TROUBLE SHOOTING

The information contained in this section is intended to aid qualified service personnel in the testing an repair of steambath generators.

To avoid electric shock, disconnect generator from electric voltage supply. All servicing must be performed by qualified personnel only.

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
System is not working	Electric power is off	Turn power on
	Control is "OFF"	Turn control "ON"
	Temperature control is set too low	Set control to higher temperature
	System is heating up	Wait 5 minutes for steam
	Control in "PAUSE MODE"	Turn "PAUSE" off and wait 5 minutes

NOTE: The following servicing information is intended for use by qualified personnel only. It is not intended for the home owner and/or end-user of this equipment. If there is any question, consult with qualified personnel or the manufacturer.

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
System is not working	Improper installation	Review instructions
	Incorrect power supply	Check power supply
	Transformer malfunction	Check transformer output* - Replace, if necessary
	Control is inoperative	Check control operation* - Replace, if necessary
	Water is not feeding	See below
	Unit is not heating	See below
Water is not feeding	Supply valve is closed	Open Valve
	Clogged water line	Check water line
	Low water pressure	Water pressure must be at least 20 PSI
	Clogged solenoid valve built-in filter	Remove obstruction

*See Major Electrical Components Test (page 14)

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
Water is not feeding (continued)	Probe is shorted to ground	Check for shorts
	Liquid level control board malfunction	Check water solenoid operation operation*
	Solenoid valve malfunction	Check valve - Replace if necessary
Unit is not heating	Drain valve is open	Close drain valve - Check for leaks
	Unit is flooding	See below
	Liquid level control malfunction	Check liquid level control for heater operation*
	Confactor malfunction	Check contactor operation
	Heating element Malfunction	Check heating element
Flooding (water continuously flows out of steam head)	Loose probe connection	Check probe connection
	Liquid level control malfunction	Check probe operation
	Solenoid valve malfunction	Check valve
	Drain is backing up	Check drain plumbing
	Too much water in steam	See below
Too much water in steam	There is a valley (trap) in steam line	Check plumbing
	Steam line is not insulated	Insulate steam line
	Steam line is over 20 feet	Relocate steam generator closer to steam room
Not enough steam (not hot enough)	Unit is undersized	Check sizing
	Voltage is insufficient	Check power supply
	Heating element malfunction	Check heating element
	Leak in steam line	Check steam line - Use only brass pipe or copper tubing
	Steam is intermittent	See next page

*See Major Electric Component Test (page 14)

PROBLEM	PROBABLE CAUSE	SUGGESTED REMEDY
Steam is intermittent	Temperature control is set too low	Control turns steam on and off at set temperature - Turn control higher, as desired
	There is a valley (trap) in steam line, allowing water to block flow of steam	Correct pitch of steam line
	Loose electrical connection	Check wiring
	Drain is leaking	Check drain valve
	Safety valve or tank is leaking	See below
Safety valve or tank is leaking	There is a valley (trap) in steam line	Check plumbing
	Clogged steam line	Check steam line
	Clogged steam outlet	Check steam outlet
Too much steam (too hot)	Unit is oversized	Add room temperature control or air switch
	Temperature control is set too high	Set control to lower temperature
Fuse blows out or circuit breaker trips	Fuse or circuit breaker is undersized	Check current rating
	Over voltage (current)	Check voltage (current)
	Short circuit	Check wiring
	Heating element malfunction	Check heating element
Heating element burns out	Over voltage	Check voltage
	Liquid level control malfunction	Check p.c. board heater operation
	Probe shorted to ground	Check probe circuit
	Loose electrical connection	Check wiring
	Contactor malfunction	Check contactor
	Too much calcium build-up on element	Flush generator after each use

MAJOR ELECTRICAL SYSTEMS TEST

Transformer Test

1. Power to unit is on.
2. Check voltage at terminals 1 & 4 of the Control Terminal Blcok = 24VAC.
3. If voltage is OVAC, replace transformer. If voltage is less than 24VAC, check incoming power.

Control Test

1. Power to unit is on.
2. Transformer test is good.
3. Turn control on.
4. Check voltage at terminals 2 & 4 of the Control Terminal Block = 24VAC.
5. If voltage is OVAC, check control wiring and connections for proper fit and installation.

Water Solenoid Test

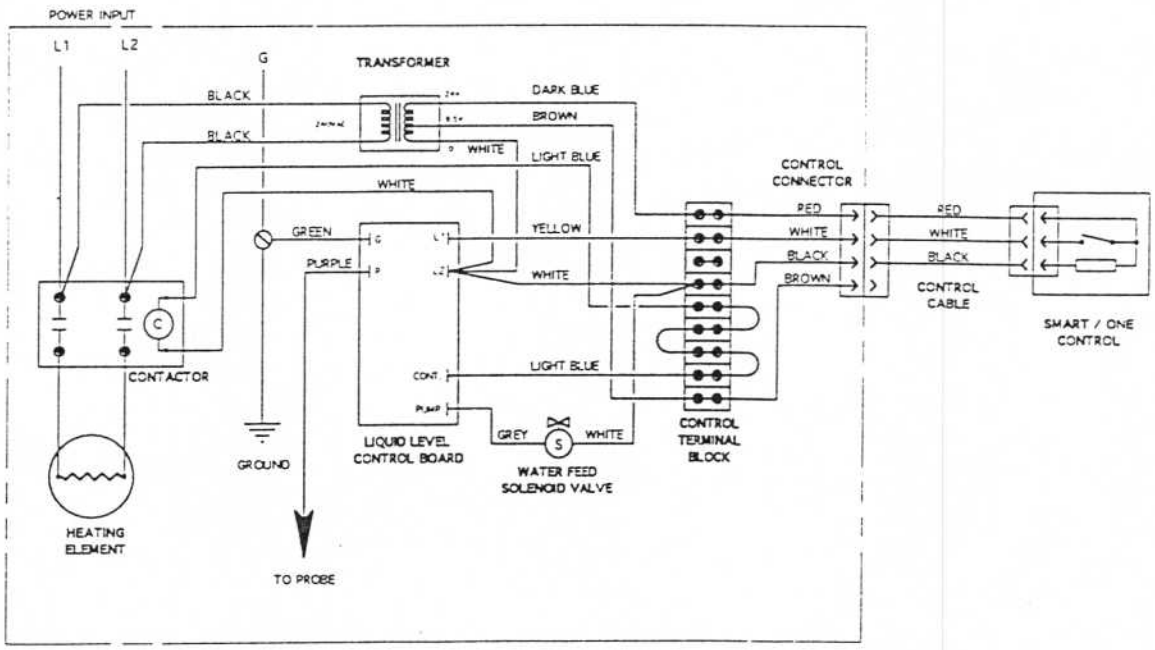
1. Power to unit is on.
2. Control test is good.
3. Drain water fron unit by opening manual drain valve (not necessary if unit has a functioning autoflush valve).
4. Turn control on.
5. Check voltage at L1 and L2 contacts on the Liquid Level Control printed circuit board = 24VAC.
6. Check voltage at "PUMP" & L2 contacts on the Liquid Level Control printed circuit board = 24VAC. If voltage = OVAC, then proceed to probe test.
7. Check voltage at the gray and white wires at water solenoid = 24VAC.
8. If voltage is 24VAC, replace water solenoid valve.

Probe Test

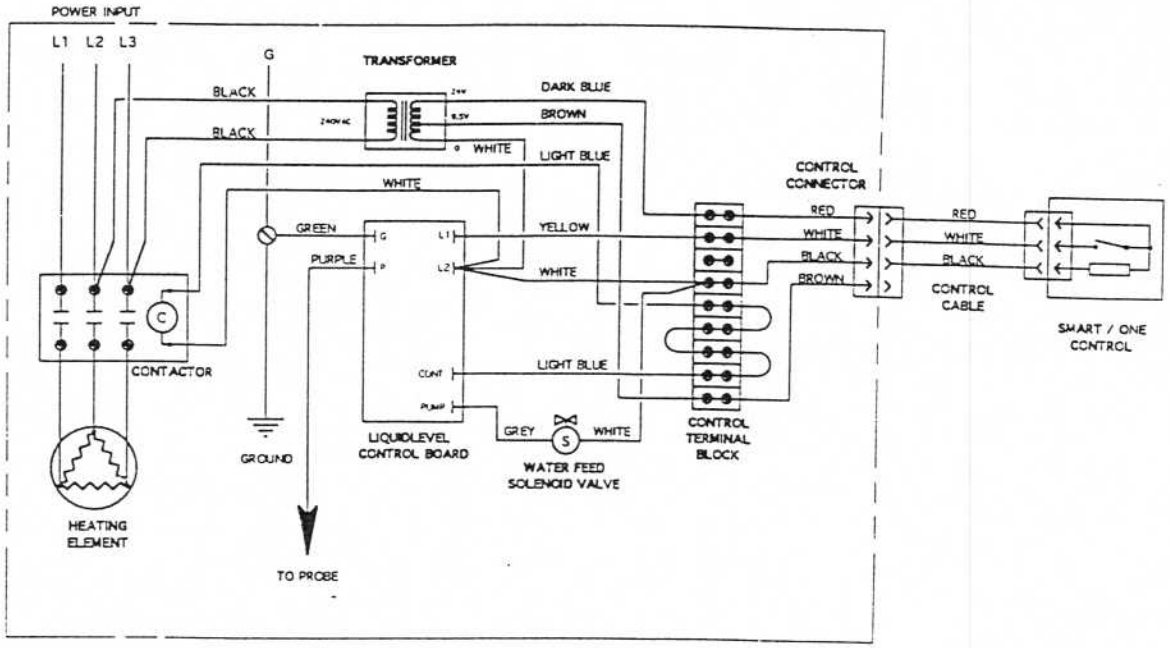
1. Drain water from unit by opening manual drain valve (not necessary if unit has a functioning autoflush valve.
2. Disconnect purple wire and green/yellow wire from the Liquid Level Control Board labeled "Probe" and "GND".
3. Check resistance between the purple wire and green/yellow wire.
4. With water level low, probe resistance should be open, if not, replace probe.

Contactor

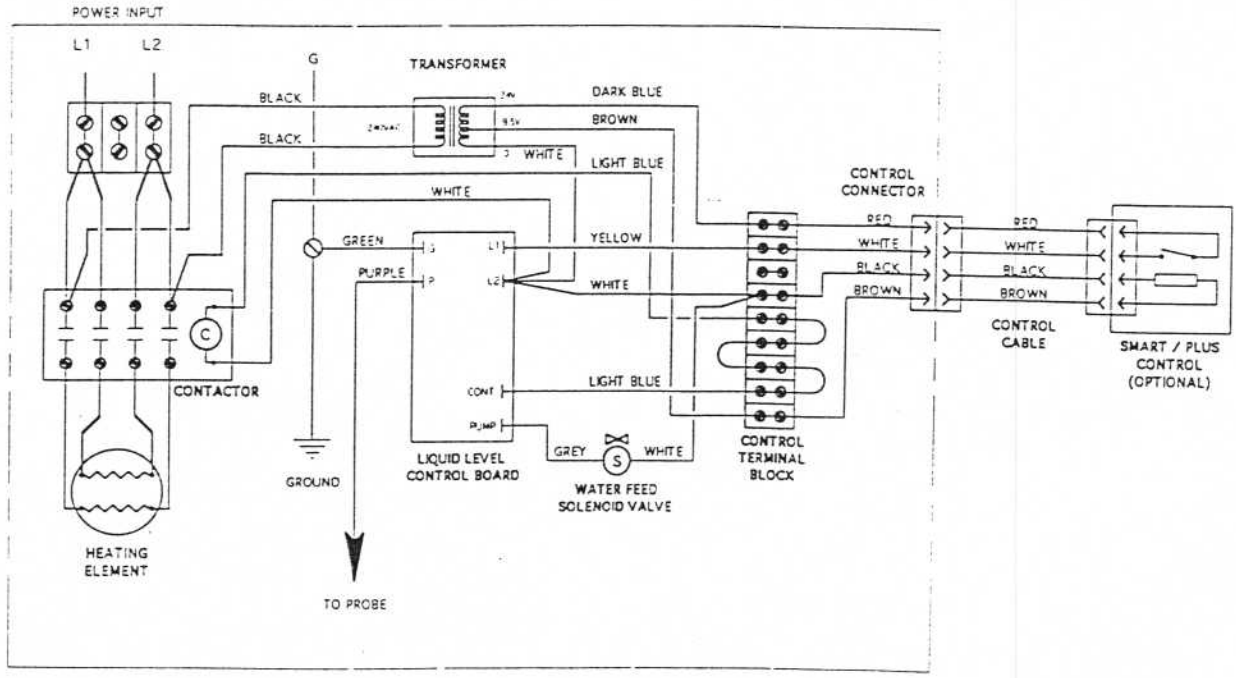
1. Power to unit is on.
2. Water solenoid test is good.
3. Turn control on.
4. Check voltage at "Contactor" & L2 contacts on the Liquid Level Control printed circuit board = 24VAC.
5. Check voltage at terminals 8 & 4 on Control Terminal Block = 24VAC.
6. Check voltage at terminals 5 & 4 on Control Terminal Block = 24VAC.
7. Check voltage at blue and white wires at the contactor coil = 24VAC.
8. If contactor coil voltage is 24VAC and contactor is not engaging, then contactor must be replace.



MR.STEAM SINGLE PHASE WIRING DIAGRAM
MODELS MS-65, MS-90, MS-150, MS-225, MS-300, MS-400
WITH STANDARD SMART / ONE CONTROL



MR.STEAM THREE PHASE WIRING DIAGRAM
WITH STANDARD SMART / ONE CONTROL



MR.STEAM SINGLE PHASE WIRING DIAGRAM
MODELS MS-SUPER-I, MS-SUPER-II, MS-SUPER-III
WITH OPTIONAL SMART / PLUS CONTROL