

CLEANER TROUBLESHOOTING

ELECTRIC MOTOR DRIVEN PRESSURE CLEANERS

TROUBLE	POSSIBLE CAUSE	REMEDY
1. Poor cleaning action.	<ul style="list-style-type: none"> A. Hard water. B. Low pressure. C. Little or no chemical being drawn. D. Improper chemical. E. Improper chemical mixture. F. Low discharge pressure. 	<ul style="list-style-type: none"> A. Connect the machine to a water softener. B. See "Low operating pressure." C. See "machine will not draw chemical." D. Obtain proper chemical. E. Mix chemical per the label. Follow all the mixing, handling, application, and disposal instructions. F. See "Low operating pressure."
2. Machine will not draw chemical.	<ul style="list-style-type: none"> A. No chemical solution. B. Metering valve not open. C. Chemical line strainer clogged. D. Air leak in Chemical line. E. Metering valve clogged. F. Restrictor orifice too large or missing. 	<ul style="list-style-type: none"> A. Replenish supply. B. Turn metering valve knob to open. C. Remove screen and clean. D. Tighten all fittings and hoses for the chemical line. E. Disassemble and clean. F. Install proper size orifice.
3. Low operating pressure.	<ul style="list-style-type: none"> A. Insufficient water supply. B. Incoming water hose too small. C. Water supply hose too long. D. Belt slippage. E. Worn belt. F. Spray tip worn or wrong size. G. Dirty or worn check valves in water pump. H. Water supply hose kinked. I. Inlet filter screen clogged. J. Motor runs slowly. K. Air leak in inlet plumbing. L. Defective water pump. M. Leaking discharge hose. N. Chemical metering valve open and sucking air. O. Defective unloader. P. Inlet ball valve not fully open (if so equipped). Q. Restricted coil. 	<ul style="list-style-type: none"> A. The water supply must meet or exceed the maximum discharge volume specified in the PERFORMANCE section, and minimum water inlet pressure specified in the General section of the MODEL SPECIFICATIONS section. B. Use larger water supply hose. C. Use shorter water supply hose. D. Tighten belt per instructions in MACHINE MAINTENANCE insert. E. Replace belt per CLEANER EXPLODED VIEW. F. Replace with spray tip specified in the GENERAL section of MODEL SPECIFICATIONS. G. See PUMP TROUBLE SHOOTING. H. Straighten hose. I. Clean water filter screen or hose inlet screen. J. See "Pump engine starts slow or overheats and stops." K. Tighten all fittings. L. See PUMP TROUBLESHOOTING. M. If a water leak is found, DO NOT OPERATE THE MACHINE. Disconnect the power and replace hose. N. Refill chemical, place soap screen in water, or shut off metering valve. O. Repair or replace unloader valve. P. Open inlet ball valve completely. (Handle parallel w/ valve body). Q. See COIL BACK PRESSURE CHECK on MACHINE MAINTENANCE.
4. Excessive, unusual noise.	<ul style="list-style-type: none"> A. Pump. B. Defective motor. C. Pulleys rubbing. D. Misalignment of pump & motor 	<ul style="list-style-type: none"> A. See PUMP TROUBLESHOOTING. B. Call service technician or take engine to Repair/Warranty station. C. Adjust shields or pulley(s). D. Realign pump and engine.
5. Belts slipping.	<ul style="list-style-type: none"> A. Belts too loose. B. Excessive backpressure. C. Defective water pump. 	<ul style="list-style-type: none"> A. Tighten per instruction on MACHINE MAINTENANCE. B. See "Excessive Back Pressure" Below C. See PUMP SERVICE.

CLEANER TROUBLESHOOTING (CONT.) ELECTRIC MOTOR DRIVEN PRESSURE CLEANERS

TROUBLE	POSSIBLE CAUSE	REMEDY
6. Excessive back pressure.	A. Spray tip built up with lime. B. Water pump turning too fast. C. Coil built up with lime. D. Relief valve defective.	A. Remove and clean, or replace spray tip with tip specified in GENERAL section of MODEL SPECIFICATIONS . B. See MODEL SPECIFICATIONS . C. Delime Coil. D. Remove and replace.
7. Excessive vibration.	A. Defective belt. B. Defective Pump. C. Defective accumulator.	A. Remove and replace using belt specified in CLEANEREXPLODED VIEW or the GENERAL section of MODEL SPECIFICATIONS . B. See PUMP TROUBLESHOOTING . C. Recharge/replace.
8. Pump motor will not start (motor does not hum).	A. No power. B. Defective motor starter or ON OFF switch. C. Defective motor.	A. Use a different outlet, check fuses in main disconnect switch. Replace fuse if blown. B. Call service technician. C. Call service technician, or take motor to repair. Warranty station.
9. Pump motor will not start (motor hums).	A. Pump frozen B. Defective Motor. C. Defective water pump D. Excessive backpressure.	A. Machine must be thoroughly warmed to above freezing. B. Call service technician or take motor to Repair/ Warranty station. C. See PUMP STATION . D. See "Excessive Back Pressure."
10. Pump motor starts slow or overheats and stops.	A. Low voltage. B. Excessive backpressure. C. Defective motor.	A. See "Low voltage." B. See "Excessive Back Pressure." C. Call service technician, or take motor to Repair/Warranty station.
11. Pump motor stops and will not start.	A. Motor starter "kicked out" (if so equipped) or thermal overload tripped. B. Excessive backpressure. C. Defective motor.	A. Turn motor starter off to reset, and then turn on, or push thermal overload reset button on motor. B. See "Excessive Back Pressure." C. Call service technician, or take motor to Repair/ Warranty station.
12. Low voltage.	A. Incoming voltage incorrect. B. Not large enough extension cord. C. Too long extension cord.	A. Have a qualified technician check motor terminal voltage. Correct voltage is in MODEL SPECIFICATIONS . B. Use an extension cord with amperes or watts rating as high or higher than that of the MODEL SPECIFICATIONS . C. Shorten extension cord.
13. Machine shocks operator.	A. Machine improperly grounded. B. Outlet not grounded.	A. STOP! Operating machine. Call Service technician. B. Have properly wired outlet installed.