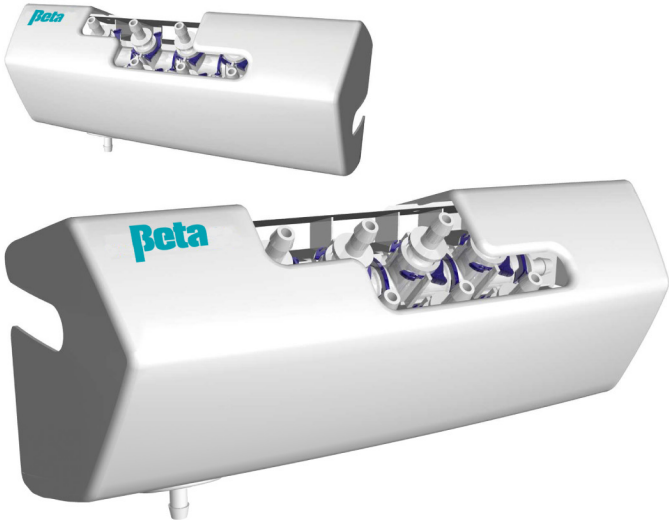




Manifold QF Troubleshooting Guide



Contents

Description	Page
Safety	3
Introduction	3
Troubleshooting Table	4

Safety

Always wear the required Personal Protective Equipment (including gloves and goggles that must be worn when potentially exposed to any hazardous materials and when carrying out hazardous work tasks). Turn the dispenser off during cleaning and note that parts may be contaminated with product. If possible, flush tubing out with water prior to carrying out any maintenance. For information on products that are used in this dispenser, please carefully read the product label and Material Safety Data Sheet (MSDS).



Before working on the manifold, the L5000 dispenser should be isolated from any electrical source.

Introduction

The following trouble shooting guide will enable you to determine the cause of many of the problems you may encounter. To rectify the fault please see the reference guide for further instructions.

Problem	Possible Cause	Solution
Leaks from NRV's (including air inlet NRV)	Loose connection	Check blue clips are securely fastened
	Dirt or Debris on O-rings	Remove NRV and check O-rings for debris. Rinse or replace NRV as necessary
	Degradation of O-rings	Remove NRV and check O-rings for chemical attack. Replace NRV as necessary
Leaks from T-Pieces	Loose connection	Check blue clips are securely fastened
	Degradation of O-rings	Remove T-Piece and check O-rings for chemical attack. Replace T-Piece as necessary
Water constantly leaking into manifold	Damaged solenoid valve diaphragm	Remove solenoid and check for damage. Replace as necessary
Leak from valve body	Flow switch has become un-bonded from valve body	Replace complete flow switch and valve body assembly – see reference guide
Leaks from U-shaped connecting tubes	Loose connection	Check blue clips are securely fastened
	Tubes have relaxed over time	Tighten stepped hose clamps
	Chemical degradation of hose	Remove and replace damaged hose
Leaks from manifold into chemical feed tubes	Dirt or debris in NRV	Remove NRV from manifold and feed hose <ul style="list-style-type: none"> flush through with water replace NRV if necessary
Leaks from feed lines	Tubes have relaxed over time	Tighten stepped hose clamps
	Degradation of hose	Replace hose as necessary
"No Flow" Alarm	Water flow through flow switch has dropped below minimum 2L/m (0.5 US Gal/min)	Check water supply for required flow. See specification. If flow is within specification inspect flow switch plunger for debris. (note: supply can be affected by demand from other equipment)
	Obstruction in transport hose	Check transport hose and remove: <ul style="list-style-type: none"> restrictions kinks blockage
	Blocked water filter	Check water filter and replace filter sock - see reference guide
	Debris obstructing flow switch operation	Inspect flow switch and replace as necessary
	Trigger present for more than 5 minutes	Press CURSOR key to check if a trigger is locked on. Reprogram that trigger if micro-controlled machine. If not, use different trigger
	Manifold has been disconnected	If manifold has been intentionally

		disconnected transport time must be set to 0 and the power must be switched off then on again. If this is not done, the system will continue to behave as though the manifold is still connected issuing a no-flow alarm with each feed
	Signal from manifold has been interrupted	Check connections between manifold and L5000. Check cable for damage and replace as necessary
	Faulty solenoid valve	Replace solenoid valve – see reference guide
	Chemical degradation of flow switch	Replace back flow prevention NRV – see reference guide
	XL ONLY – Internal pressure has gone too high	<ul style="list-style-type: none"> • Check outlet for blockage/debris • Check length and height of transport hose to machine against spec • Replace pressure switch if necessary
Product left in delivery tube	Transport time is too short	Increase transport time as necessary
	Leaking chemical NRV	Replace NRV
Premature wear of peristaltic pump tubes	Possible blockage in feed line	<ul style="list-style-type: none"> • Check for feed line blockage
	Possible blockage in NRV	<ul style="list-style-type: none"> • Remove NRV and rinse/replace
Solenoid valve will not open	Electrical problem	<ul style="list-style-type: none"> • Ensure 24VDC is present at solenoid coil while manually priming • Check resistance (ohms) of solenoid coil. Disconnect wires from solenoid valve and measure across two coil terminals. Should be approx 50 – 130 ohms
Manifold flushes continuously and no chemical pumps activate	Triggering non – existent pumps	<ul style="list-style-type: none"> • In relay mode, non-existent pumps (unused pump positions which can be up to position 8) must have a call rate of zero, or if they are triggered the higher numbered pump will activate first (in this case a non – existent pump) and the flush will come on and remain open, making it appear as though the solenoid is stuck open • In other modes, non-existent pumps must have a dose amount of zero or a similar scenario could occur



Beta Technology
2841 Mission Street
Santa Cruz, CA
U.S.A 95060-2142

Customer Service

TEL: 831 • 426 • 0882
TEL: 800 • 858 • 2382 (toll-free in U.S.A.)
FAX: 831 • 423 • 4573
FAX: 800 • 221 • 8416
<http://www.beta-technology.com>

Global Technical Customer Service

North America:
TEL: 800 • 468 • 4893 (toll-free in U.S.A.)
TEL: 262 • 631 • 4461 (international)
Europe, Middle East & Africa:
TEL: +1 630 • 513 • 9799

Asia Pacific:

TEL +1 86 21-50509900 x 2520
Japan:
TEL: +1 090-6506-5140
Latin America
TEL: +1 - 541148428270