Section 5
Trouble Shooting

Symptom	Probable Cause	Suggested Remedy
Machine does not start	Power Supply	Check these areas: Circuit breakers, Voltage, Power leads, Power connections
	"Start" Switch	When actuated there must be continuity through the contacts on the start switch.
	"Pause-Run" Switch	Must be in "Run" position and should have continuity through the switch.
	"Off-On" Switch	Check for continuity in "On" position. If no continuity, replace switch.
	Door Switch	Check for continuity through door switch when door closed. If no continuity, adjust or replace switch.
	Control Breaker	Check 1.5 amp breaker for continuity. If no continuity, replace breaker.
	Timer	Check to insure that the timer is in the "off" position to supply 120VAC through the "Start" cam to the start switch.
	Timer, Rapid Advance Motor	Check the rapid advance motor for continuity and replace if no continuity.
	Control Transformer	Check voltage output from control transformer for 120VAC. If voltage is incorrect, replace transformer.
Door does not lock	Timer Position	The following sequence must have taken place to advance the timer before the door locks. 1. Loading door closed. 2. Timer initially in "Off" position. 3. Pause-Run in "Run" position. 4. Off-On in "On" position. 5. Push Start button. 6. Timer advances to "On" position.
	Door locking solenoid	Check to insure that solenoid is receiving 120VAC from input/output board. If it is, replace solenoid.
	Door Switch	Check for continuity through door latch switch when door closed. If no continuity, adjust or replace door switch.

Symptom	Probable Cause	Suggested Remedy
Door will not open	Thermoactuator	Check to see if thermoactuator(s) and/or its mechanism is stuck or binding and not allowing the door lock solenoid to open. Check to be sure that the locking thermoactuator is not receiving 120VAC during the last 1 1/2 minutes of the cycle. Also check to see that the unlocking thermoactuator is receiving 120VAC during the last minute of the cycle. If the thermoactuators do not receive voltage at the correct times, change the timer. If the timing and voltage is correct, replace the thermoactuator.
	Door Rod	Check to see that door rod from solenoid to lock ass'y is long enough to allow lock ass'y to disengage. If not, adjust rod.
	Door Lock Solenoid	Check that door lock solenoid is not stuck closed. If stuck, replace solenoid.
	Timer	Make sure machine is in "off" position allowing Timer to authorize door unlock.
Machine starts but timer will not advance	Water Valves	Check to insure that water valves are operating. If not, check for 120VAC to water valve from timer. If 120VAC, clean screens. If still no operation, change water valve. If no voltage check pressure switch then change timer.
	Drain Valve	Check to insure that drain valve is closing. If not, check for 120VAC to drain valve from timer. If 120VAC, change or clean drain valve. If no voltage, change timer.
	Fill Hose Screens & Water Valve Screens	Check all screens for obstructions and clean.
	Water	Check to insure that water is turned on and operating.
	Pressure Switch Hose	Check hose for holes. Be sure the inlet end of the large part of the hose is lower than the rest of the hose and is free of debris.
	Pressure Switch	Check to insure that pressure switch has continuity between #21 & #22 and #11 & #12. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
	Main Timer Drive Motor	If power is available to main timer drive motor but it doesn't run, replace timer motor.

Symptom	Probable Cause	Suggested Remedy
Machine tumbles in only one direction	Reversing Timer	Check to see that reversing timer is running. Check for alternating 24VDC at blue and at orange from reversing timer to signal reversing operation to drive. If not running or no voltage, replace reversing timer.
	Variable Frequency Drive	Check blue and orange wires on variable frequency drive for alternating 24VDC for forward and reverse direction from the reversing timer. If no voltage, see reversing timer above. Be sure to check wire connections at drive. If 24VDC at drive, replace drive.
Does not give intermediate spin	Pressure Switch	Check pressure switch for continuity across terminals #21 & #12 indicating pressure switch has reset to the empty position. If no continuity, change pressure switch.
	Reversing Timer	Check to see if running. Check for 24VDC output on blue/wht wire. If not running or no output, change reversing timer.
	Pause-Run Switch	Check in run position for continuity to allow spin relay to operate.
	Spin Relay R2	Check spin relay coil for continuity, replace if shorted. Check for 24VDC input to spin relay contacts. Check for 24VDC out of relay on red & black wires. If input voltage is okay and there is no output voltage, change relay.
	Timer	Advance to spin cycle, check for 120VAC on red/blk from main timer. If no voltage, change timer.
Machine starts and advances through cycle but motor does not operate	Variable Frequency Drive	Check Variable frequency drive Green light on back illuminated, Okay. Red light on back illuminated, do the following: 1. Disconnect power to washer for two minutes to reset variable frequency drive. Reconnect to power and check for green light. Green--okay. Red--go to step 2. 2. Check incoming power to washer for correct voltage. Line voltage out of the specified operating range will cause the drive to fault, lighting the red light. 3. Check motor. Disconnect from power. Push tab on bottom of drive and remove lower cover. **(Do not remove complete cover as it will damage the drive)** Disconnect the three gray wires that operate the motor from terminals "U", "V", and "W" in the drive. Reconnect power to the washer and check the green light. Green--change the drive motor. Red--change the variable frequency drive.

Symptom	Probable Cause	Suggested Remedy
Machine starts and advances through cycle but motor does not operate (continued)	Pause-Run Switch	Check to be sure that switch is in run position to allow run relay to operate.
	R1 Relay	Start machine to verify that door locks and check for 120VAC to R1 (run relay) coil. Check for continuity across relay coil. Check for 24VDC input on white wire and 24VDC output on blk/red wire. If no output, replace relay.
	Reversing Timer	Check to see that reversing timer is running. Check for alternating 24VDC at blue and at orange from reversing timer to signal reversing operation to drive. If not running or no output voltage, replace reversing timer.
Intermediate spin speed works-no high extract	Program Timer	Advance to final extract, check red/green wire from timer for 120VAC to extract relay. If no voltage, replace timer.
	Extract Relay (R3)	Check relay for continuity through coil. Check output on green wire from extract relay for 24VDC. If no continuity or no 24VDC, replace relay.
Hot water does not enter tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to insure that water is turned on and operating.
	Pause-Run Switch	Check in run position for continuity. If no continuity, replace switch.
	Timer	Advance machine into wash cycle and check for 120VAC at red/blue wire coming from timer.
	Water Temperature Selector Switch	Check switch for continuity between red/blue wire and red/yellow wire when Hot is selected. If no continuity, change switch.
	High Water Level Relay	Check for continuity across N.C. contacts of high water level relay. If no continuity, replace relay.
	Pressure Switch	Check pressure switch continuity between terminals #11 & #12. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.

Symptom	Probable Cause	Suggested Remedy
No cold water to tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to insure that water is turned on and operating.
	Pressure Switch	Check pressure switch continuity between terminals #11 & #12. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
	Pause-Run Switch	Check in run position for continuity. If no continuity, replace switch.
	Timer	Choose cold cycle, advance to wash, check for voltage on white/black from timer. If no voltage, replace timer.
	Water Temperature Selector Switch	Choose cold cycle, advance to wash and check wht/org wire from selector switch for 120VAC. If no voltage, change switch.
	High Water Level Relay	Check for continuity across N.C. contacts of high water level relay. If no continuity, replace relay.
	Hot Rinse Relay	Check for continuity across N.C. contacts of hot rinse relay. If no continuity, replace relay.
No hot water in detergent dispenser	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to insure that water is turned on and operating.
	Pause-Run Switch	Check in run position for continuity. If no continuity, replace switch.
	Timer	Advance to wash, check for voltage on red/org from timer. If no voltage, replace timer.
Water does not flush softener compartment.	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.

Symptom	Probable Cause	Suggested Remedy
Water does not flush softener compartment. (continued)	Water	Check to insure that water is turned on and operating.
	Pause-Run Switch	Check in run position for continuity. If no continuity, replace switch.
	Pressure Switch	Check pressure switch continuity between terminals #11 & #12. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
	Timer	Advance machine to final rinse and check for voltage at wht/blue wire coming from timer. If no voltage, replace timer.
	High Water Level Relay	Check for continuity across N.C. contacts of high water level relay. If no continuity, replace relay.
Water comes in but level does not rise	Drain Valve (open)	Check these areas - Drain valve blockage - Drain valve motor and gear train. If power but drain valve does not close, replace valve. - Power to the drain valve. If no power to drain valve, check (brn/yel) circuit for power.
Water level too high	Pressure Switch	Check for blockage in pressure switch hose. Check for pressure switch opening circuit across terminals #21 & #12. Replace switch if contacts do not open.
	High Water Level Relay	Check for continuity across N.C. contacts of high water level relay. If no continuity, replace relay.
Water drains slowly	Drain System	Check hoses and drain valve for blockage. Clean if necessary. Check building drains for blockage or inadequate size.
Water leakage around loading door	Door Adjustment	Door may need adjustment due to abuse or wear. Check tightness around perimeter using a dollar bill. Adjust left to right tightness by shims at door lock or hinge side. It is important to center gasket to tub opening before tightening door to hinge bolts. Chalk may be used on tub front to show point of contact with tub. If gasket is deformed, worn, or damaged, replace. Refer to parts section for door gasket expander kit.

Symptom	Probable Cause	Suggested Remedy
Excessive vibration	Mounting System	Check these areas: - Strength of mounting structure, concrete or base. - Mounting bolts may be loose and need tightening.
	Drive Belt	- Worn drive belt can cause vibration and noise.
	Pulleys	- Damaged pulleys.
	LOADING	- NOTE: SMALL LOADS CONTRIBUTE TO OUT OF BALANCE LOADING AND INCREASE VIBRATION.