

MrSteam®

Residential Steambath Generator Systems

Installation, Operation & Maintenance Manual

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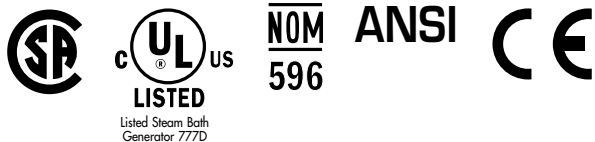
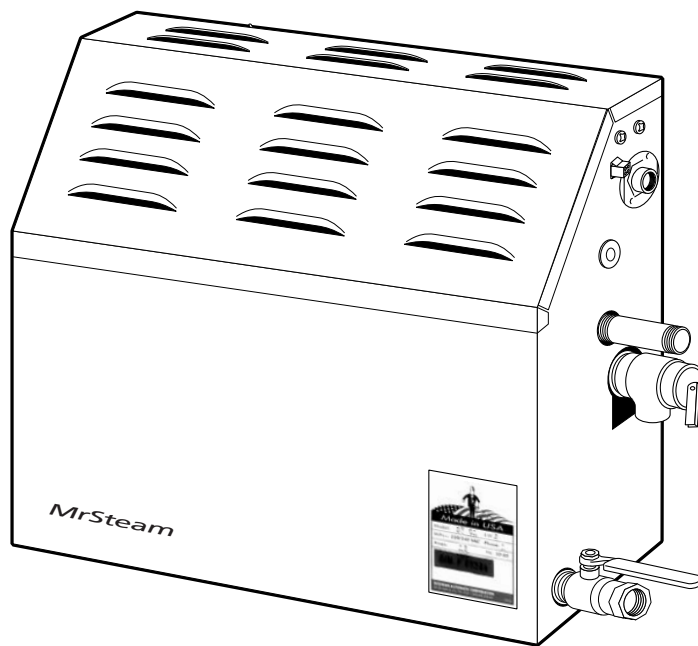
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MODELS:

MS-65	MS-SUPER 1
MS-90	MS-SUPER 2
MS-150	MS-SUPER 3
MS-225	MS-Super 4
MS-300	MS-Super 5
MS-400	MS-Super 6

MODEL _____ Serial No. _____



IMPORTANT NOTE:

As you follow these instructions, you will notice warning and caution symbols. This blocked information is important for the safe and efficient installation and operation of this generator. These are two types of potential hazards that may occur during this installation and operation:



states a hazard may cause serious injury or death if precautions are not followed.



signals a situation where minor injury or product damage may occur if you do not follow instructions.

IMPORTANT NOTE:

This highlights information that is especially relevant to a problem-free installation.



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Before Installing

Read these instructions before installation or service. Although this MS steambath generator has been fully qualified for shipment by MR. STEAM, the following must be reviewed for proper, safe and enjoyable steam bathing.

Verify that the model and accessories are correct, including incoming line voltage.

Insure steambath generator has been correctly sized for the steambath room. Pay particular attention to room volume and construction. If any questions, please refer to MR. STEAM sizing guide enclosed. (see page 16)

Marble or glass walls or ceilings, or exterior walls "ENLARGE" the room's size, requiring a generator larger than one based only on the room's cubic foot (L x H x W) volume.

The physical size of the unit, clearance for plumbing servicing, and its distance from the steam room must all be considered before final installation.

IMPORTANT

MR. STEAM units are intended to be operated with a MR. STEAM timer and/or temperature control only, and are to be installed strictly in accordance with the specific instructions supplied with these optional accessories and the information contained in this manual.



Mr. Steam steam generators are connected to 240V line voltage and contain live electrical components. All installation and service to be performed by qualified electricians and plumbers only. Installation or service by unqualified persons may void the warranty.

Steam Room Requirements

- 1.** Steam room must be completely enclosed, with full walls, door, floor and ceiling.
- 2.** It is recommended that a gasketed door is used for heat sealing and steam containment.
- 3.** If tile-type flooring is used, install anti-skid strips or equivalent, for safety.
- 4.** Walls and ceilings must be covered with water-resistant, non-corrosive surface, such as tile, molded acrylic, fiberglass, etc.
- 5.** Provide a floor drain.
- 6.** No heating, venting or air conditioning devices should be installed inside the steam room.

Locating the Steam Generator Unit

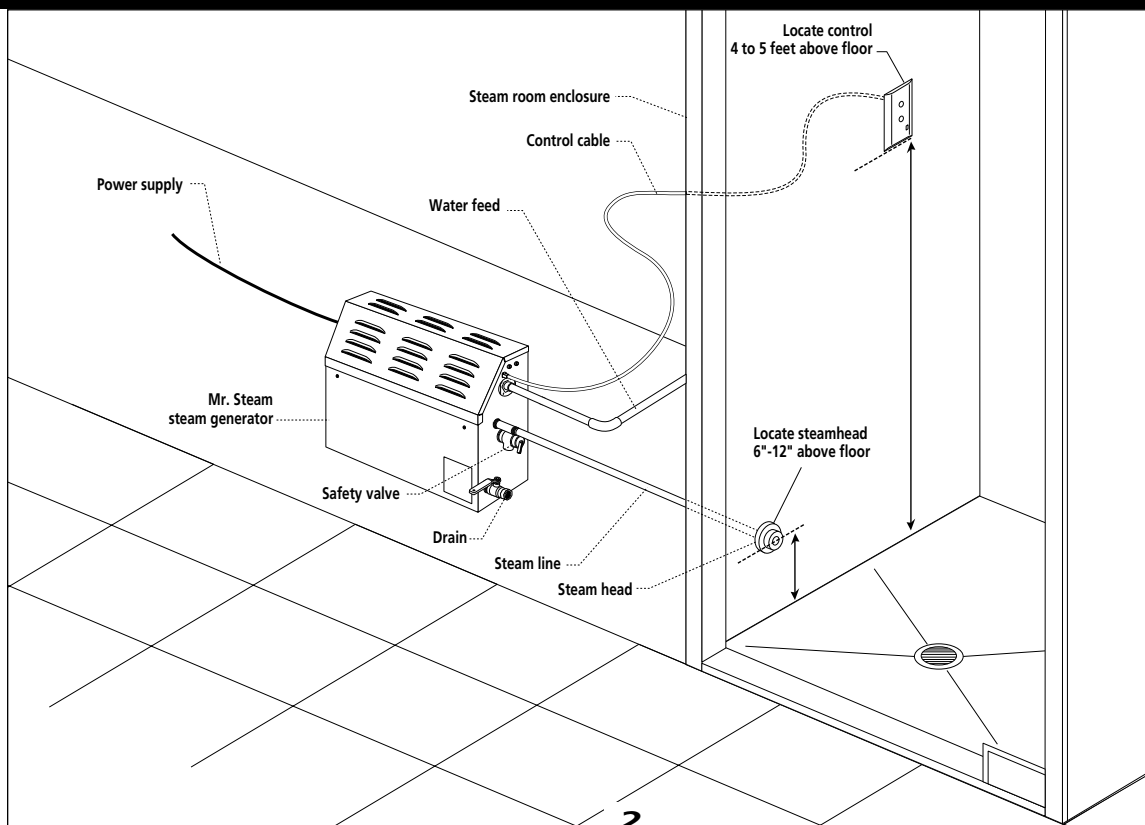
Select a location as near as possible to the steam room.

Typical locations include: closet, vanity cabinet, heated attic or basement.

1. Locate steambath generator within 25 feet of steam room.
2. Do not install steambath generator inside steam room.
3. Do not install steambath generator outdoors.
4. Do not install steambath generator in unheated attic or any locations where water could freeze.
5. Do not install steambath generator near combustible or corrosive materials and chemicals.
6. Install steambath generator on a solid and level surface.
7. Install steambath generator in an upright position only.
8. Install anti-water hammer device as required.
9. Provide access to both ends of steambath generator for servicing. See page 5.
10. Steam line, safety valve and drain valve become hot during operation. Provide appropriate protection.
11. MR. STEAM CONTROLS can be located inside the steam room or on the outside of the steam room. See separate CONTROL INSTALLATION AND OPERATION INSTRUCTIONS for specific details. If the SMART/TWO or SMART/PLUS controls are located outside the steamroom, a remote sensor (part number MSNC) is required.

NOTE: The SMART/ONE, SMART/REMOTE, SMART/TWO and SMART/PLUS controls are UL Approved for installation and operation in a wet location

Typical MrSteam Installation

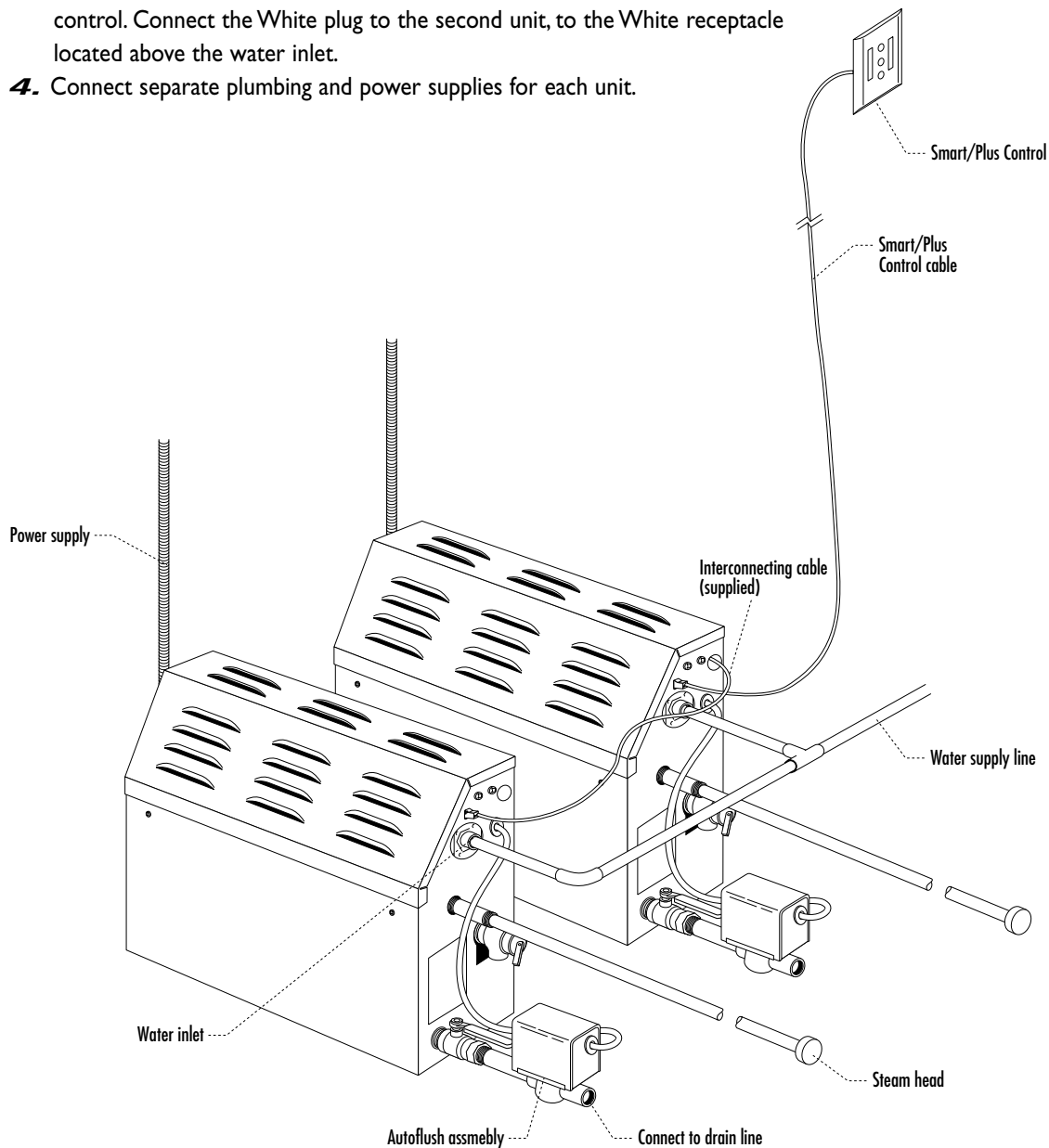


MS Super 4, 5, 6 Typical Configuration

Installation Instructions for Models:

MS-Super 4, MS-Super 5 and MS-Super 6

- 1.** Install each unit as in a single installation.
- 2.** Connect the SMART/PLUS control to either unit per instructions supplied with the SMART/PLUS control.
- 3.** Using the interconnecting cable provided (PN 103608) connect the Black plug to the Liquid Level Control Board Terminal marked TANDEM in the same unit connected to the SMART/PLUS control. Connect the White plug to the second unit, to the White receptacle located above the water inlet.
- 4.** Connect separate plumbing and power supplies for each unit.



**MS Super 4, 5, 6 typical installation
shown with optional autoflush**

Installation

Plumbing

All plumbing shall be performed by a qualified plumber and in accordance with applicable national and local codes.

- Use unions on all pipe connections.
- Use only brass piping or copper tubing
- Do not use black, galvanized or PVC pipe.

Water Supply (3/8" NPT)

- 1.** Connect hot or cold water line. Hot water line is preferable. Hot water should not exceed 160° F.
- 2.** Provide a shut off valve in the supply line.
- 3.** Do not overheat inlet solenoid valve with solder connections. Overheating will damage parts.
- 4.** Flush inlet water line thoroughly before making connection to unit.
- 5.** Strainer is required if there are solid particles in the water.
- 6.** For best performance water pressure should be 15 to 20 psig.
- 7.** Provide anti-water hammer device as required.

Steam Outlet (1/2" NPT)

- 1.** Do not install a valve in steam line. Flow of steam must be unobstructed.
- 2.** Use 1/2-inch brass or copper pipe from unit to steam head.
- 3.** Insulate steam line using pipe insulation rated 250° F or higher.
- 4.** Pitch steam line to avoid valleys and trapping of condensate.
- 5.** Pitch steam line 1/4" per foot towards steam head or steam generator.

Steam Head

- 1.** Locate steam head 6 to 12 inches from floor, except:
 - For tub/shower enclosures, install steam head 6 inches above tub top ledge.
 - When used in shower stall with acrylic or other non-heat resistant floors, install steam head 20-30 inches from floor or use a steam shield MS-103412.
- 2.** If steam room is provided with seat(s), locate steam head as far away from seat as possible.
- 3.** Install steam head with steam emission slot facing downward.
- 4. NOTE:** To preserve steam head finish, do not use wrench or other tools to tighten. Hand tightening is sufficient when Teflon or equal pipe thread sealing compound is used.
- 5.** Locate steamhead as required to prevent accidental contact with steam.

Drain (1/2" NPT)

NOTE: A drain valve is provided to facilitate servicing.

Where local codes permit, provide a drain line connection from steambath generator drain valve. Check local plumbing code for receptor, trap and vent requirements. Unit drains by gravity.

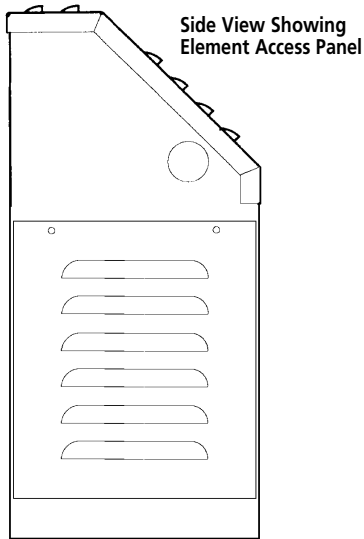
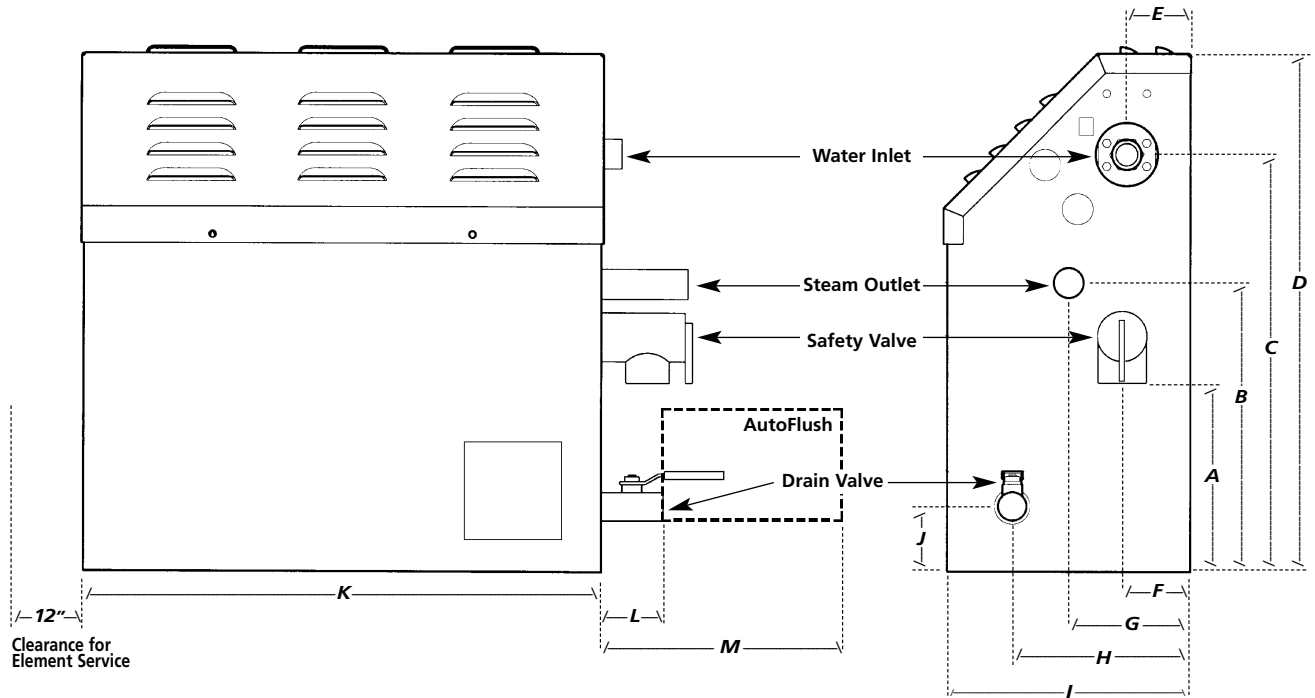
Safety Valve (3/4" NPT)

Where permitted by local codes, provide a connection for safety valve.



To insure proper and automatic safety valve operation, DO NOT connect a shut off valve or a plug at safety valve outlet.

Generator Diagram



	MS65-MS400	MS SUPER 1-6
A	5-1/2 (140)	7-1/4 (184)
B	8-1/4 (210)	10 (254)
C	11-7/8 (302)	12-1/2 (310)
D	14-3/4 (375)	18-3/4 (466)
E	1-3/4 (45)	6 (152)
F	1-7/8 (48)	2-1/2 (64)
G	3-1/2 (89)	4 (102)
H	5 (127)	6 (152)
I	6-3/4 (171)	7-7/8 (200)
J	1-3/4 (45)	1-3/8 (35)
K	14-1/2 (368)	19-3/4 (502)
L	2-1/2 (64)	2-3/8 (60)
M	6 (152)	6-3/8 (162)



TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT POWER SUPPLY DIRECTLY TO ELEMENTS !!!

NOTES:

1. M=AutoFlush
2. All units in inches (MM)
3. MS Super4 includes (2) MS Super 1 units
4. MS Super5 includes (2) MS Super 2 units
5. MS Super6 includes (2) MS Super 3 units

Electrical

All electrical wiring to be installed by a qualified electrician in accordance with local and national codes.

Power Wiring - See "Input Power Wiring" Diagrams (Page 7)

1. Check power voltage. Use 240V rated-unit when supply is greater than 208V. (Most homes have 240V, 1PH service).
2. Use minimum 90 deg. C/300V copper conductors only, sized in accordance with National and Local electrical codes for the Amps in chart below.
3. Connect equipment grounding wire to ground terminal provided.
4. Install a separate circuit breaker between supply and unit.
5. On single phase units, use two-wire supply source with ground. Neutral (white) wire is not required.

Model No.	Maximum Room Volume, Cu. Ft. *	KW	Volts	Amp	Wire size[†] (AWG)
MS-65	65	4.5	208	22	10
			240	19	12
MS-90	100	5.0	208	24	10
			240	21	10
MS-150	175	6.0	208	29	10
			240	25	10
MS-225	250	7.5	208	36	8
			240	32	8
MS-300	325	8.5	208	41	8
			240	36	8
MS-400	375	9.0	208	44	8
			240	38	8
MS-Super 1	475	10.0	208	49	8
			240	42	8
MS-Super 2	575	12.0	208	58	6
			240	50	8
MS-Super 3	675	15.0	208	73	6
			240	63	6
MS-Super 4**	875	20	208	2 x 49	8
			240	2 x 42	8
MS-Super 5**	1075	24	208	2 x 58	6
			240	2 x 50	8
MS-Super 6**	1275	30	208	2 x 73	6
			240	2 x 63	6

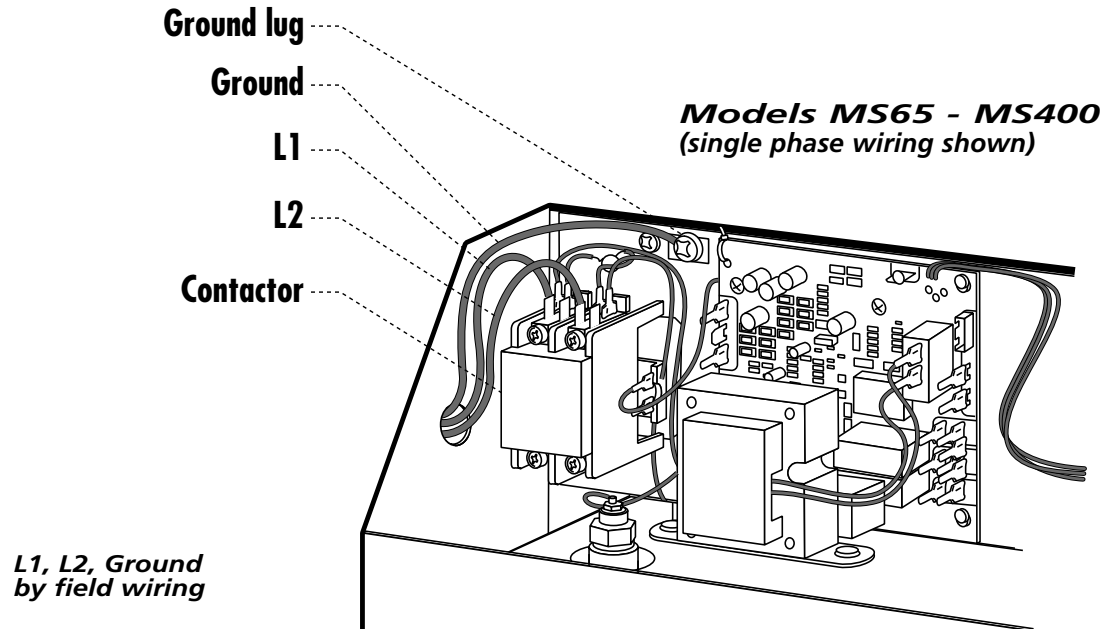
*See page 18 for room sizing.

** MS Super4 includes (2) MS Super 1 units
 MS Super5 includes (2) MS Super 2 units
 MS Super6 includes (2) MS Super 3 units

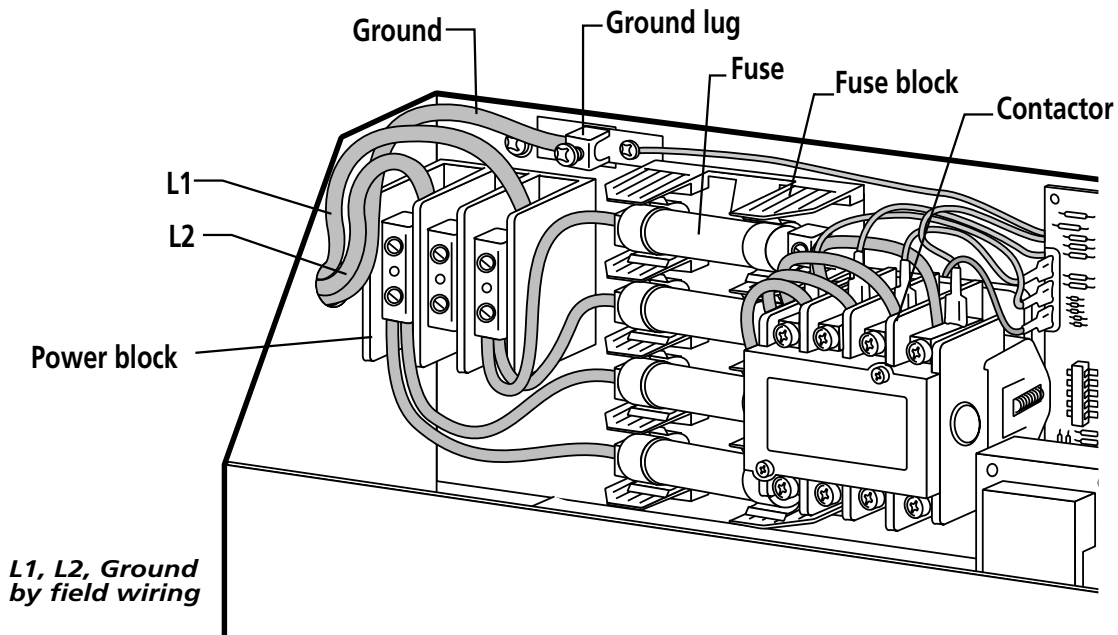
[†]All specifications shown are single phase.
 Consult factory for three phase specifications

Provide separate circuit breakers for each unit

Input Power Wiring

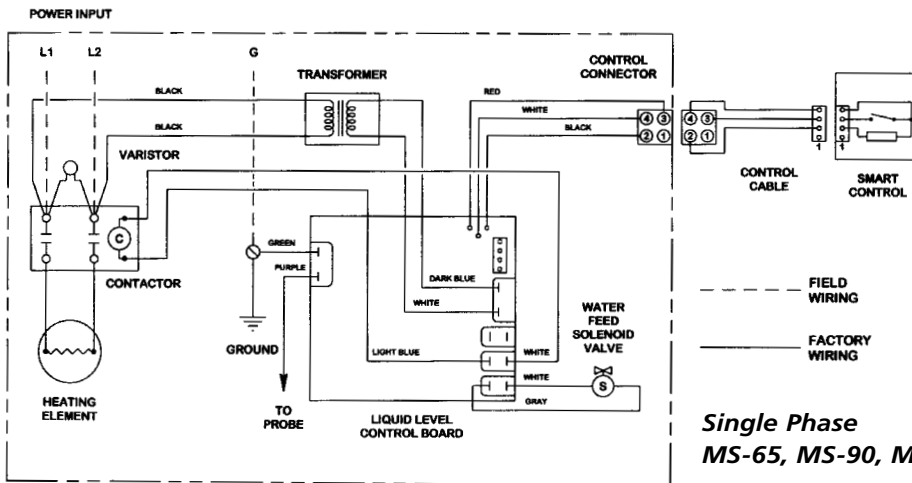


Models MS Super 1 - MS Super 6
(single phase wiring shown)

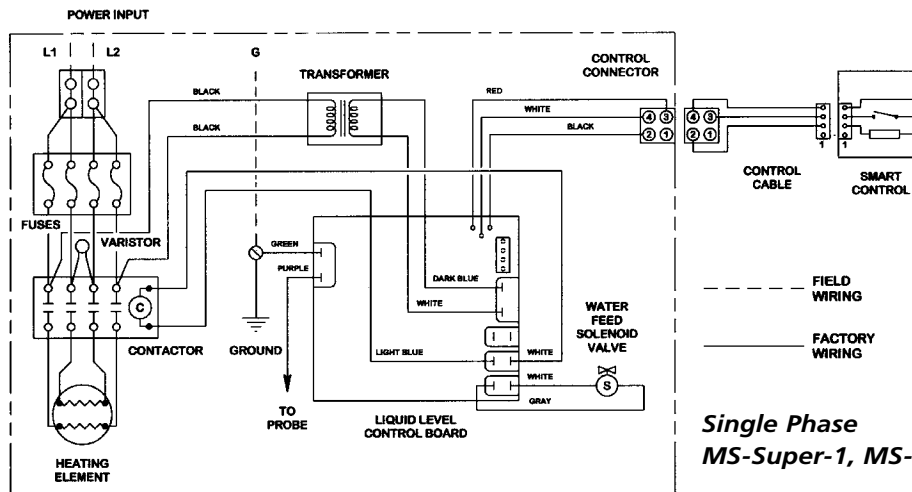


TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT
POWER SUPPLY DIRECTLY TO ELEMENTS !!!

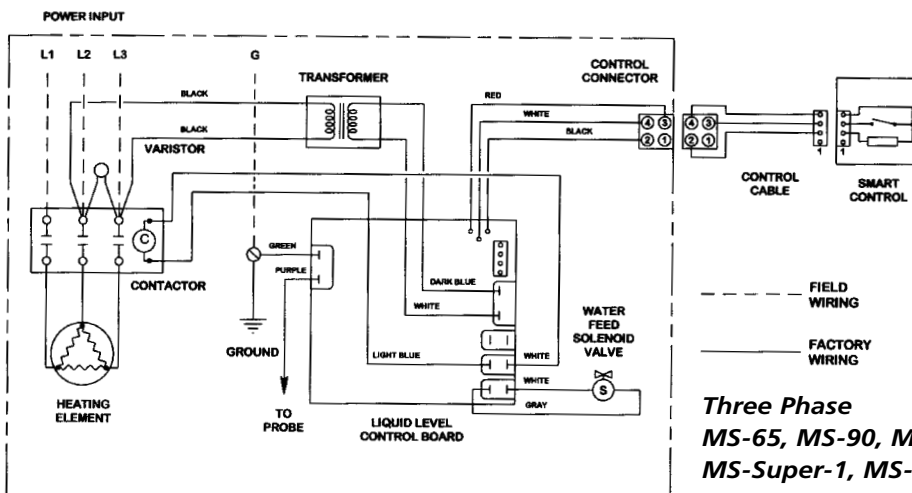
Wiring Diagrams



Single Phase
MS-65, MS-90, MS-150, MS-300, MS-400



Single Phase
MS-Super-1, MS-Super-2, MS-Super-3



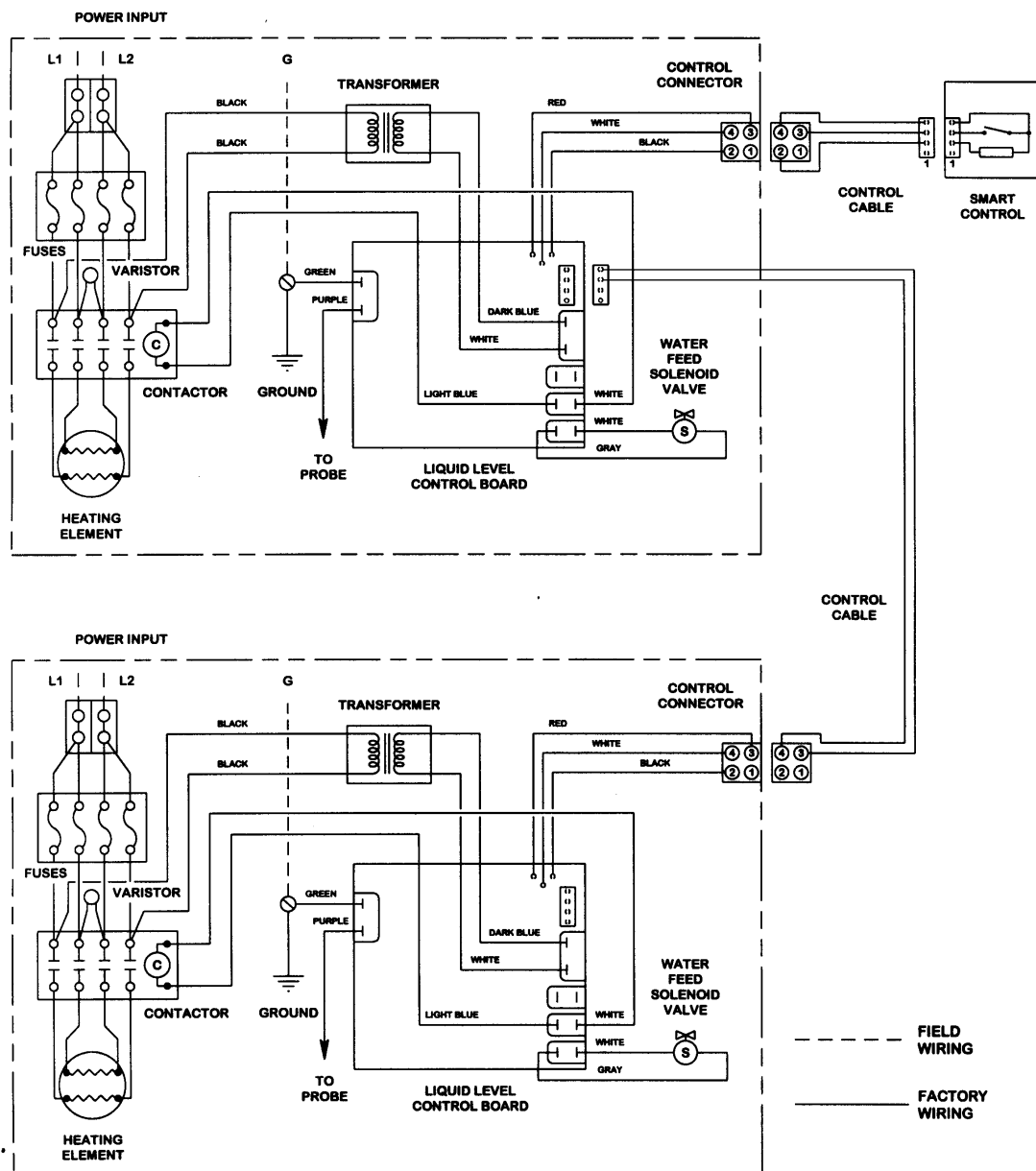
Three Phase
MS-65, MS-90, MS-150, MS-225, MS-300, MS-400,
MS-Super-1, MS-Super-2, MS-Super-3

Single Phase Wiring Diagram with Smart/Plus control

**Installation Instructions for Models:
MS-Super 4, MS-Super 5 and MS-Super 6**

1. Install each unit as in a single installation.
2. Connect the SMART/PLUS control to either unit per instructions supplied with the SMART/PLUS control.
3. Using the interconnecting cable provided (PN 103608) connect the Black plug to the Liquid Level Control Board Terminal marked TANDEM in the same unit connected to the SMART/PLUS control. Connect the White plug to the second unit, to the White receptacle located above the water inlet.
4. Connect separate plumbing and power supplies for each unit.

**Wiring Diagram: MS-Super-4, MS-Super-5,
MS-Super-6 Single Phase Models**

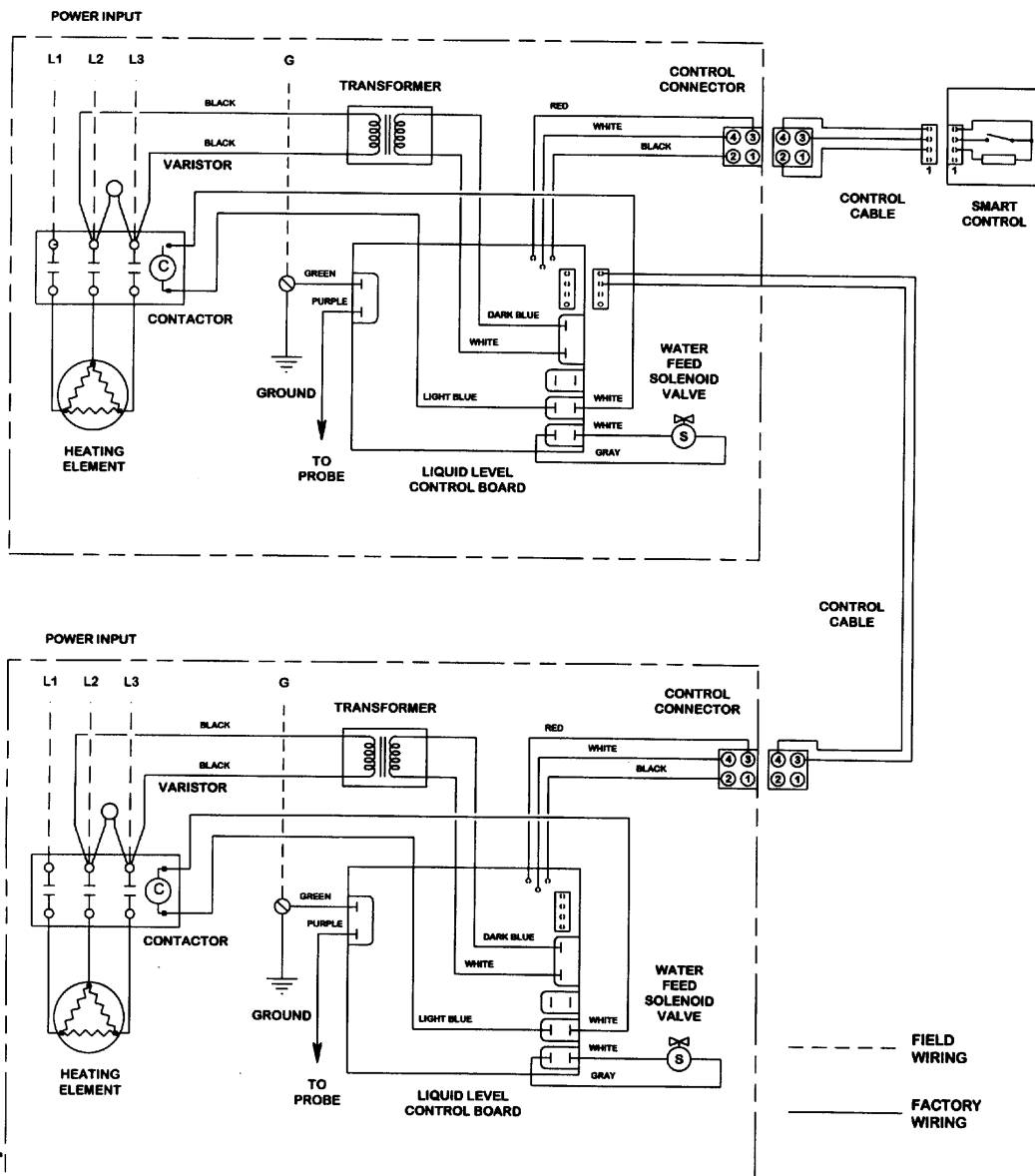


Three Phase Wiring Diagram with Smart/Plus control

Installation Instructions for Models: MS-Super 4, MS-Super 5 and MS-Super 6

1. Install each unit as in a single installation.
2. Connect the SMART/PLUS control to either unit per instructions supplied with the SMART/PLUS control.
3. Using the interconnecting cable provided (PN 103608) connect the Black plug to the Liquid Level Control Board Terminal marked TANDEM in the same unit connected to the SMART/PLUS control. Connect the White plug to the second unit, to the White receptacle located above the water inlet.
4. Connect separate plumbing and power supplies for each unit.

Wiring Diagram: MS-Super-4, MS-Super-5, MS-Super-6 Three Phase Models



Optional Autoflush System

BOX CONTENTS:

- AutoFlush Valve with Cord and Bushing
- Nipple
- Installation Instructions.

The optional AutoFlush feature automatically drains the MrSteam system following each use. The stainless steel tank is flushed and remains empty until it is used again. A time delay allows the water to cool down (about two hours) before it drains resulting in a safe and gentle operation.

Installation Instructions

Plumbing to be performed by a qualified plumber and shall be in accordance with applicable national and local codes. Unit drains by gravity.

A drain line that is lower than the AutoFlush assembly must be available. The AutoFlush valve outlet is threaded 1/2" NPT. Check plumbing code for receptor, trap and vent requirements.

Sweat Fittings

When using sweat fittings use only tin base solder with a melting point below 600 degrees F. Do not overheat. Ends of water supply tubing must be thoroughly clean for a minimum distance of 1" from ends. Do not remove valve cover.



TO PREVENT POSSIBLE ELECTRIC SHOCK, SHUT OFF POWER AT PANEL BOX BEFORE REMOVING STEAM GENERATOR COVER.

1. Using nipple provided connect AutoFlush valve end "B" to ball valve.
NOTE: If there is not enough room for the valve, an elbow and a short nipple (not provided) can be added.
2. Connect valve end "A" and "B" are indicated on bottom of AutoFlush Valve.
3. Open ball valve (handle must be aligned with brass nipple).
4. Remove knock-out in jacket and connect cord. Connect cord to FLUSH terminals on the liquid level control circuit board as shown in wiring diagram. Connect black wire to BLK terminal. Connect white wire to WHT terminal.

NOTE: If circuit board has MS-AUTOFLUSH terminals marked BLK WHT YEL BLU, a time delay relay (TDR) kit is required. Call factory for 103583-AUTOFLUSH TDR KIT.

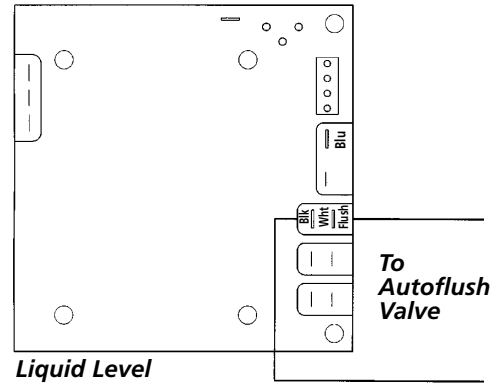
5. Replace cover, secure it with screws and restore power.

To Check Operation

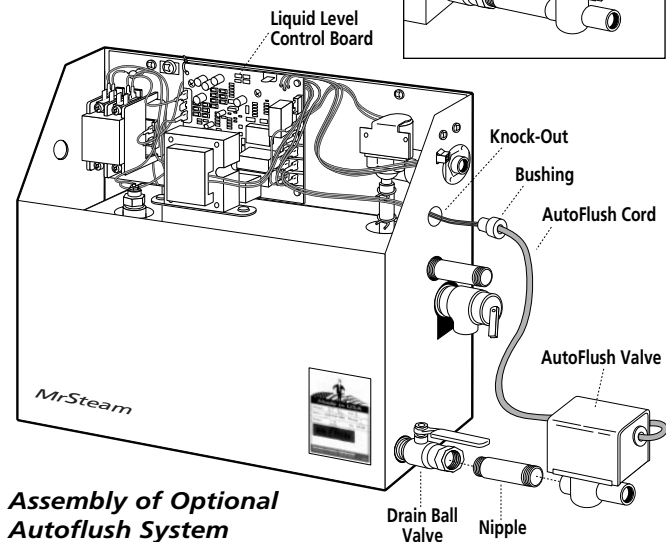
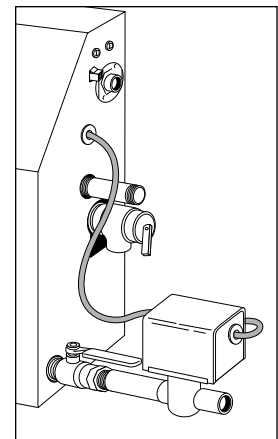
1. Turn on MrSteam and allow tank to fill with water.
(see MrSteam instruction manual)
2. Turn off MrSteam control. Water should stay in tank.
3. Turn off power at the panel box.
Water should discharge from tank.
4. Turn on power at panel box.
5. Repeat



PROVIDE DRAIN PLUMBING ACCORDING TO LOCAL CODES. PLUMB AS REQUIRED FOR GRAVITY DRAIN SYSTEM.



Liquid Level Control Board



Assembly of Optional Autoflush System

Check Out and Operation

1. Turn on SMART CONTROL
 - Follow specific instruction sheet provided with controls.
2. Steam will begin to appear in a (5-8) minutes at the steam head.
 - When system is equipped with a temperature control, steam will shut off when desired temperature is reached and will automatically resume when room temperature drops below set point.
3. Steam will shut off automatically when SMART CONTROL counts down to zero.
 - To shut steam off manually, turn off CONTROL "OFF".
 - To clear steam from enclosure area, turn on cold or lukewarm shower before opening door.

Optional Equipment

Refer to specific instruction sheets for installation, operation and maintenance of optional equipment and accessories such as SMART/ONE, SMART/TWO, SMART/PLUS, SMART/REMOTE, AUTOFLUSH, etc.

Maintenance

MR. STEAM steambath generators are designed for unattended operation and require little maintenance. Other than periodic draining, maintenance procedures are not required. Every 2 months, or more often in "hard" water areas, the drain valve should be opened fully flushing out accumulated materials, salts and other particles which are natural by-products of boiling water. Note: For best results, this should be done immediately after using the steambath generator, while contents are still hot and with the control off!



Draining immediately after a steam cycle may expose PVC and other piping to high temperature water. Check local codes. The unit will refill automatically when the control is activated again. In areas of very hard water, a MR. STEAM autoflush system is recommended for generator longevity.

Major Electrical Systems Test

Transformer Test

1. Power to unit is on.
2. Check voltage at blue and white terminals of the PC board = 24VAC.
3. If voltage is zero VAC, 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 yellow & white terminals of the PC board.
5. If voltage is zero VAC, 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 from unit by opening manual drain valve (not necessary if unit has a functioning autoflush valve).
4. Turn control on.
5. Check voltage at "PUMP" (grey and white terminals) on the PC board = 24VAC. If voltage = zero VAC, then proceed to probe test.
6. Check voltage at the grey and white wires at water solenoid = 24VAC.
7. If voltage is 24VAC, and water does not enter, replace water solenoid valve.

Probe Test

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

Contactors

1. Power to unit is on.
2. Water solenoid test is good.
3. Turn control on.
4. Check voltage at "CONT" (white and blue terminals) on the PC board.
5. Check voltage at blue and white wires at the contactor coil = 24VAC.
6. If contactor coil voltage is 24VAC and contactor is not engaging, then contactor must be replaced.

Trouble Shooting

The information contained in this section is intended to aid qualified service personnel in the testing and 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 or check circuit breaker
	Control is "OFF" or in "PAUSE" mode	Turn control "ON"
	Temperature control is set too low	Set control to higher temperature
	System is heating up	Wait 5 minutes for steam



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 10 psig
	Clogged solenoid valve built-in filter	Remove obstruction
	Probe is shorted to ground	Check for shorts
	Liquid level control board malfunction	Check water solenoid operation*
	Solenoid valve malfunction	Check valve - Replace if necessary

*See Major Electrical Components Test (page 12)

Trouble Shooting

Problem	Probable Cause	Suggested Remedy
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 contactor operation*
	Burnt out fuse(s)	Check Fuses
	Contactor 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 50 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 below
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 next page

*See Major Electric Component Test (page 12)

Trouble Shooting

Problem	Probable Cause	Suggested Remedy
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
	Incoming power connected directly to elements	Check connections (see page 7)
	Liquid level control malfunction	Check probe and contactor 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
Water continuously flowing out of drain line	Drain left in open position	Close drain
	If AutoFlush - malfunction of circuit board	Check circuit board
	If AutoFlush- AutoFlush valve obstructed by calcium build-up	Clean or replace valve

*See Major Electrical Components Test (page 12)

It's Easy to Select the Right Mr.Steam Model

1. Measure the Length, Width, and Height in feet of the steam enclosure to be used.

L _____

W _____

H _____

Multiply the Length x Width x Height to get the basic room volume in CUBIC FEET (a)

a _____

2. If the interior wall construction material within the steam enclosure is natural marble, stone, slate, glass block or concrete, copy the figure from box (a) to box (b).

b _____

3. Total (a) and (b) to obtain Total Basic Cubic Feet

c _____

4. Increase (a) by 15% for each of the following design features that describe the steambath enclosure:

- One exterior outside wall
- Tile or mud wall
- An extra glass panel in addition to the door
- A cast iron tub or marble bench

d _____

e _____

f _____

g _____

5. For steambath rooms higher than 8 ft., add 15% to the total in box (c)

h _____

ADD BOXES (d) THROUGH (h) TO BOX (c) = TOTAL CUBIC FEET REQUIRED

i _____

Compare the total cubic feet required (i) to the specification chart below and select the appropriate model.

IMPORTANT: THE FORMULA FOR SELECTING THE STEAMBATH GENERATOR IS A RECOMMENDATION ONLY. BECAUSE OF VARIABLES IN CONSTRUCTION, THESE SIZING INSTRUCTIONS AND SPECIFICATIONS SHOULD BE CONSIDERED AS GUIDELINES ONLY. NO HEATING, VENTING OR AIR CONDITIONING DEVICES SHOULD BE INSTALLED INSIDE THE STEAM ROOM.

MrSteam will review the model selected provided we receive complete information, including working drawings, specifications, and pertinent electrical and construction details. Otherwise the manufacturer disclaims responsibility for the sizing of a model selected.

Model No.	Kw	Maximum Room Volume (cu.ft.)	Available Voltage 50 60/HZ	Amps
MS65	4.5	65	208V/1PH 240V/1PH	22 19
MS90	5	100	208V/1PH 240V/1PH	24 21
MS150	6	175	208V/1PH 240V/1PH	29 25
MS225	7.5	250	208V/1PH 240V/1PH	36 32
MS300	8.5	325	208V/1PH 240V/1PH	41 36
MS400	9	375	208V/1PH 240V/1PH	44 38
MS Super 1	10	475	208V/1PH 240V/1PH	49 42
MS Super 2	12	575	208V/1PH 240V/1PH	58 50
MS Super 3	15	675	208V/1PH 240V/1PH	73 63
MS Super 4 Package	20	875	208V/1PH 240V/1PH	97 84
MS Super 5 Package	24	1075	208V/1PH 240V/1PH	116 100
MS Super 6 Package	30	1275	208V/1PH 240V/1PH	145 125

Models MS65-MS400 supplied standard with a SMART/ONE control. All Super Models supplied standard with a SMART/PLUS control. All standard controls supplied in polished chrome with a white accent trim. Polished chrome steamhead supplied standard.

MS-Super-4 Package includes two MS-Super-1 generators and one SMART/PLUS Control.

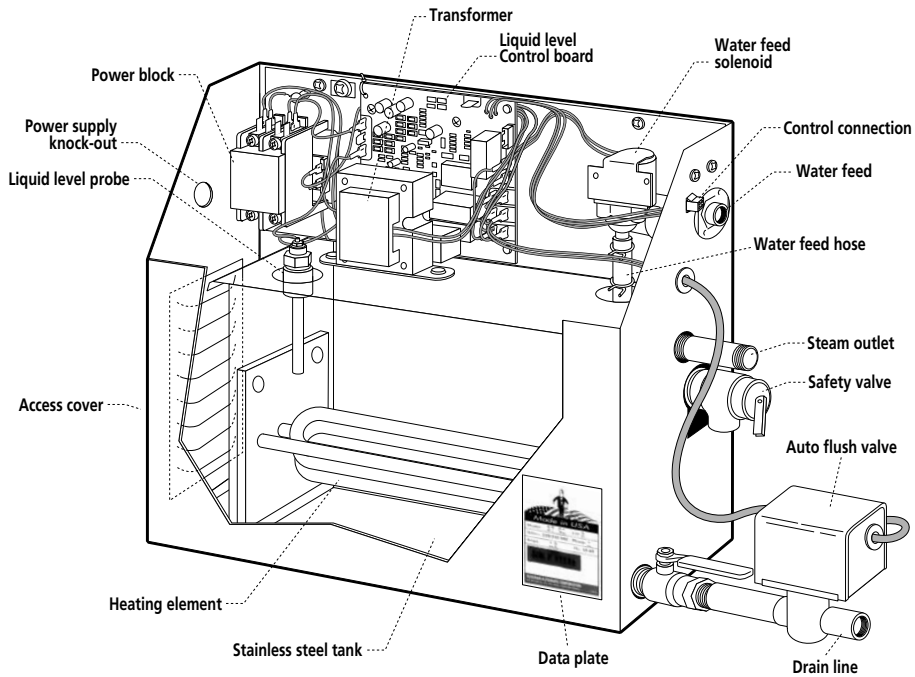
MS-Super-5 Package includes two MS-Super-2 generators and one SMART/PLUS Control.

MS-Super-6 Package includes two MS-Super-3 generators and one SMART/PLUS Control.

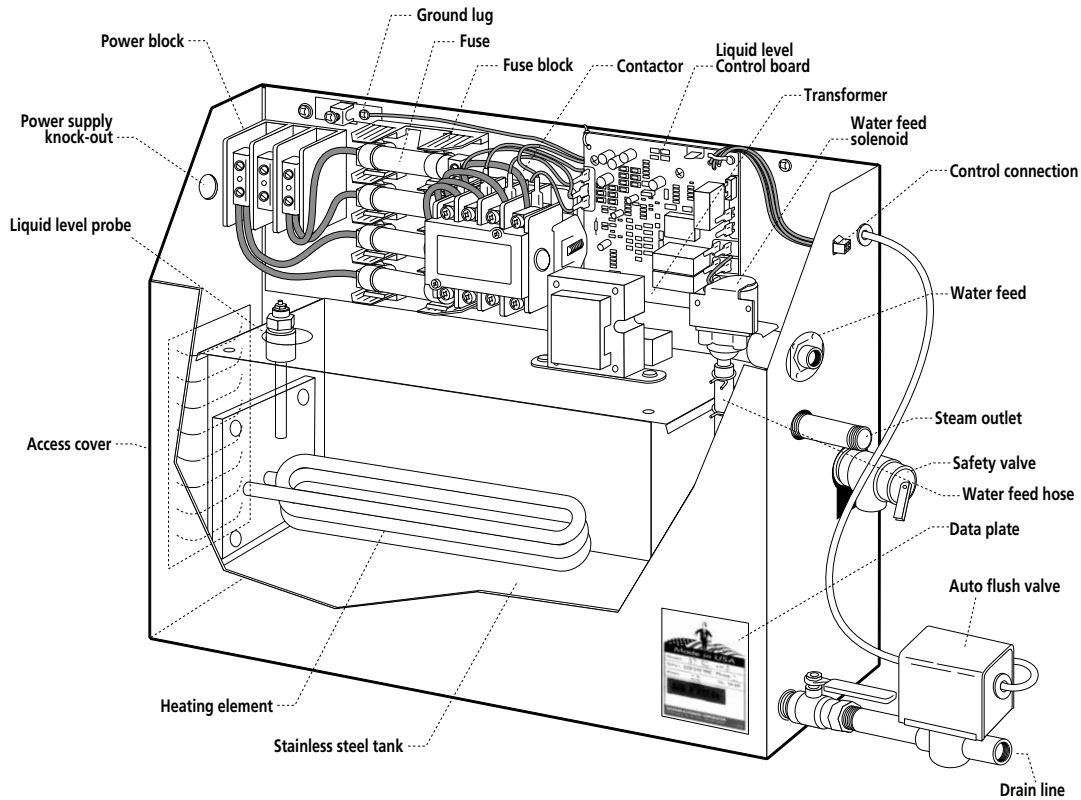
Models MS65-MS400 measure 19" L x 14 3/4" H x 6 3/4" D and weighs 28 lbs. Each SUPER series measure 24" L x 18 3/4" H x 7 7/8" D and weighs 45 lbs.

Call for availability of additional voltages and phases.

MS Regular Models MS65 - MS400 (with Autoflush)
shown with cover removed



MS Super Models MSSuper 1 - MSSuper 6 (with Autoflush)
shown with cover removed



Replacement Parts List

Part No.	Description	Product
99178	Drain Valve	(MS-Super 1 — Super 6)
99178MS	Drain Valve	(MS 65 — MS 400)
99297	Safety Valve 15PSI	All models
100479	Water Feed Solenoid Valve w/filter	All models
100477-1	Transformer 24VAC	All models
103675	Liquid Level Control Board	All models
100476-2	Contactactor 40A 2-pole	(MS 65,-400 except below)
99012	Contactactor 50A 3-pole	(MS 300-400/208V & all 3 Phase)
103453	Contactactor 50A 4-pole	(MS-Super)
100471-2	Probe Assembly	All models
99096W	Heating Element Gasket	All models
99314	Power Fuse 60A 250V	MS-Super 1-6 Single phase
29041BMS	Heating Element 4.5KW 208V	(MS 65)
29041CMS	Heating Element 4.5KW 240V	(MS 65)
29051BMS	Heating Element 5 KW 208V	(MS 90)
29051CMS	Heating Element 5 KW 240V	(MS 90)
29061BMS	Heating Element 6 KW 208V	(MS 150)
29061CMS	Heating Element 6 KW 240V	(MS 150)
29071BMS	Heating Element 7.5KW 208V	(MS 225)
29071CMS	Heating Element 7.5KW 240V	(MS 225)
29081BMS	Heating Element 8.5KW 208V	(MS 300)
29081CMS	Heating Element 8.5KW 240V	(MS 300)
29091BMS	Heating Element 9 KW 208V	(MS 400)
29091CMS	Heating Element 9 KW 240V	(MS 400)
29101BMS	Heating Element 10 KW 208V	(MS-SUPER 1 & MS-Super 4)
29101CMS	Heating Element 10 KW 240V	(MS-SUPER 1 & MS-Super 4)
29121BMS	Heating Element 12 KW 208V	(MS-SUPER 2 & MS-Super 5)
29121CMS	Heating Element 12 KW 240V	(MS-SUPER 2 & MS-Super 5)
29151BMS	Heating Element 15 KW 208V	(MS-SUPER 3 & MS-Super 6)
29151CMS	Heating Element 15 KW 240V	(MS-SUPER 3 & MS-Super 6)

Contact factory for 3 Phase heating elements.