

# WASTEFLO

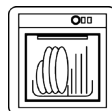
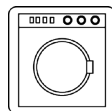
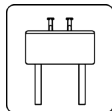
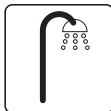
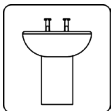
## Installation & Maintenance Instructions

Please leave this instruction booklet with the home owner as it contains important guarantee, maintenance and safety information



**LS5**

Pt. No. 46577



# IMPORTANT

**In the unlikely event of experiencing a problem with this product, please contact TechAssist on +44 (0) 800 31 969 80**

**Due to the nature of this product DO NOT attempt to return or remove this product from its installation.**

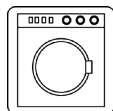
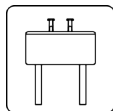
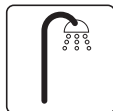
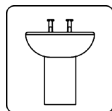
## **STORAGE**

If this product is not to be installed immediately on receipt, ensure that it is stored in a dry, frost and vibration free location in its original packaging.

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## PRODUCT DESCRIPTION

The **LS5** is a compact automatic Lifting Station for domestic use, designed for the drainage of washbasins, showers, bath tubs, sinks, washing machines or dishwashers. The **LS5** has five inlet connections, to pump waste away from bathroom sanitary ware or kitchen appliances.



Please note the following warning signs.



**Warning of possible electrical hazard.**



**Possible danger to personnel or important installation requirement.**

## WARNINGS



- All the safety and operating instructions in this booklet must be followed.
- The unit must not be used for any other application without the written consent of Stuart Turner Limited.
- The unit must be installed by a qualified person.
- The unit is not suitable for heavy commercial/ industrial applications.
- The plumbing installation must comply with the Building Regulations.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- All pipework referred to in this installation manual are typical PVC waste pipe size's used in the UK.



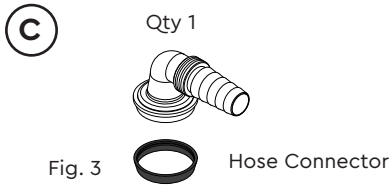
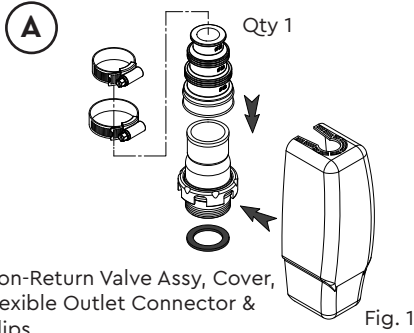
- The electrical installation must be carried out in accordance with the current national electrical regulations and installed by a qualified person.
- In the interests of electrical safety a 30 mA. residual current device (R.C.D. not supplied) should be installed in the supply circuit. This may be part of a consumer unit or a separate unit.
- Before starting work on the electrical installation ensure the power supply is isolated.
- This appliance must be earthed.
- The wiring must not be exposed to water.



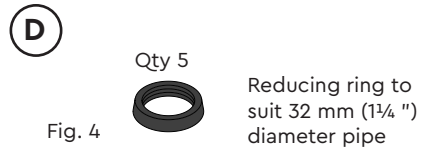
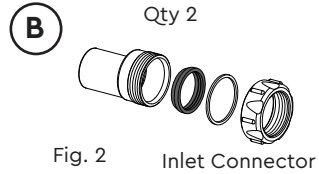
- **The supply cable must be positioned so that it is not stepped on, cut or damaged.**
- **The Lifting Station must be disconnected from the power supply before replacing the filter.**

**Please read installation details carefully as they are intended to ensure this product provides long, trouble free service. Failure to install the unit in accordance with the installation instructions will lead to invalidation of the warranty.**

## ACCESSORIES CHECKLIST



**IMPORTANT: With the product removed from its packaging check for any damage prior to installation. If any damage is found contact Stuart Turner Ltd within 24 hours of receipt.**

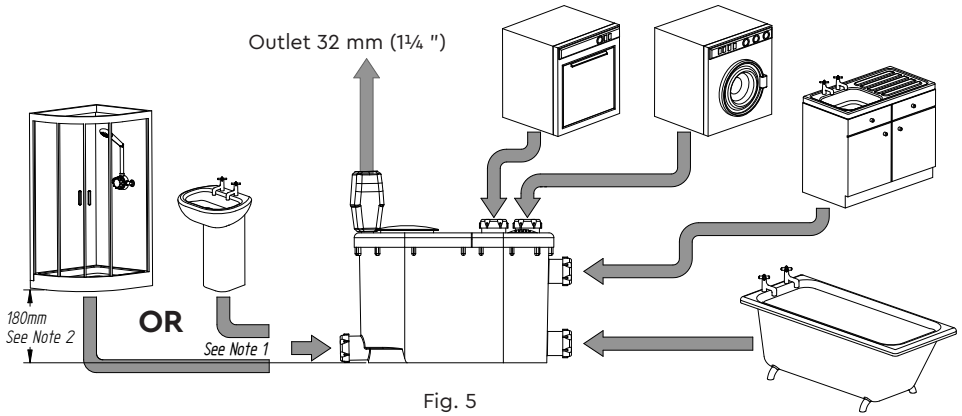


## 1 LOCATION

- 1.11 The unit can be connected under a kitchen unit, washbasin or in a closet. Allow a minimum height of 220 mm above the unit, for maintenance and servicing.
- 1.12 The unit must be positioned away from heat sources, such as radiators and heaters.
- 1.13 Care must be taken to protect the unit against frost and freezing. All pipes at risk of freezing must be protected by thermal insulation.

Cont ...

## 2 CONNECTIONS



- 2.11 Note 1: Only connect one sanitary device per inlet connection.
- 2.12 Note 2: The shower tray/bath (lowest waste outlet) must be a minimum of **180 mm** above the base of the macerator, to ensure necessary drainage **and must not contain a trap.**
- 2.13 Dishwashers and washing machines **must** be connected to the top inlets only.

Cont ...

### 3 INSTALLATION

#### INSTALLATION GUIDELINES

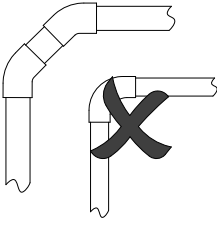


Fig. 6

3.11 Always use smooth bends or 2 × 45° bends. **Do not use 90° elbows.**

3.12 Vertical pipework must be installed first, pipework may be inclined up to 45° but will need to be included in the vertical height calculation.

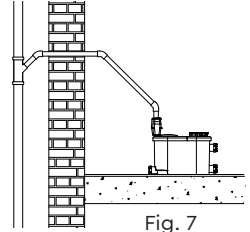


Fig. 7

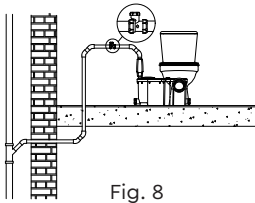


Fig. 8

3.13 If the discharge is lower than the unit, to prevent water siphoning from the outlet pipe, an air admittance valve (not supplied) capable of withstanding 6 psi. Example only: Hunter Plastics Anti-Vac Gurgle Master WV032 which can be used on 32 mm pipework.

3.14 If the unit is to be installed within furniture or cupboards, or boxed in, allow space for motor ventilation through the top cover leaving at least 90 mm between the unit and any shelf/boxing.

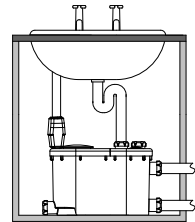


Fig. 9

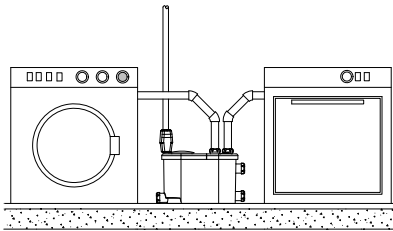


Fig. 10

3.15 If either a dishwasher or washing machine are to be used, they must always be fitted using the top connectors.



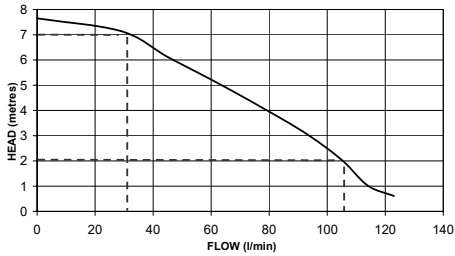


Fig. 11

- 3.16 Ensure that the total flow drained at any given time never exceeds the total pumped flow from the unit, taking into account the height and length of the outlet pipe. For instance,
- At 7 metres outlet head, the outlet flow is 30 l/min.
  - At 2 metres outlet head, the outlet flow is 105 l/min.



3.17 **Always ensure full access to the unit is possible for maintenance.**

### STEP 1 OUTLET CONNECTION

- 3.18 The horizontal outlet pipe must have a minimum fall of 1:100 (1°).
- 3.19 With 32 mm pipework fitted – the LS5 will pump a maximum horizontal distance of 72 metres or a maximum vertical distance of 7 metres.

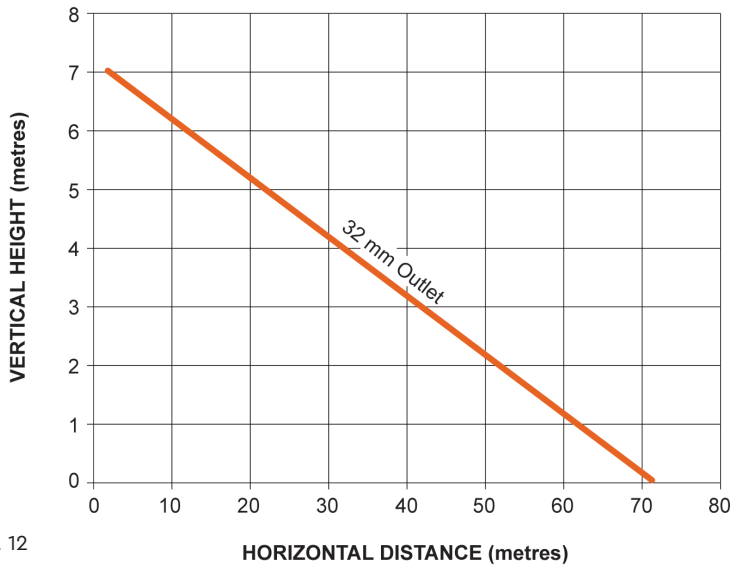
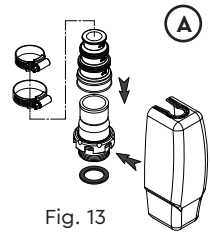


Fig. 12

3.20 The unit is supplied with a non-return valve assembly (A), a universal cover and flexible rubber adaptor with adjustable clips.



3.21 **Note: The universal adaptor must be cut to fit a 32 mm diameter pipe size, as shown in the diagram below. Use of smaller diameter pipe will result in damage to the unit.**

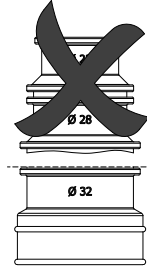


Fig. 14

3.22 Fit the adjustable clips over the adaptor.  
Fit the adaptor onto the top of the one-way valve with an adjustable clip.  
The 32 mm pipe can then be fitted down to the one-way valve as shown.  
Tighten the adjustable clips to 5.0 N.m.

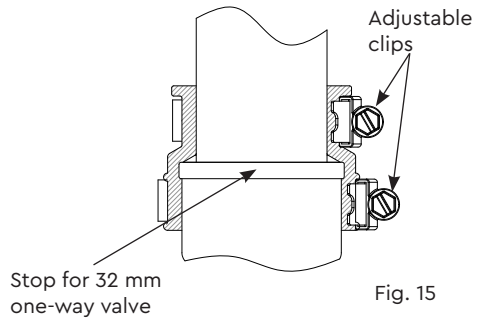


Fig. 15

3.23 The non-return valve can then be fitted to the connector on the flexible pipe from the unit, ensuring that the rubber sealing washer is fitted, and it is tightened to produce a water tight seal.

3.24 The universal non-return valve cover has a cut out section that needs to be removed to fit 32 mm diameter pipe as shown. Fit the cover over the on-way valve/adaptor assembly.

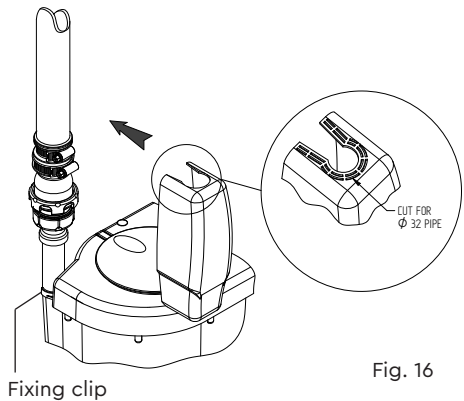


Fig. 16



3.25 **The flexible pipe must be supported by the fixing clip, along with all relevant fitted pipework to prevent the flexible pipe being bent which can cause an obstruction.**

Cont ...

## STEP 2 SIDE & TOP SANITARY CONNECTIONS

- 3.26 The unit is factory fitted with a cap, to seal all inlet sanitary connections.
- 3.27 Select the sanitary connection to be used, unscrew the 1½ " nut to remove the cap and seal.
- 3.28 The connection pipe must have a minimum fall of 1:33 (3°) into the unit.
- 3.29 This unit is supplied with two side inlet connectors (B), to allow connection to 40 mm (1½ ") diameter pipe and one right angle hose connector (C), to allow connection to 20 mm flexible pipe or G ¾ running nut.
- 3.30 Use the seal and nut with the inlet connector (B), to connect to your inlet pipe. Tighten to produce a watertight seal.
- 3.31 All pipe connector nuts should be hand tight to seal.
- 3.32 The two top connections are not fitted with integral non-return valves, and must be connected using an appliance waste trap.
- 3.33 When a shower tray or bath is installed, ensure the waste outlet is a minimum of **180 mm** above floor level, to ensure necessary drainage.

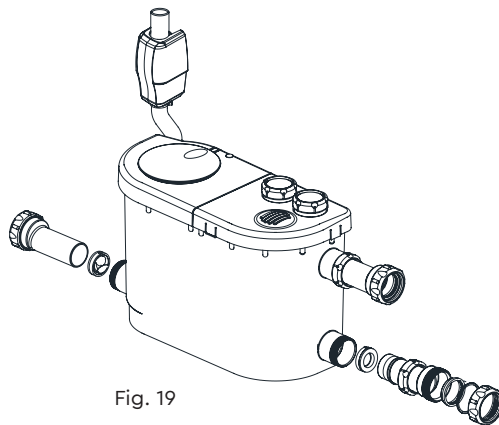
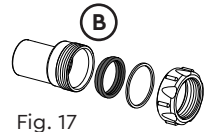


Fig. 19

## 4 ELECTRICAL INSTALLATION



- 4.11 **Regulations:** The electrical installation must be carried out in accordance with the current national electrical regulations and installed by a qualified person.
- 4.12 **Safety:** In the interests of electrical safety a 30 mA. residual current device (**R.C.D. not supplied**) should be installed in the supply circuit. This may be part of a consumer unit or a separate unit.
- 4.13 Before starting work on the electrical installation ensure the power supply is isolated.
- 4.14 This appliance must be earthed.
- 4.15 The wiring must not be exposed to water.
- 4.16 The supply cable must be positioned so that it is not stepped on, cut or damaged.

### 4.17 Electrical Connection

The unit is provided with a factory fitted supply cord. This must be permanently connected to the fixed wiring of the mains supply. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

A suitable method of connection would be via a double pole switched, fused connection unit complying with BS 1363-4, protected with a fuse (see technical specification).

The connection unit should be mounted in an easily accessible position and should be labelled if confusion is possible, to allow easy identification of the lifting station isolating switch.

### 4.18 Wiring Of Connection Unit



**WARNING: This appliance must be earthed.**

The wires in the mains lead (supply cord) are coloured in accordance with the following code:

- Green and Yellow: Earth
- Blue: Neutral
- Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your connection unit proceed as follows:

- The wire which is coloured green and yellow must be connected to the terminal in the connection unit which is marked with the letter E or by the earth symbol:  $\oplus$  or coloured green or green and yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

## **5 COMMISSIONING**

- 5.11 The Lifting Station will operate automatically as soon as the required level of water enters the case.
- 5.12 Check that the unit operates after all the inlets are operated one after the other, for a few minutes, to represent normal use.
- 5.13 Finally check that all connections are watertight.
- 5.14 The unit should operate for no more than 10 to 20 seconds at a time, depending on the height and length of the discharge pipe, it is quite normal for the pump to cut in and out several times during the sanitary device emptying.

## 6 MAINTENANCE



- 6.11 The Lifting Station should only be used for the removal of grey water.
- 6.12 AVOID KITCHEN TOWELS, HAIR, FOOD WASTE, CIGARETTES ETC, as this will damage the unit and **will invalidate our warranty.**
- 6.13 Do not pour in any corrosive liquids such as acids, solvents, oil, paint stripper, as this will damage the unit, and is NOT covered under the guarantee.
- 6.14 Acid based descalents and aggressive cleaning agents must not come into contact with the unit.  
If in any doubt as to the suitability of the chemical solutions, please contact our Pump Assist Helpline.
- 6.15 As water is heated scale deposits are released in areas of hard water. Scale can cause the mechanical seal to stick if left alone for long periods. We recommend the unit to be run for at least 3 minutes every four weeks to "exercise" all working parts. It is also recommended that a non acid based descalent is used to remove limescale. To be carried out twice a year.  
A non acid based cleaner can be used to clean all sanitary appliances connected to the unit.
- 6.16 There should be no dripping from the bathroom sanitary ware or kitchen appliances, as this will cause the unit to operate.
- 6.17 Do not use any connected bathroom sanitary ware or kitchen appliance in the event of a power failure.

- 6.18 Care should be taken to protect the unit and pipes from frost and freezing.
- 6.19 Should the unit start to release odor's the charcoal filter (Part No. 28170) should be changed (Fig. 20).
- 6.20 No other maintenance is required under normal working conditions.



**WARNING: The Lifting Station must be disconnected from the power supply before replacing the filter.**

Contact Stuart Turner for spares replacement.

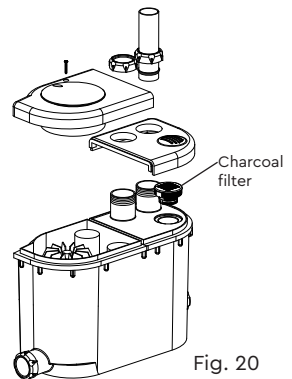


Fig. 20

- 6.21 **For Further Technical Support:** Phone the Stuart Turner TechAssist team on +44 (0) 800 31 969 80. Our staff are trained to help and advise you over the phone or arrange for a service engineer to call.

Cont ...

## 7 TECHNICAL SPECIFICATION

Pump Model		<b>LS5 46577</b>
General	Guarantee	2 years
	Approvals	CE
Features	Slimline design	✓
	Noise level	50 dB(A) (typical)
Material	Enclosure	Polypropylene
Performance	Max. pumping distance (vertical)	7 metres
	Max. pumping distance (horizontal)	72 metres
	Maximum flow	120 l/min
	Maximum ambient air temperature	40 °C
	Min / Max water temperature	Min 4 °C / Max 50 °C (Continuous duty), Max 70 °C (washing machine)
Connections	Inlet(s)	32 mm (1¼ ") dia. (standard), 20 mm/G ¾ elbow connection (washing machine)
	Outlet	32 mm waste pipe adaptor
Motor	Duty rating	Continuous (S1)
Electrical	Power supply / phase / frequency	230 V a.c. / 1 / 50 Hz
	Current (full load)	2.0 Amps
	Power consumption	460 Watts
	Fuse rating	5 Amps
	Power cable (pre-wired)	1.5 metres
Physical	Enclosure protection	IPX4
	Width	413 mm
	Depth	180 mm
	Height (excluding hoses)	278 mm
	Weight (including fittings)	7.8 Kg

Stuart Turner reserve the right to amend the specification in line with its policy of continuous development of its products.

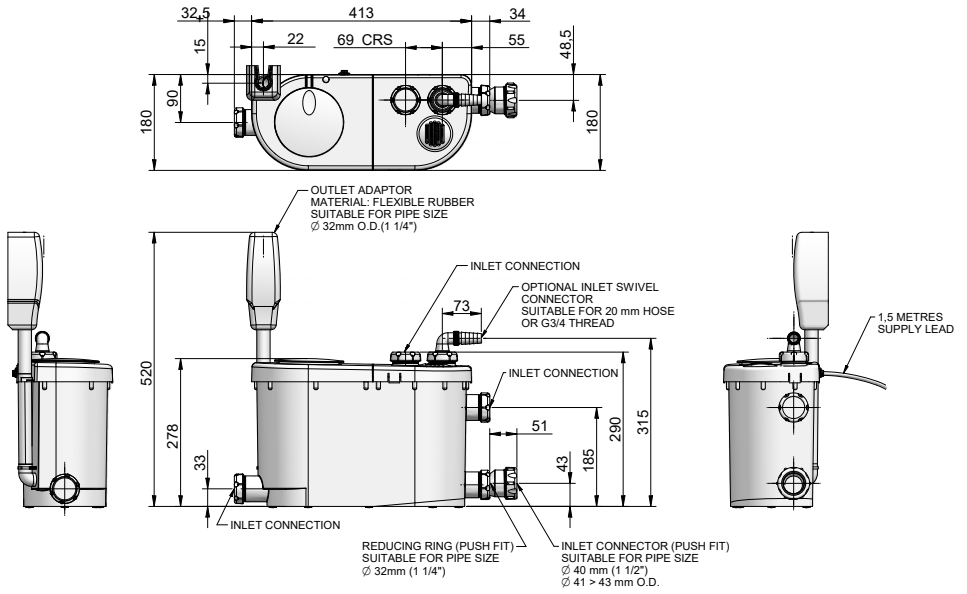


Fig. 21



## 8 TROUBLE SHOOTING GUIDE



8.11 **WARNING:** The Lifting Station must be disconnected from the power supply before any service.



8.12 All work involving dismantling the Lifting Station, except for the service of the filter and inlet/outlet non-return valves, must be carried out by an approved engineer. Contact Stuart Turner Ltd for details of approved service engineers.

Symptoms	Probable Cause	Recommended Action
Lifting Station will not start.	Electrical supply.  Motor thermotrip activated.	Check wiring connections. Check all switches are 'on'. Check fuse (see technical specification section). Check circuit breaker is set.  Wait approximately 20 minutes for the thermotrip to auto-reset.
Lifting Station works, but does not discharge, or discharges slowly.	The outlet pipe is blocked.	Clean the outlet pipe.
The motor buzzes, but does not spin.	Pump is blocked.	<b>Do not attempt to service the Lifting Station.</b> Contact Stuart Turner Ltd.
After use, the Lifting Station hunts on and off.	The outlet non-return valve is leaking or there is water loss from the auxiliary sanitary connections.	Clean the non-return valve. Fix the leaks from the auxiliary connections.
The Lifting Station does not stop.	The outlet pipe is too high or too long. The outlet pipework is restricted. The internal pressure switch has failed.	Correct installation.  Clean the outlet pipe.  Pressure switch in need of replacement contact Stuart Turner Ltd.
The Lifting Station does not work with one of the auxiliary connections.	The inlet pipework or inlet non-return valve is blocked.	Clean the inlet pipe or non-return valve.
Water returns to the shower tray.	The minimum fall for the inlet pipe has not been met. The inlet non-return valve is blocked.	Correct installation.  Clean the non-return valve.
Odd noises when the Lifting Station operates.	Obstruction due to foreign object.	<b>Do not attempt to service the Lifting Station.</b> Contact Stuart Turner Ltd.
Nasty smells from the Lifting Station.	Active carbon filter need replacing. Pipework is obstructed.	Replace the filter.

8.13 **Environment Protection:** Your appliance contains valuable materials which can be recovered or recycled.  
At the end of the products' useful life, please leave it at an appropriate local civic waste collection point.

## 9 THE WASTEFLO GUARANTEE

Congratulations on purchasing a Stuart Turner Lifting Station.

We are confident this Lifting Station will provide many years of trouble free service as all our products are manufactured to the very highest standard.

The Wasteflo Lifting Station is guaranteed to be free from defects in materials or workmanship for 2 years from the date of purchase.

Within the guarantee period we will repair, free of charge, any defects in the Lifting Station resulting from faults in material or workmanship, repairing or exchanging the whole unit as we may reasonably decide.

Not covered by this guarantee: Damage arising from incorrect installation, improper use, unauthorised repair, normal wear and tear and defects which have a negligible effect on the value or operation of the Lifting Station.

Reasonable evidence must be supplied that the product has been purchased within the guarantee term prior to the date of claim (such as proof of purchase or the Lifting Station serial number).

This guarantee is in addition to your statutory rights as a consumer. If you are in any doubt as to these rights, please contact your local Trading Standards Department.

### Guarantee Call Out Procedure

In the event of a claim, **DO NOT remove or return the unit**, please telephone **'TechAssist'**.

**+44 (0) 800 31 969 80**

Have the following information ready before you call **'TechAssist'**.

- **Proof of purchase**
- **Serial number of product**

Full details will be given when contacting **'TechAssist'**.

You should obtain appropriate insurance cover for any loss or damage which is not covered by Stuart Turner Ltd in this provision.

Please record here for your records.

TYPE NO.	SERIAL NO.	DATE PURCHASED

## NOTES



**DECLARATION OF CONFORMITY**

**Machinery Directive – 2006/42/EC**  
BS EN ISO 12100

**Low Voltage Directive – 2014/35/EU**  
BS EN 12050-3, BS EN 12050-4, BS EN 60335-1

**EMC Directive – 2014/30/EU**  
BS EN 55014-1, BS EN 61000-3-2, BS EN 61000-3-3,

**EMF Directive – 1999/519/EC**  
BS EN 62233

**RoHs Directive – 2011/65/EU**

IT IS HEREBY CERTIFIED THAT THE STUART ELECTRIC MOTOR DRIVEN PUMP AS SERIAL NUMBER BELOW, COMPLIES WITH THE ESSENTIAL REQUIREMENTS OF THE ABOVE E.E.C. DIRECTIVES.

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RESPONSIBLE PERSON  
AND MANUFACTURER

STUART TURNER LIMITED  
HENLEY-ON-THAMES, OXFORDSHIRE  
RG9 2AD ENGLAND.

Signed .....  ..... Technical Director

Stuart Turner are an approved company to BS EN ISO 9001:2015



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