Troubleshooting Ventura Manual Systems

SYMPTOMS	PROBABLE CAUSE	REMEDY
No product flow, good brine discharge flow, Recovery percentage is 0 (See Flow Test)	• Internal leak in Clark Pump	 While system is running, kink brine hose to stop flow until pressure rises to 125psi, release hose quickly, repeat no more than 10 times in succession Inspect Clark Pump Check Valves Complete Service is recommended. Contact Dealer or see Clark Pump re- build manual. Install Offshore Kit
Feed pump runs with loud noise	Intake blockedAir in system	 Check thru-hull valve Check sea strainer for leaks Check fresh water flush module for leaks Re-prime system (restart)
Pump runs intermittently, cycling on/off	 Overpressure switch on ShurFlo pump opening 	Adjust or replace switch
Feed Pump not running, no noise	 No power at feed pump Pressure switch Failed 	 Check voltage at pump Adjust or bypass. To bypass, jump terminals on switch with electri- cal wire. Only bypass to test, not run long term.
Feed pump turns on, no pres- sure	Feed pump air lockedPressure relief valve open	 Open pressure relief valve to bleed the air, then close to start Close pressure relief valve
Display activates, but pump will not run	 Loose or broken pump wire connection Tanks are full (if equipped with tank switch). If full, Run & Stop LED should be lit. 	 Check wiring at terminal block inside control box Check tanks– system cannot be started if tanks are full.
System runs, no product water delivered to water tanks	 Disconnected or broken product tubing 3-Way Valve Incorrectly set 	 Check product tubing Check 3-Way Valve position
Low Feed Pressure, Low Am- perage	• Warm saltwater or brackish water	Normal condition
High feed pressure, High Am- perage, & Product Flow down up to 15%	 Colder or more saline water Brine or product flow path subject to back pressure Scaled or fouled membrane 	 Normal condition Confirm by routing into a bucket to test Clean Membrane

Troubleshooting Ventura Remote Manual Systems

SYMPTOMS	PROBABLE CAUSE	REMEDY
Low product flow, more than 1 GPH Total flow down (see flow test)	 Motor receiving less than 12.5 VDC 	 Check wiring for voltage drop. Increase wire size if necessary Check power supply If available, turn on battery chargers
	Blockage or restriction in system	• Replace prefilter, service strainer, check all hose runs
	Thru-hull blockage	 Confirm by using intake service hose and bucket of seawater to bypass. Clean Thru-hull
	Mineral Scaling	• Perform SC-3 Cleaning (Note: By design, it is rare for a membrane to cause low total flow on Spectra systems)
	Pump or Motor worn	 Pump should be able to reach 125psi within 3 seconds, & push 1.6 G/M Replace pump head
Low product flow. Recovery percentage below minimum nominal value (See Flow Test)	 Pressure relief Valve open partially 	Close Pressure relief valve
	• Internal leak in Clark Pump	 Complete service recommended. Contact dealer of see Clark Pump rebuild manual. Install offshore kit
Asymmetrical pressure and flow readings between pump shifts, more than a few psi	 Scored Clark Pump annular rings and/or reversing valve spool 	• Replace
	 Scored Clark Pump piston rod and/or lip seals 	 Confirm by opening test port on back of Clark Pump. If constant flow, re- place seals and circular sand rod (240 grit) or replace piston rod
	Scored Clark Pump cylinders	• Hone, circular sand (240 grit) or replace
No product flow, good brine discharge flow, Recovery percentage is 0 (See Flow Test)	• Internal leak in Clark Pump	 While system is running, kink brine hose to stop flow until pressure rises to 125psi, release hose quickly, repeat no more than 10 times in succession Inspect Clark Pump Check Valves Complete Service is recommended. Contact Dealer or see Clark Pump re- build manual. Install Offshore Kit

Troubleshooting Ventura Remote Manual Systems

SYMPTOMS	PROBABLE CAUSE	REMEDY
PPM High	TDS meter needs calibration	• Recalibrate TDS meter or taste test water until it can be replaced
	• Feed Flow or Clark Pump Problem	• Low product flow, recovery percentage, or feed pressure can lead to drop in product water quality. Perform Flow Test & address flow issue.
	• Membrane fouled or damaged	 Clean membrane or consult dealer about membrane damage. If system flow (product plus brine) is to specification, the membrane is clean, the product flows are consistent with the system flow, and the water quality is still not acceptable, then replacement of the membrane is indicated. By design, high ppm typically has to do with something other than the membrane itself.
	• Fouled Prefilters	 Freshwater flush procedure needs to be tested and adjusted. PPM of brine discharge must be below 1000ppm at end of flush cycle. Replace filters or run watermaker for an extended period of time with pressure relief valve open to rinse.