

DRAPER

EN

Original Instructions
Version 1
October 2025

230V SUBMERSIBLE

DIRTY WATER PUMP

WITH FLOAT SWITCH

27481



**UK
CA** **CE**

1. Preface

These are the original product instructions. Read the instruction manual in full and retain for future reference.

Please visit drapertools.com/manuals for the latest version of this manual and the associated parts list, if applicable.

1.1 Product Reference

User Manual for: 230v Submersible Dirty Water Pump
With Float Switch

Stock No: 27481

Part No: SWP330/850

1.2 Revisions

Version 1: October 2025
First release

As our manuals are continually updated, always ensure that the latest version is used.

1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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3. Product Introduction

3.1 Intended Use

This water pump is designed for submersion within a reservoir and is suitable for transferring and pumping water containing malleable debris of up to the maximum rated particle size. This pump is suitable for permanent or semi-permanent installations where the pump is **NOT** in constant use and in locations where it is necessary to maintain a set level of water or for temporary installation to drain reservoirs of unwanted water.

'Dirty water' pumps are intended for use in general irrigation and lowering water levels in inspection pits, trenches and footings where solids may be present. Dirty water is defined as water contaminated by soil, crop seepage, dairy products or cleaning materials and containing no more than 3% dry matter. These pumps are **NOT** suitable for use with sewage or cess pools.

'Clear water' is defined as water that is not muddied by sediment or algae and contains no visible particles. It is recommended to use clear water pumps **ONLY** in reservoirs that are completely free from debris.

Important:

- This pump is **NOT** suitable for continuous use such as water circulation (water features etc.).
- This pump should **ONLY** be used to lower water levels and **NOT** suitable for completely draining reservoirs.
- The pump should remain **COMPLETELY** submerged during the entire operation to ensure the pump remains cool and the motor is not damaged due to overheating. **Damage caused by overheating that occurs when the pump is NOT completely submerged during operation is NOT cover by your warranty.**
- This pump is **NOT** suitable for permanent installation in a fishpond or other reservoir containing water mixed with chemicals or other acidic contaminants, including salt water.
- Where the pump is used temporarily in a fishpond, remove the fish for the duration of the operation or place a guard around the pump inlet to prevent fish being drawn into the mechanism. Ensure the guard does not obstruct the impeller or prevent water from being drawn into the pump. **DO NOT** use this pump in fishponds where the fish are small enough to access the impeller.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

3.2 Specification

Stock No.	27481
Part No.	SWP330/850
Rated voltage:	230V/50Hz
Rated input:	850W
Usage:	Clear and dirty water
Maximum particle size:	35mm
Outlet aperture diameter:	38mm
Hose adaptor:	2 sizes
Hose diameter:	25mm (1'), 32mm (1 1/4")
Maximum flow rate:	330L/min
Maximum head height:	10.5M
Minimum water level for	
Starting:	10mm
Clear water:	1mm*
Dirty water:	15mm
Water inlet adjustment:	1mm to 35mm
Water temperature range :	5 – 35°C
Power cord length (approx.):	10M
IP rating:	IPX8
Appliance class:	I
Net weight (including accessories):	6.1kg

*Minimum water level above the base of the pump at which the pump can pass water. However, it is recommended that the pump remains completely submerged during operation to prevent compromising the motor. **1mm position should only be used for pumping clean water.**

4. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user or the product.

4.1 General Health and Safety Precautions

- Observe all standard safety precautions and good practices when working with electrical equipment and water.
- **DO NOT** modify this product in any way and **ONLY** use spare parts recommended by Draper Tools.
- Keep your work environment clear and well-lit, with bystanders at a safe distance.
- Before each use inspect the pump for damaged, cracked, loose or corroded parts and any leakages.
 - **Important: DO NOT** use this pump if it is leaking or damaged. **DO NOT** attempt to disassemble and contact Draper Tools to discuss repair and replacement options.
- Keep the power cord away:
 - from oil, sharp edges and sources of heat.
 - from the reservoir and other sources of moisture at all times.
- **NEVER** pull on the power cord to disconnect the plug from the socket.
- 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. Cleaning and user maintenance shall not be carried out by children unless they are aged from 8 years and above and supervised.
- Children shall **NOT** play with the appliance.

4.2 Additional Safety Information for this Submersible Water Pump

- **ALWAYS** disconnect the pump from the power supply before assembling, disassembling or cleaning.
- **ALWAYS** ensure the pump is switched off, unplugged from the power supply and has completely stopped before entering the water and moving or making any adjustments to the pump.
- The pump shall **NOT** be left outside during freezing weather conditions.

- The pump must **NOT** be used when people are in the water.
- This pump is **NOT** suitable for continuous pumping operations.
- **NEVER** use this product to pump or transport corrosive, flammable or explosive liquids or solvents.
- To reduce the risk of electric shocks, avoid contact with earthed objects during use.
- This pump is **NOT** controlled by a built-in manual power switch and will start up when connected to a live mains power supply if the float is in a raised position.
 - **ALWAYS** ensure the pump is positioned correctly and safely before switching the power supply on.
- Keep hands and loose clothing well away from the impeller while the pump is connected to a mains power supply.
- **NEVER** position the pump below the reservoir water inlet.
- **NEVER** pump water in the direction of people, electrical wiring or equipment.
- **DO NOT** stand the pump on the reservoir bed during use if sediment is present.
 - The pump should be suspended from a rope, chain or stood on a brick to prevent debris being drawn in to the impeller.



CAUTION! NEVER use the power cord or float switch cord for this purpose.

- The float switch **MUST** be held in position by the cord clamp during use.
- The float switch attached to this product is **NOT** suitable for continuous use as an **ON/OFF** switch.
 - Power to this device should be controlled by the mains power connection; the float switch is intended to stop the pump when the operation is complete.
- Ensure that there are no obstructions in the reservoir before switching on the pump.
- **DO NOT** leave this product unattended during use.
- **DO NOT** use this product with a programmer, timer, separate remote-control system or any other device that switches the product on automatically, or on any circuit that is regularly switched on or off by the utility, as it may pose a hazard if it is switched on unattended.

- **NEVER** run the pump dry.
- **NEVER** obstruct the outlet as this may severely damage the pump.
 - Stop the pump **IMMEDIATELY** if you suspect that the outlet or inlet may be blocked or jammed.
- Transport the pump using the built in carry handle.
 - **NEVER** carry by the plug, cord or float switch.
- **ALWAYS** use, transport and store this product in its upright position.

4.3 Connection to the Power Supply

This appliance is supplied with an approved plug and cord for your safety.

If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.

The damaged or incomplete plug, when cut from the cord, shall be disabled to prevent connection to a live electrical outlet.

This product is a Class I[†] appliance and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted


The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, use a small plain-slot screwdriver to remove the fuse cover. Ensure

the substitute is of the correct rating, approved to BS 1362 and ASTA or BS Kite marked.

ASTA  BSI 

This should only be performed by suitably qualified personnel.

Important: If an extension lead is required, use an approved and compatible lead rated for this appliance. Unwind the entire lead and follow all the instructions supplied with the extension lead.

[†]Earthed : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

Important: This product **MUST** be used with a RCD (residual current device) with a rated residual operating current of no greater than 30mA. If an extension lead is used, the RCD **MUST** be installed at the power outlet and not into the extension lead.

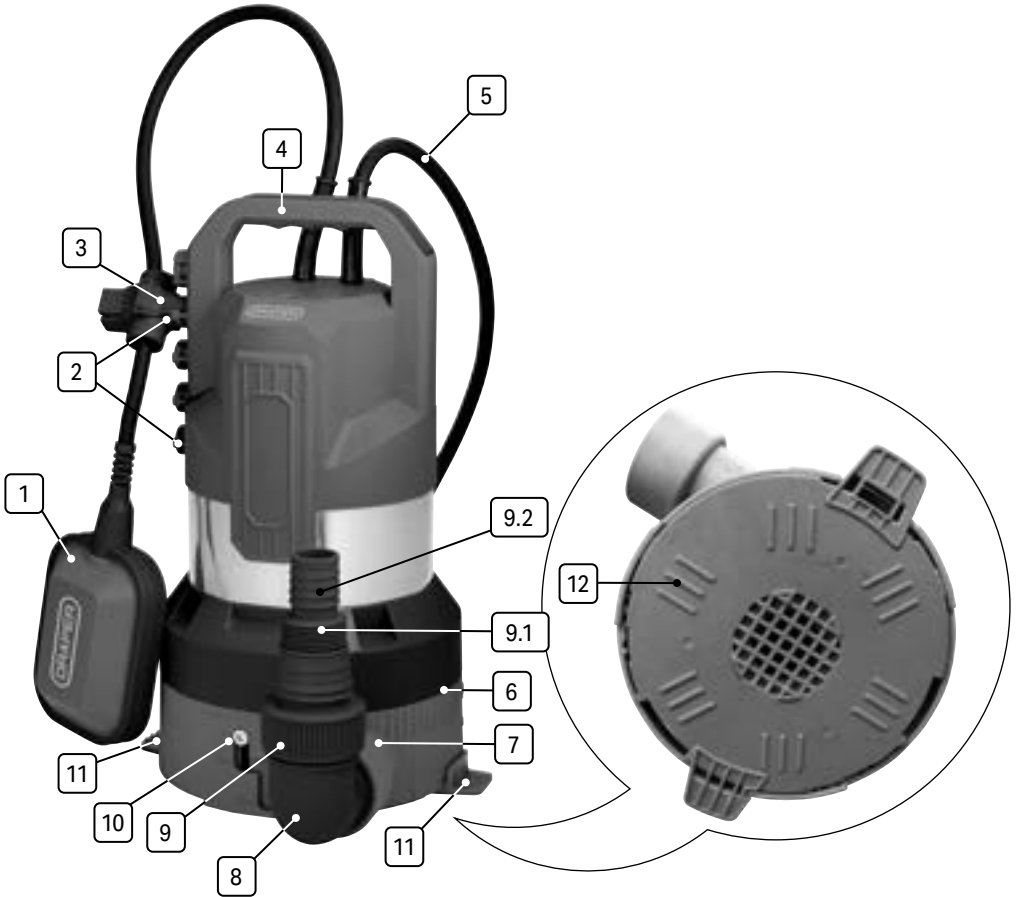
4.4 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

5. Identification and Unpacking

5.1 Product Overview

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. **DO NOT** attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- 1 Float switch
- 2 5 Float switch height positions
- 3 Float switch clamp
- 4 Carry handle

- 5 Cord and plug
- 6 Impeller housing
- 7 Pump outlet
- 8 Outlet connector
- 9 Hose adaptor

- 9.1 32mm thread fit
- 9.2 25mm push fit
- 10 Particle size adjuster
- 11 Inlet adjuster levers
- 12 Pump inlet

5.2 Packaging

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6. Preparation Instructions

Important: Before preparing or adjusting this product, read and understand all the safety instructions listed in this manual.

WARNING! ALWAYS ensure the pump is switched off, unplugged from the power supply and has completely stopped before installing or making any adjustments to the pump.

6.1 Fitting the Outlet Connector and Hose Adaptors (Fig.1 – Fig.2)

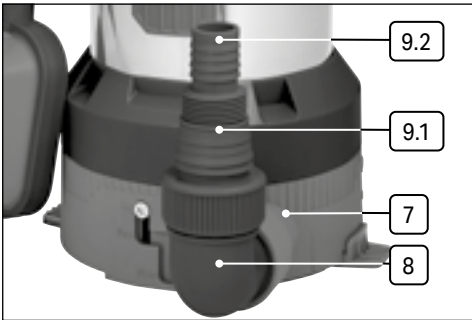


Fig. 1

1. To connect a delivery hose, screw the outlet connector (8) into the pump outlet (7).
2. Then screw the 32mm hose adaptor (9.1) onto the outlet connector.
 - To achieve an airtight seal, it is recommended to wrap PTFE tape around the screw thread of the connector/adaptor.
 - The adaptor can be used with a 'layflat' hose with an external diameter of 32mm or 25mm. **Note:** the flow rate will be reduced when the 25mm connector is used.

3. Secure the delivery hose to the adaptor using a suitable retaining clip.

To use the 25mm diameter hose connector

- Push the hose onto the end of the adaptor (9.2).

To use the 32mm diameter hose connector

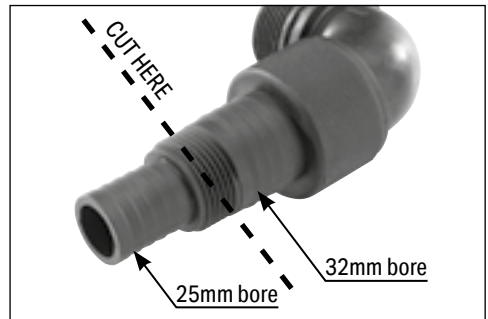


Fig. 2

- To use the 32mm diameter without reducing the flow rate, remove the narrower end of the 25mm hose connector.
- Cut through the threaded section of the narrower end (Fig.2), then slide the hose onto the larger grip.

Important: Once the adaptor has been cut it cannot be used for 25mm diameter hoses.

6. Preparation Instructions

6.2 Installation and Placement (Fig.3)

Important: The water pump should **ONLY** be used to transport water containing debris of up to the rated maximum particle size. Remove any debris that exceeds the maximum particle size from the reservoir before operating to prevent damage to the impeller and pump.

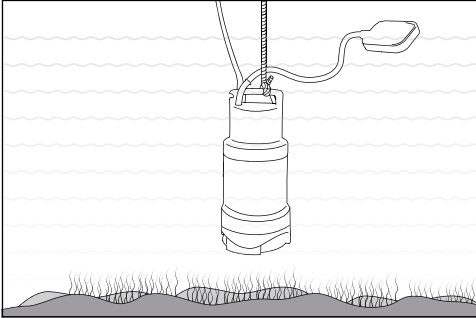


Fig. 3

1. Ensure the pump is switch off and unplugged from the power supply before submerging the pump.
2. Adjust the float – see **section 6.4**.
3. Select the relevant particle size for the water inlet – see **section 6.3**.
4. Lower the pump into the reservoir by holding the handle **4** or by attaching a rope or chain to the handle.

CAUTION! DO NOT use the float switch or power cord to lower the pump into the reservoir.

5. Tip the pump slightly when submerging to force out any residual air from inside the pump.
6. Ensure the pump is positioned so that the float switch can move freely. If the float switch becomes trapped or obstructed it may not lower with the water level causing it to operate continuously when the water level is too low.
- Minimum clearance of 60 × 60cm around the pump is required to allow the float switch to move freely.
7. Ensure that the hose is as straight as possible and free from kinks, splits or obstructions.

CAUTION!

- To ensure the motor remains cool the pump must remain submerged throughout the entire operation.
- **DO NOT** run the pump dry.
- Using the pump above the water level may cause the motor to overheat and damage the pump.

6.3 Adjusting the Water Inlet Particle Size (Fig.4 – Fig.6)

The water inlet particle size can be changed between 1mm, 15mm and 35mm by lifting the pump slightly and turning to select the appropriate particle size. **1mm position should only be used for pumping clear water.**

To adjust the water Inlet particle size

- Support the pump by pressing down on the inlet adjuster levers **11**.
- Then hold and pull up the handle **4** and rotate the particle adjuster **10** until the required particle size is selected.

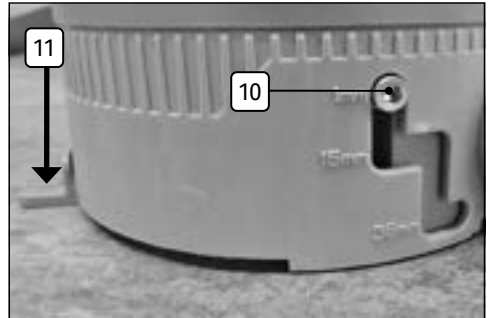


Fig. 4

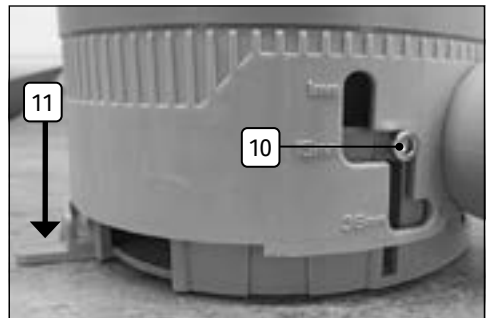


Fig. 5

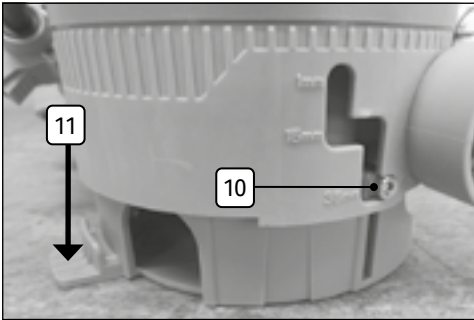


Fig. 6

6.4 Positioning the Float Switch (Fig.7 – Fig.9)

The float switch **1** controls the water level at which the pump will automatically switch on and off during operation. As the water level drops the float switch will activate and tip downwards.

- The float switch cord is anchored by the clamp **3** and the cord distance can be adjusted to determine the change in the volume of the water level required to switch the pump 'ON' or 'OFF'. Attach the clamp to one of the five positions available **2**.

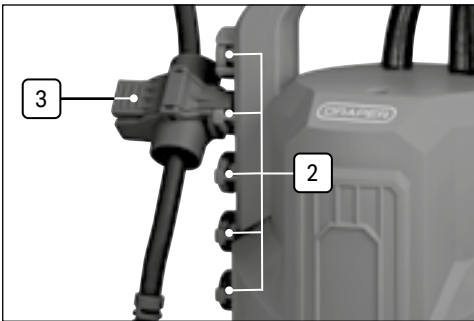


Fig. 7

- **Shorter distance between the float switch and cord clamp.**

- Reduces the change in depth required to switch the pump 'ON' or 'OFF'.
- The pump will switch 'ON' at a lower water level.
- The pump will switch 'OFF' at a higher water level.
- Use the shortest distance possible to ensure the pump switches 'OFF' when the water level reaches the top of the pump. **Note:** the pump will switch 'ON' at any time that the water level rises above the top of the pump.

Important: If the distance is set to short the pump will not operate.

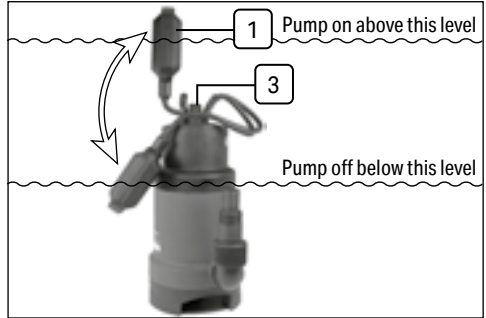


Fig. 8

- **Longer distance between the float switch and cord clamp.**

- The pump will switch 'OFF' at a higher water level.
- The pump will switch 'ON' at a lower water level.
- Use a longer distance if a higher water level is permissible. **Note:** the pump will not switch off automatically when the water level reaches the top of the pump. In this case the pump will need to be switched off manually – See **section 7.1**.

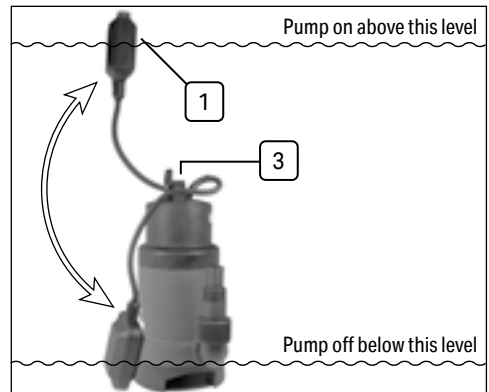


Fig. 9

7. Operating Instructions

Important: Before operating this product, read and understand all the safety instructions listed in this manual. Ensure that the pump is prepared and positioned correctly before connecting to the power supply.



CAUTION!

- **DO NOT** allow the pump to operate if the water level is lower than the rated minimum water level.
- To prevent overheating the pump must remain submerged for the entire operation.
- **DO NOT** leave the pump unattended while running.

7.1 Switching the Pump 'ON' and 'OFF'

1. Once the pump is correctly positioned, connect it to a mains power supply via an RCD and switch on the supply.
2. If the water level is high enough to maintain the float switch connection, the pump will automatically start.
3. The pump will automatically deactivate when the float switch drops to the appropriate level to break the switch connection.
4. Once this occurs disconnect from the power supply.

Manual Switch OFF

- To manually switch off the pump, hold the float switch downwards in a vertical position until it is lower enough to switch off.

7.2 Thermal Overload

- This pump is fitted with a thermal overload that will cause the pump to cut out if the internal temperature becomes too hot. If this occurs disconnect the pump from the power supply and investigate the possible causes – see **8.3 Troubleshooting**.
- Allow to cool for at least 10 minutes before restarting.

7.3 Pumping Distance and Volume

- The maximum horizontal pumping distance and hourly volume of water transferred are directly affected by the working head height.
- The term '**head**' refers to the difference in vertical height between the water surface and the highest point to which the water is pumped, regardless of the length of the hose. As the head increases the pumping distance and volume decreases more rapidly.

- **Important: ALWAYS** ensure the pump is switched off, unplugged from the power supply and has completely stopped before making any adjustments, cleaning or carrying out any maintenance.
- Technical maintenance and servicing must only be carried out by Draper Tools or an authorised service agent.

8.1 General Maintenance and Storage

- Periodically flush the pump out with fresh clean water especially if left in water for extended periods or has not been used for some time.
- Regularly check and clean the impeller to prevent the build up of debris – see **section 8.2**.
- Clean the outside of the pump with a damp cloth **ONLY**. Ensure the pump is completely dry before storage.
- **DO NOT** use solvents or aggressive chemicals to clean this product as they may damage the plastic or insulated parts.
- Store the product out of direct sunlight and out of the reach of children.

8.3 Troubleshooting

- If the product is installed permanently, run the pump at least once a week to prevent the motor seizing or binding.
- Protect the product from frost.



CAUTION! NEVER allow residual water inside the pump to freeze as this may cause irreparable damage.

8.2 Clearing Impeller Obstructions

1. Unscrew the particle adjustments screws (10). Then lift off the base.
2. Remove the cross slot screws from the grey outlet housing and lift off to access the impeller.
3. Check the impeller and housing for foreign objects / debris that may be obstructing the rotation of the impeller.
4. Remove any residual debris.
5. Then reassemble the base.

Important: If the impeller is cracked or damaged in any way. **DO NOT** continue to use the pump. Contact **Draper Tools** for advice.

Problem	Possible cause	Remedy
Pump does not switch on.	The power cord is not connected to an active power supply.	Check the connection to the power supply.
	The power cord or plug is damaged or faulty.	If the power supply cord is damaged, it must be replaced by Draper Tools, an authorised service agent or similarly qualified personnel in order to avoid a hazard.
	The float switch has not been raised to a high enough position.	Lower the position of the pump or shorten the length of cord between the float switch and cord clamp.
No output of water..	The water level is below the minimum operating level of the pump.	Increase the water level or lower the pump where possible.
	The water inlet/impeller is clogged.	Check and clean the impeller – see 8.2 .
	The outlet or hose adaptor is clogged.	Remove the hose adaptor and connector and check the outlet for obstructions.
	The head height exceeds the capabilities of the pump.	Reduce the vertical distance that the water must be pumped.

8. Maintenance and Troubleshooting

Problem	Possible cause	Remedy
Water leaking from pump or hose.	The hose adaptor O-rings are damaged or missing.	Check and replace as necessary. Wrap PTFE tape around the adaptor threads before reassembling.
	Impeller jammed or obstructed.	Check and clean the impeller – see 8.2.
Thermal load activated and pump stopped.	Water being pumped too hot.	Maximum water temperature is 35°C.
	Pump ran dry.	Allow the pump to cool and adjust the water level or pump position before restarting.

9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

Important: ALWAYS drain and thoroughly clean the pump of any water and debris before returning it to Draper Tools or its authorised agent. Draper Tools and its agents will not service any product that has been used to pump sewage, slurry or other such materials.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.



10. Warranty

12 months from date of purchase – Visit drapertools.com/warranty for more information. However, if the tools are hired out, the warranty period is 90 days from the date of purchase.



Read the instruction manual



Warning!



Earthed



WEEE -

Waste Electrical & Electronic Equipment

Do not dispose of Waste Electrical & Electronic Equipment
in with domestic rubbish



European conformity



UK Conformity Assessed

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