## **Section 5**

## **Trouble Shooting**

Trouble Shooting		
Symptom	Probable Cause	Suggested Remedy
Machine does not start	Power Supply	Check these areas: Circuit breakers, Voltage, Power leads, Power connections
	Door Switch	Check for continuity through door switch when door closed. If no continuity, adjust or replace door switch.
	Control Breaker	Check( 1.5 amp on 3 phase) ( 7 amp on 1 phase) breaker for continuity. Replace breaker if no continuity.
	Control Transformer (3 phase only)	Check voltage output from control transformer for 120VAC. If voltage is incorrect, replace transformer.
	Coin Acceptor	Check coin switch to make sure coins trip switch and give continuity across switch when closed and resets as coin passes. If no continuity, adjust or replace switch.
	Accumulator Transformer	Check accumulator transformer for 12VAC output to accumulator. If no voltage, replace transformer.
	Coin Accumulator	Check accumulator to see that display is showing correct number of coins to start. Check accumulator for short 120VAC output signal at orange/white wire when preset number of coins is reached. If no display or output signal, replace coin accumulator.
	Timer	Check to insure that the timer is in the "off" position to supply 120VAC through the Start cam to the coin accumulator board.
	Timer, Rapid Advance Motor	Check the rapid advance motor for continuity and replace if no continuity.
Machine will not accept and count coins	Coin Acceptor	Check coin acceptor for any type of blockage or damage. Clean, adjust or replace the acceptor as necessary.
	Power Supply	Check these areas: Circuit breakers, Voltage, Power leads, Power connections
	Timer	Timer must be in off position, machine had to finish previous cycle to reset coin accumulator board.
	Coin Accumulator	Check accumulator to see that display is showing correct number of coins to start. If no display, replace coin accumulator.

Symptom	Probable Cause	Suggested Remedy
Machine will not accept and count coins (continued)	Control Breaker	Check 1.5 amp( 7 amp for 3 phase) breaker for continuity. Replace breaker if no continuity.
Door does not lock	Timer Position	The following sequence must have taken place to advance the timer before the door locks.  -Loading door closed -Proper number of coins inserted to start machine -Accumulator counted and credited coins to advance timer into cycle closing on-off timer contact
	Door locking solenoid	Check to insure that solenoid is receiving 120VAC from S1 door switch. If it is, replace solenoid.
	Door Switch	Check for continuity through door latch switche(s) when door closed. If no continuity, adjust or replace door switch.
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 are 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	Main Timer Drive Motor	If 120VAC is supplied to timer motor, but it doesn't operate, replace timer motor.

Symptom	Probable Cause	Suggested Remedy
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.
	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.
	Pressure Switch	Check pressure switch continuity between terminals #1 & #2. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
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 #1 & #2. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure 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.
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.

Symptom	Probable Cause	Suggested Remedy
No hot water detergent dispenser (continued)	Timer	Advance to wash, check for voltage on red/org in 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.
	Water	Check to insure that water is turned on and operating.
	Pressure Switch	Check pressure switch continuity between terminals #1 & #2. 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.
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 #1 & #2. Replace switch if contacts do not open.
Water drains slowly	Drain System	Check hoses and drain valve for blockage. Clean if necessary. Check building drains for blockage or inadequate size.
Machine does not tumble	R2 Spin Relay	Check continuity between terminals #13 & #14 on R2 relay.
	Wash Speed Capacitor (1 phase only)	Check capacitor and replace if failed.

Symptom	Probable Cause	Suggested Remedy
Machine tumbles in only one direction	Reversing Timer	Check to see that reversing timer is running. Check for alternating 120VAC at orange/green and at brown/white from reversing timer to signal reversing operation to wash relays. If not running or no voltage, replace reversing timer.
	Tumble Relays	Check R1A and R1B tumble speed relays. If one does not close during tumble speed, check coil continuity and power to the relay. If 120VAC to relay and no coil continuity, replace relay.
Machine does not spin	Spin Relay	Check spin relay coil for continuity, replace if no coil continuity. Check relay contacts, replace if no continuity.
	Pressure Switch	Check pressure switch for continuity across terminals #1 & #2 indicating pressure switch has reset to the empty position. If no continuity, change pressure switch.
	Spin Start Capacitor (1 phase only)	Check capacitor and replace if failed.
	Motor Overload	Check vio/wht wire at terminal strip and vio wire at spin relay for continuity. If open, replacement motor must be considered.
Machine starts and advances through cycle butmotor does not operate	Reversing Timer	Check to see that reversing timer is running. Check for alternating 120VAC at orange/green and at brown/white from reversing timer ( 3 ph.) [1phase-120vac Blk/orange and Blk/white] to signal reversing operation to wash relays. If not running or no voltage, replace reversing timer.
Machine does not stop at end of cycle	Coin accumulator	Check for continuous output from terminal where orange-white wire connects to accumulator. If so replace accumulator.
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.
	Loading	NOTE: SMALL LOADS CONTRIBUTE TO OUT OF BALANCE LOADING AND INCREASE VIBRATION.