

AMBIC[®]

High Volume DC Peristaltic Pump



OPERATING INSTRUCTIONS

leading best practice in livestock health management

Ambic Equipment Ltd – High Volume Peristaltic Pump (24V DC) Operating Notes

Introduction

The High Volume Peristaltic Pump is supplied as stand-alone pump. The final delivery is dependent upon the tube type that is fitted to the pump. Currently we have two tubes sizes available.

Safety

This unit must be connected to an isolator with at least 3mm separation in all poles.
This unit must be earthed.



CAUTION: *Wear protective clothing and eyewear when dispensing chemicals or any other materials. Observe safety handling instructions (MSDS) of chemical manufacturers.*



CAUTION: *To avoid severe or fatal shock, always disconnect main power when servicing the unit.*

Specifications

Pump delivery Using Water at room temperature with one metre suction tube:

Pump Voltage	Pump Speed	Tube Bore	Delivery Rate (per minute)	Current drawn
24V	40rpm	9.6mm	0.7 litres	0.5A
24V	40rpm	12.7mm	1.1 litres	0.5A

Installation

Pump

The pump will turn clockwise during operation. Liquid intake is on the left hand spigot and delivery is on the right hand spigot. Ensure that the correct tube sizes are used.
Secure the suction and feed tube with Jubilee clips.

Mounting

The pump is designed to be fitted to a suitable plastic or metal enclosure with the correct cut out. Fixing holes are provided for M4 screws.

Power

The 24V DC wires must be tied to a solid surface. This should be connected to the supply voltage via a terminal block or crimps, as per your requirements.

Please check the Pump Voltage before connecting the supply.

Operation

The pump will run in response to application of a 24V DC supply and stop on removal of the supply. There are no other controls.

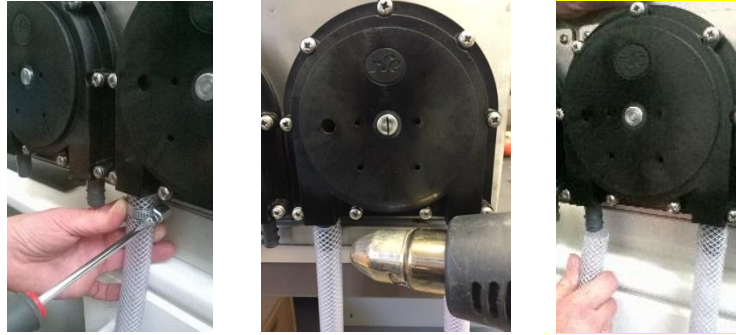
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Replacing the peristaltic tube

WARNING – Face mask and gloves must be used for protection from chemical contact.

1. If possible drain the chemical from the Pump Tube.
2. Switch the Pump OFF.
3. Remove the inlet (suction) and outlet (delivery) tube / hose. You may need to use a heat gun to warm the tube first, twist and pull back.

Warning – A sudden pull on the tube may splash residual chemicals from the tube.

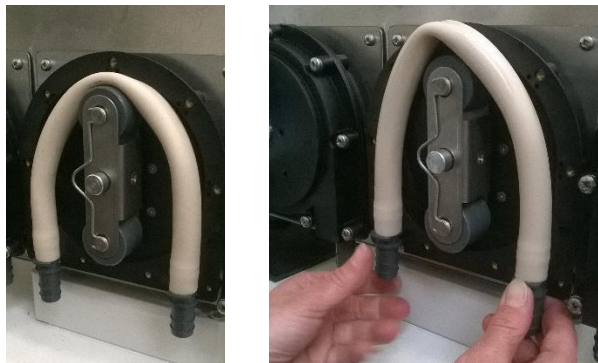


4. Remove the nine screws holding the cover, and remove the cover slowly.



5. Gently pull the tube from the Pump housing and discard safely.

Warning – Residual chemical could splash from the tube.



6. Turn the roller assembly so that it is at the 12 o' clock position, if not already in that position.

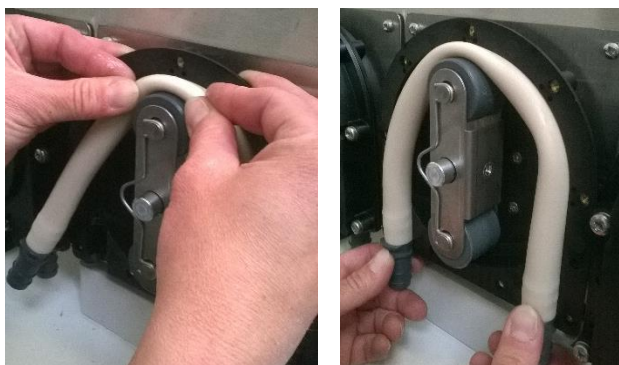


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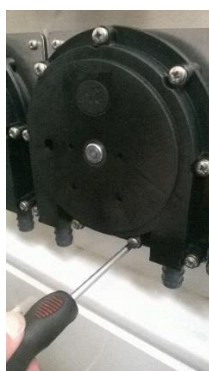
7. Apply a pea-sized amount of silicone grease to the new tube before fitting it. Fit the tube spigots to the pump block so that the spigot ridges are in the correct place.



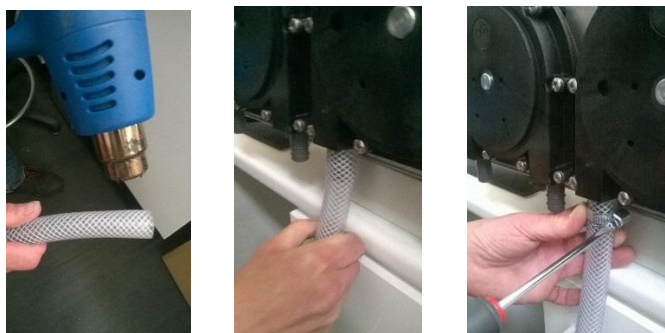
8. Pinch the centre of tube and push it between the roller and pump housing at the 12 o'clock position. The spigots may come out from the base of the pump block. If this happens push them back into place to re-fit.



9. Fit the cover and secure using the nine screws and washers.



10. Fit the inlet (suction) and outlet (delivery) tube / hose. It may be necessary to slightly warm the tube using a heat gun. Fit Jubilee clips if required.



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Troubleshooting

Fault	Cause	Remedy
Pump does not work	<p>Pump is not connected to the supply.</p> <p>The supply is Switched OFF.</p> <p>Pump is drawing current but not running.</p>	<p>Check that pump is connected to supply voltage.</p> <p>Switch the supply ON.</p> <p>Check the supply is capable of supplying the required current.</p>
No pump output delivery	<p>Pump is not running.</p> <p>Spinner assembly is not running clockwise.</p> <p>Inlet tube is not connected to the left hand spigot.</p> <p>Suction tube assembly is not properly inserted into chemical drum.</p> <p>Stiffener not fitted to the suction tube.</p> <p>Kinks in the suction and/or delivery tube.</p>	<p>Connect the power to the pump.</p> <p>Reverse the supply connections.</p> <p>Connect the inlet (suction) tube to the left hand spigot.</p> <p>Insert the suction tube into the drum.</p> <p>Fit a stiffener tube; this will help with keeping the suction tube to the bottom of the drum.</p> <p>Remove the kink and make sure it does not happen in the same place again.</p>
Pump does not lift the liquid	Peristaltic tube needs replacing.	Replace the tube with correct size bore, spigot and shore hardness.
Chemical seems to be lift and then dropping back.	<p>Peristaltic tube needs replacing.</p> <p>Air getting inside the tube.</p>	<p>Replace the tube with correct size bore, spigot and shore hardness.</p> <p>Check if the suction tube is fitted tight on the spigot and if necessary fit a jubilee clip.</p>

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Parts Listing

The following spare parts are available to order separately:

<p>AHP/100-SA-12 12.7mm Peristaltic Tube</p>	<p>AHP/100-SA-09 9.6mm Peristaltic Tube</p>
	
<p>AHP/103 Pump Block and Cover</p>	<p>AHP/102 Roller Assembly</p>
	
<p>ALP/115 Silicone Grease</p>	<p>AHP/100-24-40 24V DC Motor</p>
	



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