valve and isolation valve. Service life 5 years.
- An audible and visible alarm system. Service life 5 years warranty period 12 months.

Warranty Record Card

Product Type:	Packaged Pump Station Packaged Pump Station				
Capacity:	600L				
Home Owners Name:					
Home Owners Address:					
State:		Postcode:			
Date of Purchase:		Receipt Date & Number:			
Store where tank was p	urchased:				
Installer's (Company Na	me):				
Date of Installation:					

Register Your Product

To further assist you with your warranty, Reln recommend registering your product. Please complete the separate warranty card enclosed with the particulars of your purchase and installation and return to Reln within one month of purchase / installation to:

Wastewater Equipment Supplies Attention: Customer Service PO Box 5981 Brendale QLD 4500

WES Packaged Pump Station Warranty Certificate

Congratulations! You have made an excellent choice of this quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, experience defects due to manufacturing faults, Reln will provide you with a warranty against defects as follows:

Warranty

The WES Packaged Pump Station is guaranteed to be free from defects in workmanship and parts for a period of from the date of purchase:

- Vessel 15 Years
- Pumps 2 Years
- Alarm 12 Months

Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Competition and Consumer Act 2010 and similar state and territory laws. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Proof of Purchase

This warranty is valid for the original purchase item and is not transferable. Please keep your purchase docket, tax invoice or receipt as the best proof of purchase, and as proof of date on which the purchase was made.

Extent of Warranty

This warranty is limited to defects in workmanship or parts. Your warranty does not cover installation. WES Packaged Pump Stations must be installed strictly in accordance to installation instructions by a qualified licensed plumber and must conform to all state and local regulation requirements.

Normal Wear and Tear

This warranty does not cover normal wear and tear to the products or parts.

Exclusions

This warranty does not cover:

- Installation. Installation must be conducted by a qualified licensed plumber.
- Any defects caused by an accident, transportation, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised by WES.
- Any product that has not been installed, operated or maintained in accordance with the manufacturer's installation instructions provided with the product.
- Any product, system or component that is supplied in addition to the WES Packaged Pump Station.
- Any product that has been used for purposes other than domestic use.
- The cost of transportation of the product from customer to distributor or from distributor to the customer

To Make a Claim

To obtain service under this warranty or to have the product repaired please contact the WES on 07-3205-3666 with your dated sales receipt (proof of purchase) and the completed Warranty Details certificate.

Email: info@wastewaterequipment.com.au Website: www.wastewaterequipment.com.au

Product Type:	Packaged Pump Station WES-PPS-S			
Capacity:	600L			
Home Owners Name:				
Home Owners Address:				
State:				
Date of Purchase:				
Installer's (Company Name):				
Date of Installation:				

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