TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	REMEDY
LOSS OF CHEMICAL RESIDUAL	1. Pump setting too low. 2. Scale at injection point 3. Solution container allowed to run dry	1. Adjust to higher setting (feeder must be operating during the stroke length adjustment). 2. Clean injection parts with 8% muriatic acid or undiluted vinegar. 3. Refill the tank with solution and prime. See Start-Up Section
TOO MUCH CHEMICAL	1. Pump setting too high. 2. Chemical in solution tank too rich. 3. Siphoning of chemical into well or main line	1. Lower pump setting (pump must be operating to adjust the dial). 2. Dilute chemical solution. NOTE: For chemical that reacts with water, it may be necessary to purchase a more dilute grade of chemical direct from chemical supplier. 3. Test for suction or vacuum at the injection point. If suction exists, install an anti-siphon valve. See Figure G.
LEAKAGE AROUND TUBING CONNECTIONS	1. Worn tube ends 2. Chemical attack	1. Cut off end of tubing (about 1") and then slip on as before or replace suction valve housing and compression fitting to prevent leakage. 2. Consult your chemical supplier for compatible materials.
FAILURE TO PUMP OR FEED	1. Leak in suction side of pump. 2. Valve seats not sealing. 3. Low setting on pump. 4. Low solution level. 5. Diaphragm ruptured. 6. Pump head cracked or broken. 7. Pump head contains air or chlorine gas.	1. Examine suction tubing. If worn at the end, cut approximately an inch off and replace or replace valve body and coupling nut. 2. Clean valve seats if dirty or replace with proper material if deterioration is noted. 3. When pumping against pressure, the dial should be set above 40% maximum rated capacity for a reliable feed rate. 4. Solution must be above foot valve. 5. Replace diaphragm as shown in "Service" Section. Check for pressure above 100 PSI (7 BAR) at the injection point. NOTE: Chemical incompatibility with diaphragm material can cause diaphragm rupture and leakage around the pump head. 6. Replace pump head as shown in "Service" Section, Do not use pipe tape or other sealants. Make sure fittings hand tight only. Using pliers or wrench can crack pump head. Also, chemical incompatibility can cause cracking and subsequent leakage. 7. While pump is running, turn bleed valve adjustment screw counter-clockwise until air is purged. Close bleed valve.
PUMP LOSES PRIME	1. Dirty check valve. 2. Ball checks not seating or not sealing properly. 3. Solution container allowed to run dry	1. Remove and replace or clean off any scale or sediment. 2. Check seat and ball checks for chips, clean gently. If deformity or deterioration is noted, replace part with proper material. Chemical crystallization can hold check valves open, therefore the valves must be disassembled and cleaned. Be sure to replace all parts as shown in the Parts Diagram (at the end of the manual). 3. Refill the tank with solution and prime.
LEAKAGE AT FITTING	1. Loose fittings 2. Broken or twisted gasket 3. Chemical attack	1. All fittings can be hand tightened to prevent leakage. Clean off chemicals which have spilled on pump. 2. Check gaskets and replace if broken or damaged. 3. Consult your chemical supplier for compatible materials.
PUMP WILL NOT PRIME	1. Too much pressure at discharge 2. Check valves not sealing 3. Output dial not set at maximum	1. Open bleed valve and circulate fluid until all air is purged from pump head assembly. Close bleed valve. 2. Disassemble, loosen, clean and check for deterioration or swelling. Reassemble and wet the valve assembly, then prime. See INSTALLATION Section. 3. Always prime pump with output dial set at maximum rated capacity.
ANTI-SIPHON VALVE MALFUNCTION	1. Scale or particles have plugged diaphragm 2. Ruptured valves	1. Remove, clean and reassemble, being careful not to wrinkle the diaphragm. Check sequence and position of parts to be sure reassembly is correct. 2. Consult your distributor for replacement.
PUMP MOTOR STALLS	1. Pumping against excessive pressure 2. Low voltage to pump	1. Test pressure to determine if it exceeds pump specifications. If so, consult your distributor. 2. Make sure voltage of power source matches the voltage on the pump specifications label. If not transformers are available.
MOTOR RUNNING VERY HOT	1. Low voltage. 2. If using a step-down transformer, it may be undersized for the pump	1. Power supply voltage should match voltage on pump specification label. 2. Check the transformer to be sure it has at least 100 watts capacity.