

SCH

(SUPPLIES) LIMITED

Manufacturers & Suppliers of Estate & Garden Machinery
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OPERATING INSTRUCTIONS

MUST BE READ PRIOR TO OPERATING THIS MACHINE



TROLLEY MOUNTED WATERERS

Ref: THBW & HBWP

DESCRIPTION

The THBW waterer is a very useful 70 litre water dispenser. It is complete with 6-metres of heavy-duty hose with on/off facilities on the lance. The robust frame is mounted on two large pneumatic front wheels, two rear castor wheels and a parking brake. A useful trash bucket is also fitted. The water is dispensed by a 12-volt pump that is powered from an integral rechargeable battery. A lightweight trigger lance puts the water where it is required.

The HBWP Compact Trolley Mounted Waterer has a 1/2" heavy-duty 3.66 metres hose, complete with an on/off lever tap, and quick fit coupling for simple lance change over. It also features two large pneumatic front wheels, and two rear castor wheels. A parking brake is incorporated in the design and a rash bucket is fitted as standard.

SPECIFICATIONS - THBW

Tank capacity	70 Litres
Dimensions	W:600mm, H:800mm, L:1350mm
Weight	Empty: 30kg, Full: 99kg
Pump	12-volt diaphragm pump 18 litres per minute, powered from a rechargeable battery

SPECIFICATIONS - HBWP

Tank capacity	50 Litres
Dimensions	W:540mm, H:800mm, L:1450mm
Weight	Empty: 30kg, Full: 75kg
Pump	12-volt diaphragm pump 18 litres per minute, powered from a rechargeable battery

Each tank holds 25-litres, it is advised only to fill to the 20-litre mark.

SAFETY INSTRUCTIONS

- Always keep the unit in a safe place
- Avoid steep gradients and uneven ground.
- Do not attempt to lift the whole unit when full.
- Always check that the battery connections are secure
- Do not attempt to pull or move the waterer by pulling on the delivery hose.
- Do not point the lance at other persons
- Make sure the unit is chocked securely before operation
- The only power source must be 12-volt DC

If in doubt, please call the SCH customer help line at **01473 328272**.

IMPORTANT

- **DO NOT RUN THE PUMP WITHOUT WATER.**
- Do not use the pump in water temperatures above 60 degrees.
- The pumps maximum speed has been pre-set and must not be altered.
- Protect the unit from frost.
- Do not leave water in the pump if there is a danger of freezing.
- Keep the filter on the suction hose clean.
- This machine is designed for watering purposes only and not suitable for human consumption.
- It is advisable to recharge the battery daily if the waterer is used regularly.

OPERATING INSTRUCTIONS

- Fit the battery into the battery compartment.
- Place the brown wires onto the (+) terminal
- Place the blue wires onto the (-) terminal.
- Make sure the unit is securely chocked.
- Fill the tank with water.
- Switch pump on
 - open lance tap and pump will run
 - close and pump will shut down
- The lance tap is parallel with the hose.

The water flow is on a pressure system, turn the hose tap off and the pump will stop, turn the tap on the pump will start up.

BATTERY

- The battery should be charged after use; we recommend at least 12 - 15 hour charge.
- If the waterer is not used for a prolonged period of time disconnect the battery
- Only use the charger provided

PARTS LIST - THBW

Description	Ref
Replacement Pump	THBW01
Battery (12 amp)	THBW02
Battery (24 amp)	THBW02/22
Battery Charger (12 amp)	THBW03
Battery Charger (24 amp)	THBW03/22
Charger Battery Connection Leads	THBW04
Extension Hose	THBW05
Rose Head	THBW06
Telescopic Lance Complete	THBW07
Short Lance Complete	THBW08
Ballast Tank 70 Litre	THBW09
Tank Lid	THBW10
Tank Retaining Straps	THBW11
On/Off Switch	THBW12

PARTS LIST - HBWP

Description	Ref
Replacement Pump	HBWP01
Battery	HBWP02
Battery Charger	HBWP03
Charger Battery Connection Leads	HBWP04
Extension Hose	HBWP05
Rose Head	HBWP06
Telescopic Lance Complete	HBWP07
Short Lance Complete	HBWP08
Ballast Tank 25 Litre	HBWP09
Tank Lid	HBWP10
Tank Retaining Straps	HBWP11
On/Off Switch	HBWP12

FLOJET

Model 4300 Industrial Series "Quad" Demand Pump

Model 4300 Industrial Series

PUMP INSTALLATION MOUNTING

Flojet 4300 is a self priming pump. It may be located several feet from the tank, above or below the liquid level (It is not a submersible pump.) For vertical pump mounting be sure that the motor is located on top. This will prevent water from entering the motor chamber in event of a leak.

PLUMBING

For best performance, flexible hose is recommended instead of rigid piping at the pump. Flojet 4000 Series ports are a push in type retained by a "C" clip. To install the 4000 ports move "C" clips to rear of pump. Push the port until snug. Slide "C" clip forward to front of pump. Do not install pump such that plumbing causes excessive stress on either port.

It is essential that a 20 mesh strainer or filter be installed in the tank or in the pump inlet line to keep large foreign particles out of the system. The Flojet 1600 Series 40 or 20 mesh strainer is available with various connections to fit most installations. For more information, request Form No. 81000-072. The use of check valves in the plumbing system may interfere with the priming ability of the pump. Check valves, if used, must have cracking (opening) pressure of no more than 2 psi.

**PRODUCT WARRANTY IS VOID
IF INSTALLATION INSTRUCTIONS
ARE NOT FOLLOWED**

TROUBLESHOOTING

Motor operates, but no pump discharge (Failure to Prime)

- Restricted intake or discharge line. Open all line valves.
- Check for debris in check valves.
- Check for clogged inlet filter.
- Air leak in intake line.
- Punctured pump diaphragm.
- Defective pump check valve.
- Crack in pump housing.

Motor Fails to Turn On

- Pump or equipment not plugged in electrically.
- Loose wiring connection.
- Defective motor or rectifier.

ELECTRICAL

On 115 Volt AC pumps, the black wire lead is common, the white is neutral and green/yellow is ground. On 230 Volt AC pumps, the brown wire lead is common, the blue is neutral and the green/yellow is ground. Never connect the green (or green/yellow) wire to a five terminal. On 12 and 24 Volt DC pumps, match red (+) and black (-) power leads with red and black leads on motor or switch.

OPERATION

Allow pump to prime with discharge line (or spray valve) open, to avoid airlock. Built-in pressure switch will shutoff pump automatically when discharge valve is closed and will restart pump when valve is opened. When pump runs out of liquid, it will continue to operate. Running dry will not damage the pump. Turn off manually.

SPRAY TIP

In spraying applications the pressure generated by the pump is generally dependent upon the size of the spray nozzle. An undersized spray nozzle will cause the pump pressure switch to cycle on and off and create a pulsating flow from the pump. To maintain a smooth flow and constant operating pressure, the smallest size spray nozzles that may be used are as follows:

MODEL	MINIMUM NOZZLE SIZE	
	Equiv. Orifice Diam.	Last 2 Digits*
4300-042	9/64"	30
4300-142	9/64"	30

*Ref. Spraying Systems Catalog

Pump Fails to Turn Off after Discharge Valves are Closed

- Depletion of available liquid supply.
- Punctured pump diaphragm.
- Discharge line leak.
- Defective pressure switch.
- Insufficient voltage to pump.

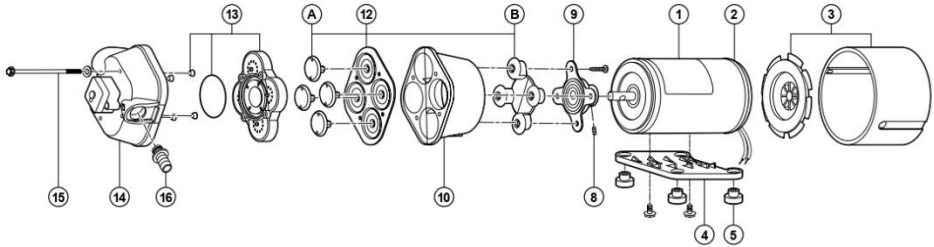
Low Flow and Pressure

- Air leak at pump intake.
- Accumulation of debris inside pump and plumbing.
- Worn pump bearing (excessive noise).
- Punctured pump diaphragm.
- Defective rectifier or motor

Pulsating Flow- Pump Cycles on and off

- Restricted pump delivery. Check discharge lines, fittings, valves and spray nozzles for clogging or undersizing.

PARTS LIST MODEL 4300 SERIES



KEY PART NO.	DESCRIPTION	4300 SERIES DASH NO.						
		QTY	-042	-141	-242	-500	-501	-502
1	02009-027 12V DC Mtr (TEFC)	1		X	X		X	X
	02029-039 115V AC Mtr (TEFC)	1	X					
	02039-027 230V AC Mtr (TEFC)	1		X				
2	20115-114 Brush Endbell/Rect. Assy. (AC) w/BRG	1	X				X	
	20115-219 Brush Endbell/Rect. Assy. (AC) w/oBRG	1	X				X	
	20115-213 Brush Endbell Assy. (DC) w/oBRG	1		X		X		X
	20115-113 Brush Endbell Assy. (DC) w/BRG	1		X		X		X
3	20132-005 Fan/Shroud Kit	1	X	X	X	X	X	X
4	11028-101 Plastic Baseplate Assy. with Grommet & Screws	1	X	X	X	X	X	X
5	20132-000 Grommet Kit	Set of 4	X	X	X	X	X	X
8	20552-000 Cam/Bearing Set Screw	1	X	X	X	X	X	X
9	20400-002 Cam/Bearing Kit w/Set Screw	1	X	X	X	X	X	
	20400-003	1						X
10	20401-000 Bearing Cover P.P.	1	X	X	X	X	X	X
12	20403-040 Diaphragm Kit w/Pistons & Screws	1	X	X	X	X	X	X
	20403-050 Santoprene ®							
	20403-050 Geolast ®							

KEY PART NO.	DESCRIPTION	4300 SERIES DASH NO.						
		QTY	-042	-141	-242	-500	-501	-502
13	Check Valve Kit w/"O" Ring & Ferrules	1						
	20407-020 Viton ®	1				X	X	
	20407-030 EPDM	1	X	X	X			X
14	Upper Housing Assy Kit							
	20404-018 E/S SW45	1	X					
	20404-017 V/G SW45	1					X	
	20404-001 E/S SW45	1		X				
	20404-007 V/G SW45	1			X			
	20404-020 E/S SW30	1			X			
	20404-003 E/S SW45	1						X
15	20405-000 Pump Screw Kit w/Washer & Ferrules	1	X	X	X			X
	20405-002 Geolast ®	1				X	X	
16	20381-002 1/2" Port Kit EPDM	2	X	X	X			
	20381-015 1/2" Port Kit Viton ®	2				X	X	
	20381-006 3/4" Port Kit EPDM	2						X
	20381-007 Garden Hose Port Kit	2						X
	Pump Head Assy							
	20406-020A	1	X					
	20406-021A	1					X	
	20406-000A	1		X				
	20406-005A	1			X			
	20406-023A	1			X			
	20406-002A	1						X

SERVICE TIPS

DISASSEMBLY Remove four pump head screws (15). Rotate bearing cover (10) so drain notch is aligned with cam/bearing assembly set screw (8). Loosen set screw with 1/8" allen wrench and slide pump head off shaft. Always use complete FLOJET repair kits upon reassembly.

ASSEMBLY Install new single-piece outer piston (B) into lower housing (10) with piston tops pointing away from motor. Slightly bend outer piston (B) along remolded crease to aid assembly. Place diaphragm in lower housing (10) with the molded o-ring seals facing away from motor. Insert each inner piston (A) through diaphragm into outer piston. Turn each piston until fully seated. Align cam/bearing assembly (9) with outer piston (B). Secure with cam/piston screws using 18 inch pounds of torque. Reassemble lower housing (9, 10, 12) to motor. Set screw MUST be positioned over shaft indentation and secured tightly. Reassemble pump upper housing (13-16). Check that ferrules are installed in upper housing and O-ring is properly seated before inserting check valve assembly (13) into upper housing (14). Align pump assembly to motor and tighten pump head screws evenly with 25 inch pounds of torque.

WARRANTY

FLOJET warrants this product to be free of defects in material and/or workmanship for a period of one year after purchase by the customer from FLOJET. During this one year warranty period, FLOJET will at its option, at no charge to the customer, repair or replace this product if found defective, with a new or reconditioned product, but not to include costs of removal or installation. No product will be accepted for return without a return material authorization number. All return goods must be shipped with transportation charges prepaid. This is only a summary of our Limited Warranty. For a copy of our complete warranty, please request Form No. 100-101.

RETURN PROCEDURE

Prior to returning any product to FLOJET, call customer service for an authorization number. This number must be written on the outside of the shipping package. Place a note inside the package with an explanation regarding the reason for return as well as the authorization number. Include your name, address and phone number.

Flojet



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WARRANTY

Your unit is guaranteed for 12 months from date of purchase. This guarantee covers faults which may occur from defective parts or manufacture.

This warranty only covers the unit for products that may be diluted with water. Tar based products are not recommended.



If you are missing your free brochure contact us on **01473 328272**, email **sales@schsupplies.co.uk**, or visit our website **www.schsupplies.co.uk**

