

# SCH

(SUPPLIES) LIMITED

**Manufacturers & Suppliers of Estate & Garden Machinery**  
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**[www.schsupplies.co.uk](http://www.schsupplies.co.uk)**

## OPERATING INSTRUCTIONS

**MUST BE READ PRIOR TO OPERATING THIS MACHINE**



## 4 Wheel Towed Water Trailers

Ref: WC(E)(P) & EWC(E)(P)

## DESCRIPTION

The WC(P) & WC(E) are suitable for tractors and ATVs of 24hp and above, and have a 600L capacity.

The EWC(P) & EWC(E) are suitable for tractors and ATVs of 30hp and above, and have 900L capacity.

The caged tanks are secured to a flatbed trolley with the pump unit mounted separately on the front of the unit. When the unit is not required for watering the tank can be removed to give a useful 4-wheel trolley.

## SPECIFICATIONS – WC(P) & (E)

Petrol Pump	WC(P) – 1" centrifugal pump
Electric Pump	WC(E) – 12-volt electric, powered from the towing vehicle or a rechargeable battery.
Tank capacity	600 Litres
Flow Rate - Petrol	150 Litres (33 Gallons) per minute – adjustable
Flow Rate - Electric	12 Litres per minute
Hose	6m (20") Heavy duty hose
Dimensions	L – 2220mm (including towbar), W - 1200mm, H – 1360mm
Weight	Empty – 98kg, Full – 650kg

## SPECIFICATIONS – EWC(P) & EWC(E)

Petrol Pump	EWC(P) – 1” centrifugal pump
Electric Pump	EWC(E) – 12-volt electric, powered from the towing vehicle or a rechargeable battery.
Tank capacity	900 Litres
Flow Rate - Petrol	150 Litres (33 Gallons) per minute – adjustable
Flow Rate - Electric	12 Litres per minute
Hose	6m (20”) Heavy duty hose
Dimensions	L – 2500mm (including towbar), W - 1430mm, H – 1600mm
Weight	Empty – 130kg, Full – 1037kg

## IMPORTANT

- DO NOT RUN THE PUMP WITHOUT WATER.
- Do not run the pump with the tap closed.
- Do not exceed the towing capacity.
- The electric 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.

## SAFETY INSTRUCTIONS

- These water carts carry a 'live load' of water, care must be taken when towing these units, no excessive speeds, no sharp or tight cornering at speed, no dangerous inclines or slopes, stopping distances are increased.
- Make sure the tank is securely fastened to the base unit.
- Make sure the waterer is securely attached to the towing vehicle
- Check wheels are securely in place and have correct pressure
- Do not allow person to travel on the waterer
- Avoid steep gradients and uneven ground.
- 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
- Always keep the unit in a safe place

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

## **OPERATING INSTRUCTIONS – ELECTRIC PUMP**

- Fix clips on the orange lead to the battery to be used
- Make sure the filter on the tank end of the inlet pipe is clean
- Open the red lever top on discharge hose (lever running parallel with the hose)
- Switch on the pump, run the pump till you have a good flow of water
- Close the red lever tap and the pump will automatically shut down.  
Open the lever tap and the pump will re-start

## **OPERATING INSTRUCTIONS – PETROL PUMP**

Follow the instructions as given in the pump manual.

## **MAINTENANCE**

chassis -

- Make sure all wheels are secure
- Grease wheels hubs
- Tighten all nuts and bolts

Electric Pump -

- Check battery connections are secure
- Clean filter on suction hose

Petrol Pump -

- As per instructions in pump manual

### 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.

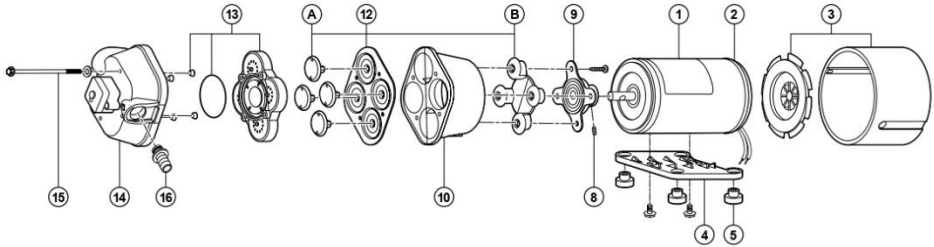
#### Low Flow and Pressure

- 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					X
	02039-027 230V AC Mtr (TEFC)	1		X				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	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 @ Geolast @	1	X	X	X	X	X	X

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	1	X					
	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](mailto:sales@schsupplies.co.uk)**, or visit our website **[www.schsupplies.co.uk](http://www.schsupplies.co.uk)**

