

MrSteam®

Residential Steambath Generator Systems

Installation, Operation & Maintenance Manual

MODELS:

MS-65T

MS-90T

MS-150T

MS-225T

MS-300T

MS-400T

MS-SUPER 1T

MS-SUPER 2T

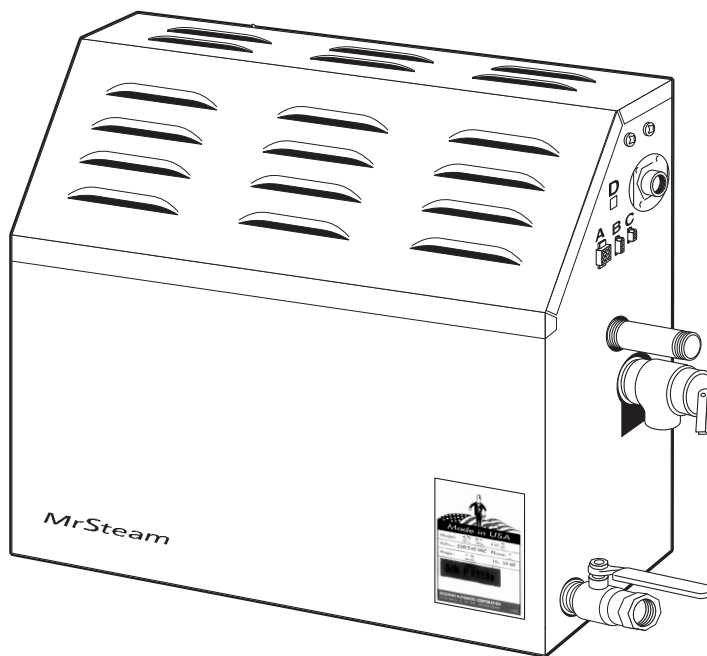
MS-SUPER 3T

MS-Super 4T

MS-Super 5T

MS-Super 6T

MODEL _____ Serial No. _____



WARNING

1. Children under the age of 16 should not use the Steambath.
2. Check with a physician before use of the Steambath if you are pregnant, have a coronary condition, are in poor health, are being treated for any other medical condition, or are using medication or drugs.
3. Exit Steam Room immediately if you feel faint, dizzy, sleepy, or otherwise uncomfortable.
4. Do not use the Steambath if you have recently consumed alcohol.
5. Condensation and moisture may cause the the Steambath floor and other surfaces to become slippery and dangerous. Installation of non-skid floor materials or the use of proper footwear is recommended at all times.

IMPORTANT! Read the manual provided for use and safety information.

MrSteam® Sussman Lifestyle Group®

43-20 34th Street, Long Island City NY 11101 • 1 800 76 STEAM • www.mrsteam.com

PUR100378 6.3/03



NOM
596

ANSI 

◀ **PEEL & STICK WARNING**

Note: MrSteam strongly recommends that this warning be peeled off and posted in a conspicuous location near the steambath.

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 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.

All information in these instructions is based on the latest product information available at the time of publication. Sussman-Automatic Corporation reserves the right to make changes at any time without notice.


PUR 101289 Rev. 6.4/04



A Division of Sussman-Automatic Corporation

43-20 34th Street, Long Island City, NY 11101 • (718) 937-4500
1-800-767-8326 • Fax: (718) 472-3256 • www.mrsteam.com

Western Regional Offices

9410 S. La Cienega Blvd., Inglewood CA 90301
1-800 72 STEAM (1-800 727-8326) • Fax: (310) 216-2944

Table of Contents

<i>Before Installing</i>	3
<i>Steam Room Guidelines</i>	3
<i>Locating the Steam Generator Unit</i>	4
<i>Typical Installation</i>	4
<i>MS Super-4T, 5T, 6T Typical Installation</i> . . .	5
<i>Installation</i>	6
<i>Plumbing</i> <i>Steam Outlet</i> <i>Drain</i>	
<i>Water Supply</i> <i>Steam Head</i> <i>Safety Valve</i>	
<i>Generator Dimensions</i>	7
<i>Electrical Specifications</i>	8
<i>Field Power Wiring</i>	9
<i>Wiring Diagrams</i>	10–12
<i>Optional Tandem Cable</i>	13
<i>Initial Start-Up and Checkout</i>	13
<i>Maintenance</i>	13
<i>Optional AutoFlush System</i>	14–15
<i>Using AromaSteam Essential Oils</i>	15
<i>Liquid Level Control Board</i>	16
<i>Select Your MrSteam Model</i>	17
<i>Replacement Parts Diagram</i>	18
<i>Replacement Parts List</i>	19

Tempo Controls

<i>General Information & Care Tips</i>	20
<i>Safety & Operating Information</i>	20
TEMPO® & TEMPO/PLUS™	
<i>Installation Instructions</i>	21–22
<i>TEMPO® Operating Instructions</i>	23
<i>TEMPO/PLUS™ Operating Instructions</i> . . .	24
TEMPO/REMOTE®	
<i>Programming the Code</i>	25
<i>Using the Remote</i>	26
<i>Pausing the Unit</i>	26
<i>Setting Program Values</i>	26
<i>Battery Replacement</i>	27
<i>Installing the Holder</i>	27
TEMPO/EXT™	
<i>Using the TEMPO/EXT</i>	28
<i>Installing the TEMPO/EXT control</i>	29

Before Installing

IMPORTANT: The following general information should be used in conjunction with consultations with your architect, designer and contractor in determining all factors necessary in providing a suitable and safe steam room.

Read these instructions before installation or service. Although this MS steambath generator has been fully qualified for shipment by MrSteam, 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 MrSteam sizing guide enclosed. (see page 17)

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: MrSteam units are intended to be operated with MrSteam TEMPO/PLUS, TEMPO, TEMPO/REMOTE and TEMPO/EXT Controls only, and are to be installed strictly in accordance with the specific instructions contained in this manual and as supplied in the manuals provided with the controls.



WARNING

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

Steam Room Guidelines

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 or other smooth surfaced flooring is used provide suitable anti-skid strips or equivalent, to prevent user slipping and injury.
4. Walls and ceilings must be constructed of water-resistant, non-corrosive surface, such as tile, marble, molded acrylic, or other non-porous material. The ceiling should be sloped to prevent dripping of condensate. If acrylic, fiberglass or other non-heat resistant materials are used as part of the steamroom enclosure, see pg. 6, "Steamhead" for additional details.
5. Provide a floor drain.
6. No heating, venting or air conditioning devices should be installed inside the steam room.
7. Steam room construction information is available from the Tile Council of America, Inc. by purchasing the TCA Handbook for Ceramic Tile Installation. Tel (864) 646-8453 or www.tileusa.com.
8. MrSteam strongly recommends that a warning be posted in a conspicuous location near the steambath. A peel-off warning has been provided (on the inside front cover) for installation. See Warning facsimile below.



WARNING

1. Children under the age of 16 should not use the Steambath.
2. Check with a physician before use of the Steambath if you are pregnant, have a coronary condition, are in poor health, are being treated for any other medical condition, or are using medication or drugs.
3. Exit Steam Room immediately if you feel faint, dizzy, sleepy, or otherwise uncomfortable.
4. Do not use the Steambath if you have recently consumed alcohol.
5. Condensation and moisture may cause the the Steambath floor and other surfaces to become slippery and dangerous. Installation of non-skid floor materials or the use of proper footwear is recommended at all times.

IMPORTANT! Read the manual provided for use and safety information.

MrSteam® Sussman Lifestyle Group®

43-20 34th Street , Long Island City NY 11101 • 1 800 76 STEAM • www.mrsteam.com

PUR100378 6.3/03



WARNING

The MS series of steam generators are for residential use only. Commercial or other non residential applications void the warranty and may adversely affect product performance.

Locating the Steam Generator Unit

Select a location as near as practical to the steam room. Typical locations include: closet, vanity cabinet, heated attic or basement.

1. Locate steambath generator within 25 feet of steam room.

NOTE: The standard length of the cable for connecting the control to the steam generator is 30 feet. The steam generator and control must be located accordingly. A 60 foot cable (PN 103922) is available as a special order part.

2. Do not install steambath generator inside steam room.
3. Do not install steambath generator outdoors or wherever environmental conditions may affect the safety and/or performance of the generator.
4. Do not install steambath generator in unheated attic or any locations where water could freeze.
5. Do not install steambath generator near flammable or corrosive materials or chemicals such as gasoline, paint thinners, or the like. Installation in areas having high concentrations of chlorine (such as pool equipment room) must be avoided.
6. Install steambath generator on a solid and level surface. Keyhole slots are provided on for wall mounting. Insure the steam generator is properly secured and level when mounting with keyhole slots.
7. Install steambath generator in an upright position only.
8. Install anti-water hammer device as necessary.
9. Provide a minimum of (12) inches at both ends and top of the steam generator or as required for servicing. See page 7.
10. Provide unions as required to facilitate installation and disconnection of piping.
11. **IMPORTANT:** Steam line, safety valve, drain valve, plumbing and steamheads become hot during operation and remain hot after shutdown for a period of time. Provide appropriate protection, including insulating plumbing lines. Avoid plumbing runs and steamhead locations that can come in contact with bathers.
12. MrSteam 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 controls are located outside the steamroom, a remote sensor (part number MST5) is required.

NOTE: MrSteam Generators (inclusive of the Tempo series Controls) are CE and UL listed.

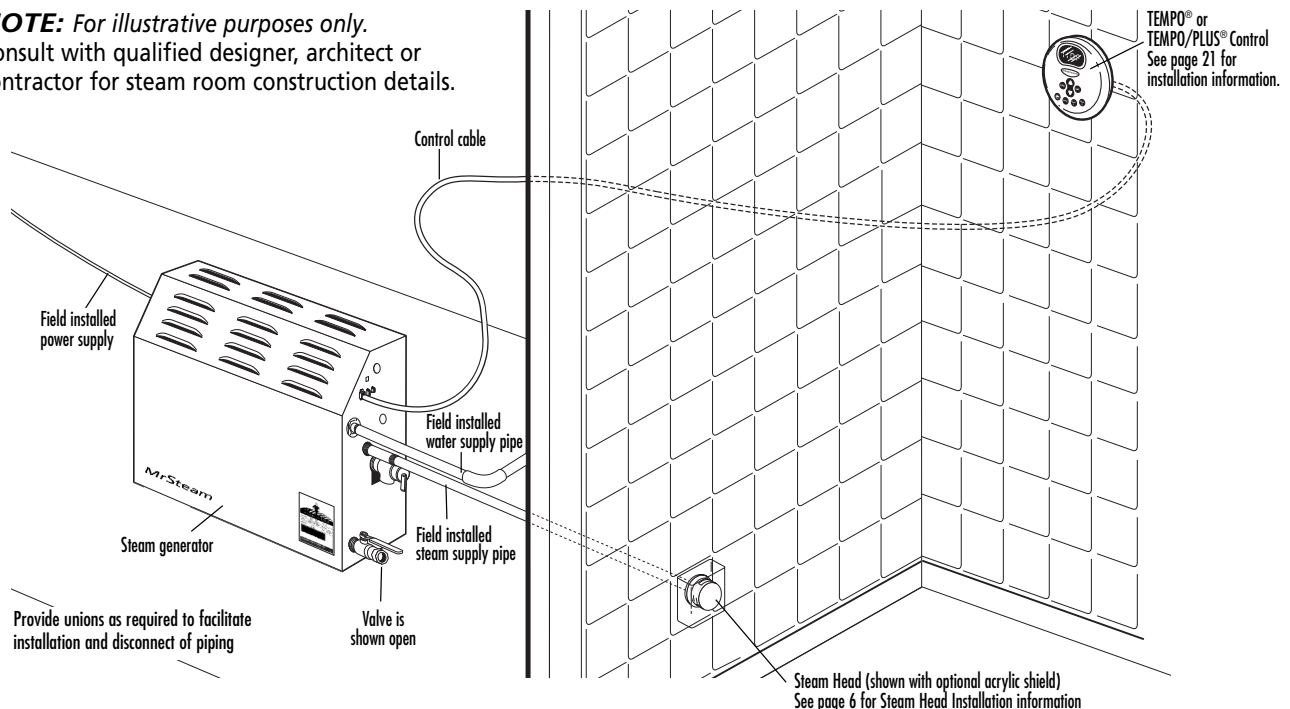
UL listing is for operation of the Tempo controls in wet environments.



The MS series of steam generators are for residential use only. Commercial or other non-residential applications void the warranty and may adversely affect product performance. Use only MrSteam Tempo® series controls.

Typical MrSteam Installation

NOTE: For illustrative purposes only. Consult with qualified designer, architect or contractor for steam room construction details.



MS Super 4T, 5T, 6T Typical Configuration

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

1. Install each steam generator as in a single installation. Install generators as close as possible to each other, not exceeding 12 feet. The interconnecting cable length is 12 feet.
2. **IMPORTANT NOTE:** Power must be disconnected at the main electrical supply. Remove steam generator covers. Retain screws and cover for reuse.
3. Connect the TEMPO/PLUS control to either unit per instructions supplied with the TEMPO/PLUS control.
4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (PN 103904) through the knock-outs as shown in Diagram A. Connect each end to the printed circuit board connector labeled "TANDEM" as shown.
5. Prevent the interconnecting cable from contacting hot surfaces such as steam outlet, safety valve and the like.
6. Connect separate plumbing and power supplies for each unit. Replace covers with cover screws.

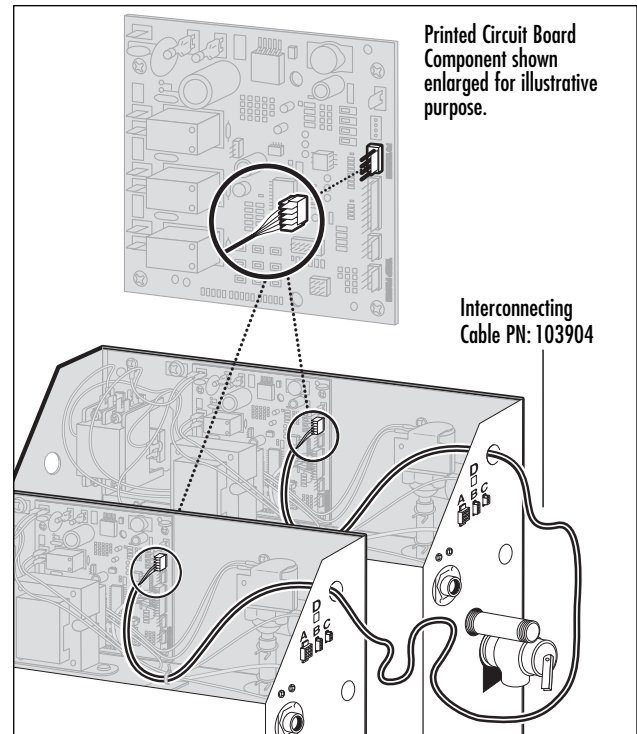
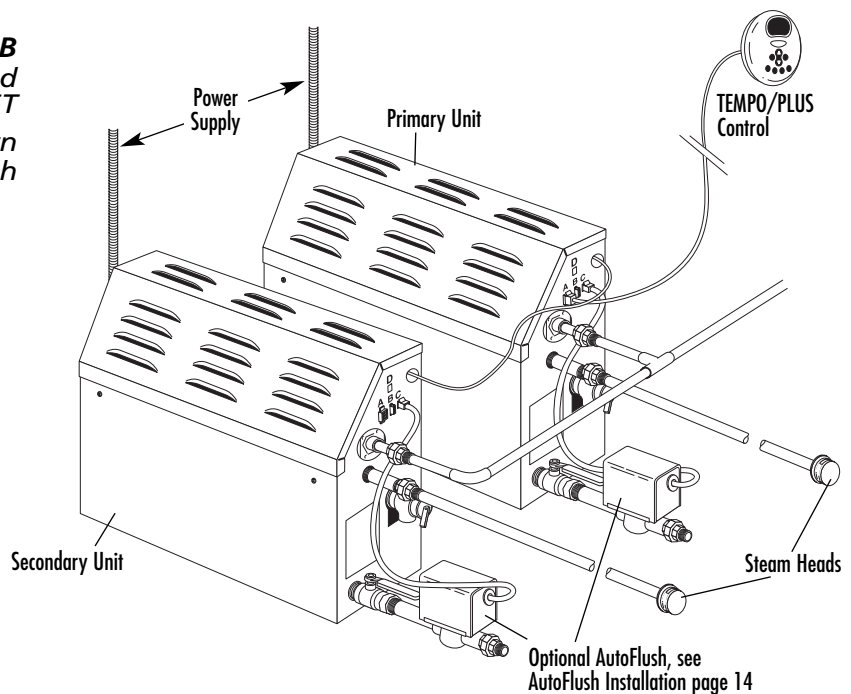


Diagram A

NOTE: For illustrative purposes only.
Units shown prior to plumbing and installation.

Diagram B
*Assembled and Installed
MS Super 4T, 5T, 6T
Typical Installation shown
with Optional AutoFlush*



NOTE: For illustrative purposes only. Consult with qualified designer, architect or contractor for steam room construction details.

Installation

Plumbing

All plumbing shall be performed by a qualified licensed 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, however hot water should not exceed 160° F.
2. Provide a shut off valve in the water supply line upstream of the steambath generator.
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 recommended upstream of feed water connection.
6. For best performance water pressure should be 15 to 20 psig. Reduce pressure as required if necessary.
7. Provide anti-water hammer device as required.

Steam Outlet (1/2" NPT)

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

NOTE: Running the steam line down and then up will create a steam trap blocking the flow of steam.

Steam Head (1/2" NPT)



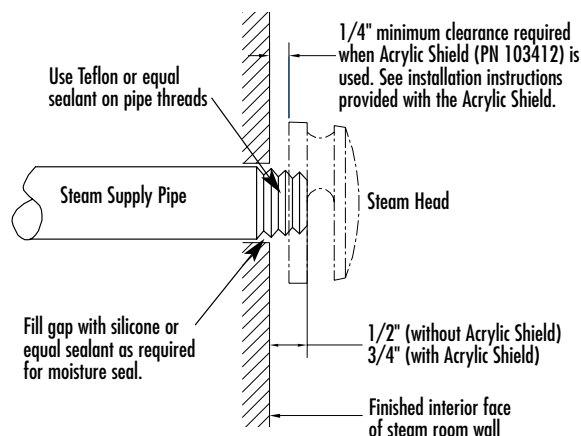
CAUTION

INSTALLER: Because the steam head and direct steam emissions are very hot, locate the steam head where incidental contact by bather with the steam head or direct steam emission cannot occur.

1. Locate steam head 6-12 inches above floor, except for
 - Tub/shower enclosures, install 6 inches above tub top edge.
 - For enclosures with acrylic or other non-heat resistant flooring install Acrylic Shield Part Number MS-103412.
2. Install steamhead with steam head facing downward. Hand tightening is sufficient when teflon or equal pipe thread sealing compound is used.

IMPORTANT NOTE: to preserve steam head finish, do not use wrench or other tools to tighten. Use no abrasive cleansers or chemicals. Use only water with mild soap and a non-abrasive sponge.

3. **IMPORTANT:** Consult with supplier of acrylic, fiberglass and other non-heat resistant enclosures for recommended steamhead location. Use Acrylic Shield part number MS-103412.



Drain (1/2" NPT)

NOTE: A drain valve is provided to facilitate servicing. Provide a drain line connection from steambath generator drain valve according to National and local Codes. Check local plumbing code for receptor, trap and vent requirements. Unit drains by gravity.

Safety Valve (3/4" NPT)

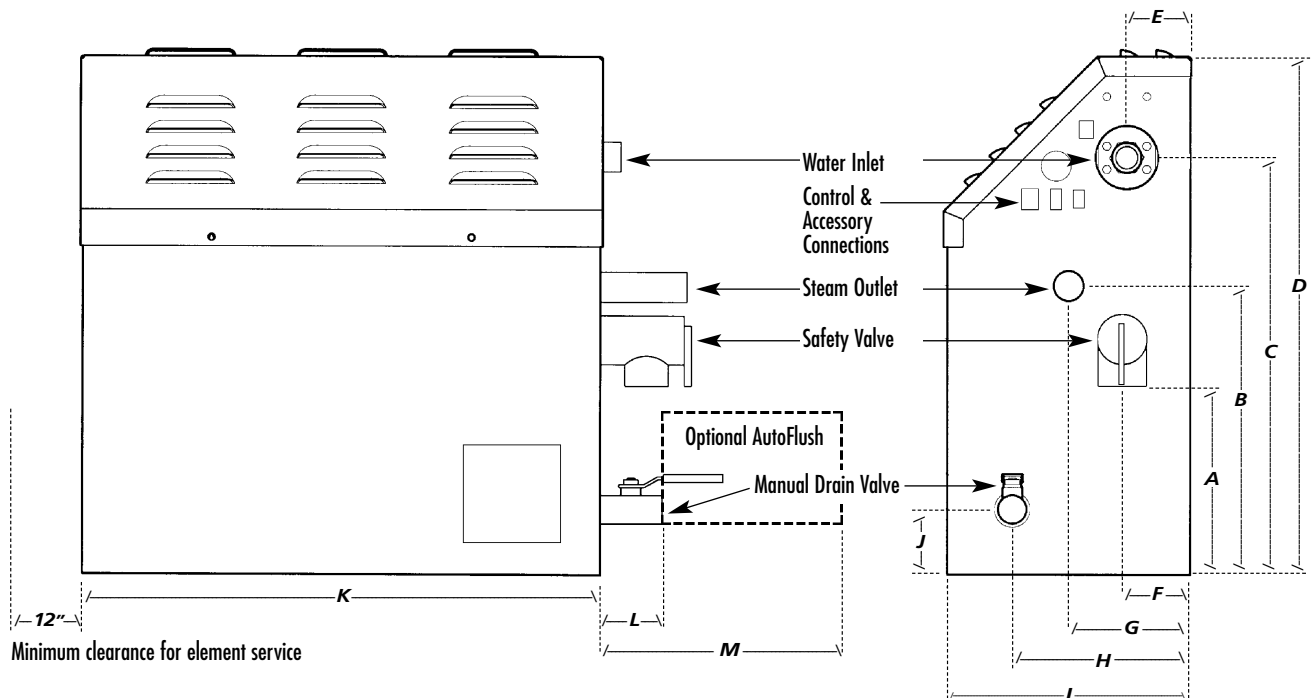
Where permitted by local codes, provide an outlet plumbing connection for safety valve.



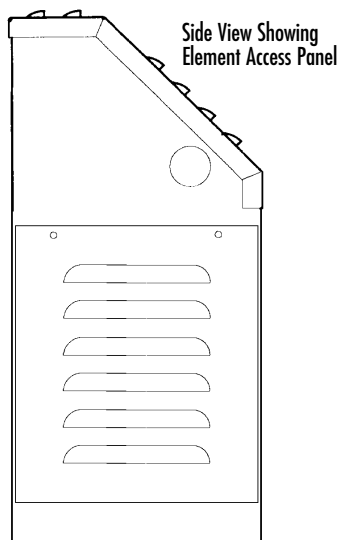
WARNING

To insure proper and automatic safety valve operation: DO NOT connect a shut off valve or a plug at safety valve outlet. DO NOT connect a shut off valve in steam supply pipe.

Generator Diagram



IMPORTANT NOTE: Provide clearance around steam generator as required for service and maintenance. DO NOT rough in plumbing and electrical services based on dimensional information provided. Drawing not to scale.



	MS 65T- MS 400T		MS SUPER 1T-6T	
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 !!!

NOTE: For illustrative purposes only.

NOTES:

1. M=Optional AutoFlush
2. All units in inches (MM)
3. MS Super 4T includes (2) MS Super 1T units
4. MS Super 5T includes (2) MS Super 2T units
5. MS Super 6T includes (2) MS Super 3T units

Electrical

All electrical wiring to be installed by a qualified licensed electrician in accordance with National Electrical Code and local electrical code.

Power Wiring—See “Field Power Wiring” Diagrams (Page 9)

1. Check power voltage. Use 240V rated unit when supply is greater than 208V. (Most homes have 240V, 1PH service). Use 208V rated unit for 208V power.
2. Use minimum 90° C/300V rated insulated copper conductors only, sized in accordance with National Electrical Code and local electrical code for the Amps in Ampere Chart.
3. Connect suitably sized equipment grounding wire to ground terminal provided.
4. Install a separate circuit breaker between supply and unit. Provide a power supply disconnect within sight of the steam generator or one that is capable of being locked in the open position.
5. For single phase units, use two-wire supply source and equipment grounding wire. Neutral (white) wire is not required.

AMPERE CHART

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

*See page 17 for room sizing.

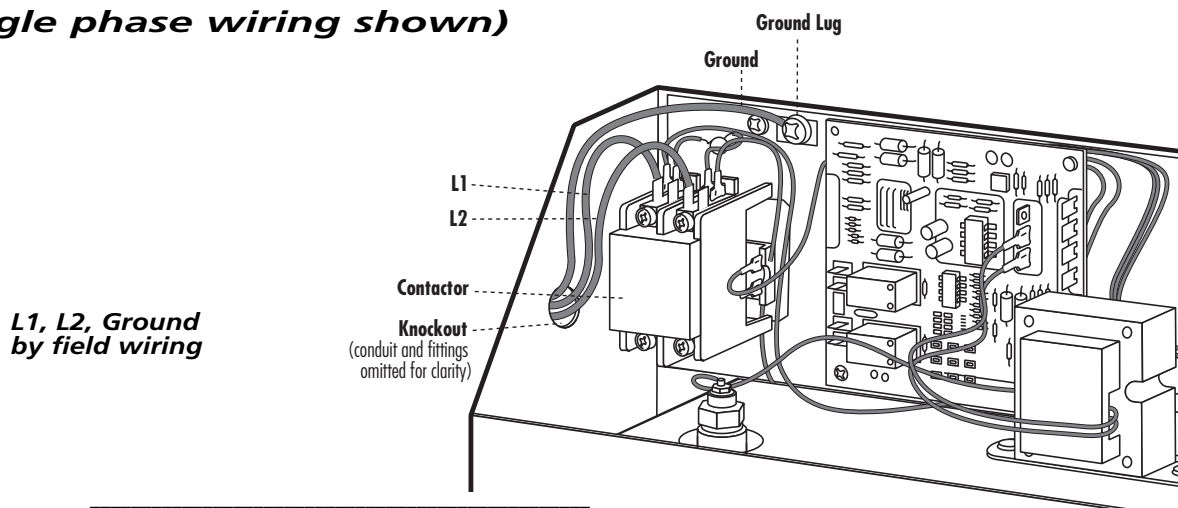
** MS Super 4T includes (2) MS Super 1T units
MS Super 5T includes (2) MS Super 2T units
MS Super 6T includes (2) MS Super 3T units

[†]All specifications shown are for 208V and 240V, single phase.
Consult factory for three phase or other voltage specifications

Provide a power supply disconnect within sight of the steam generator or one that is capable of being locked in the open position.

Field Power Wiring

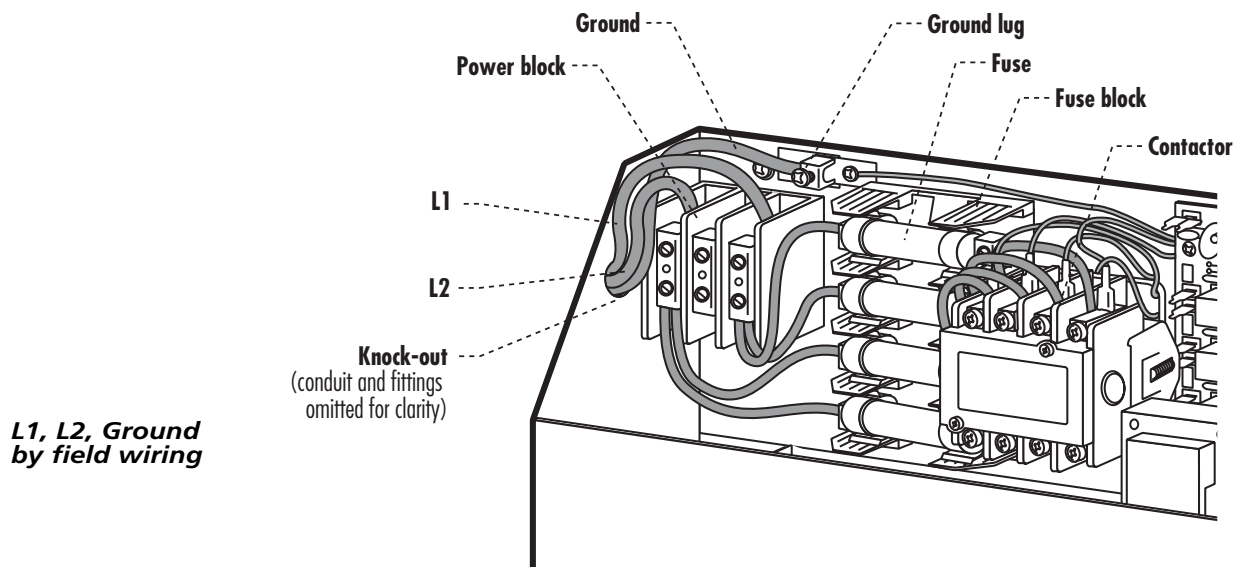
Models MS 65T – MS 400T (single phase wiring shown)



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

NOTE: For illustrative purposes only. Consult with qualified licensed electrician for electrical installation.

Models MS Super 1T – MS Super 6T (single phase wiring shown)



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

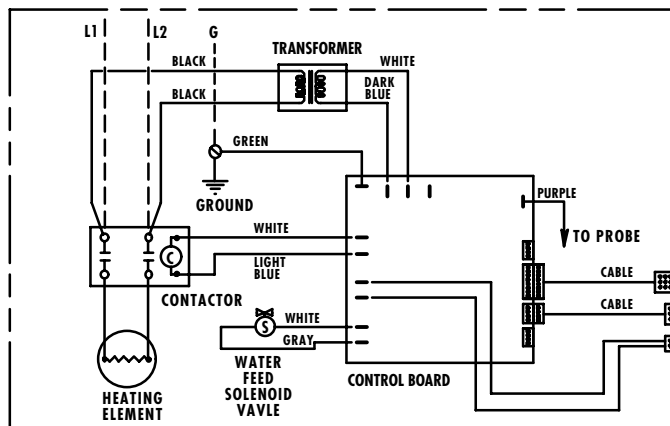
NOTE: For illustrative purposes only. Consult with qualified licensed electrician for electrical installation.

Wiring Diagrams

LEGEND (All Diagrams)

---	FIELD WIRING
—	FACTORY WIRING

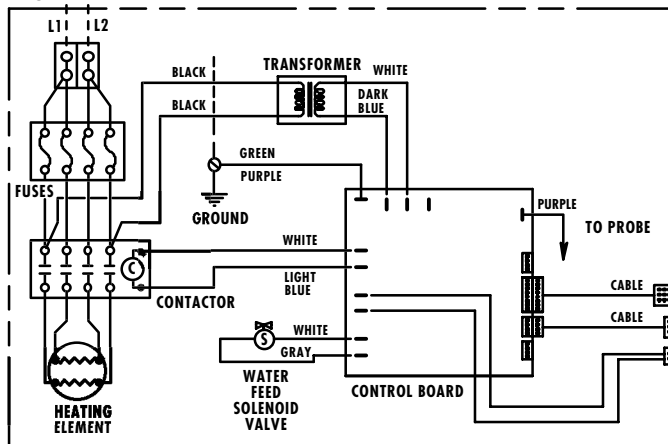
POWER INPUT



SINGLE PHASE

MS-65T, MS-90T, MS-150T,
MS-225T, MS-300T, MS-400T

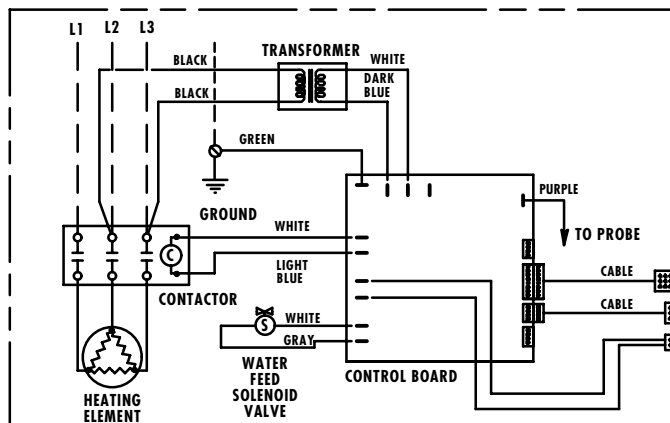
POWER INPUT



SINGLE PHASE

MS-SUPER-1T
MS-SUPER-2T
MS-SUPER-3T

POWER INPUT



THREE PHASE

MS-65T, MS-90T, MS-150T,
MS-225T, MS-300T, MS-400T,
MS-SUPER-1T, MS-SUPER-2T,
MS-SUPER-3T

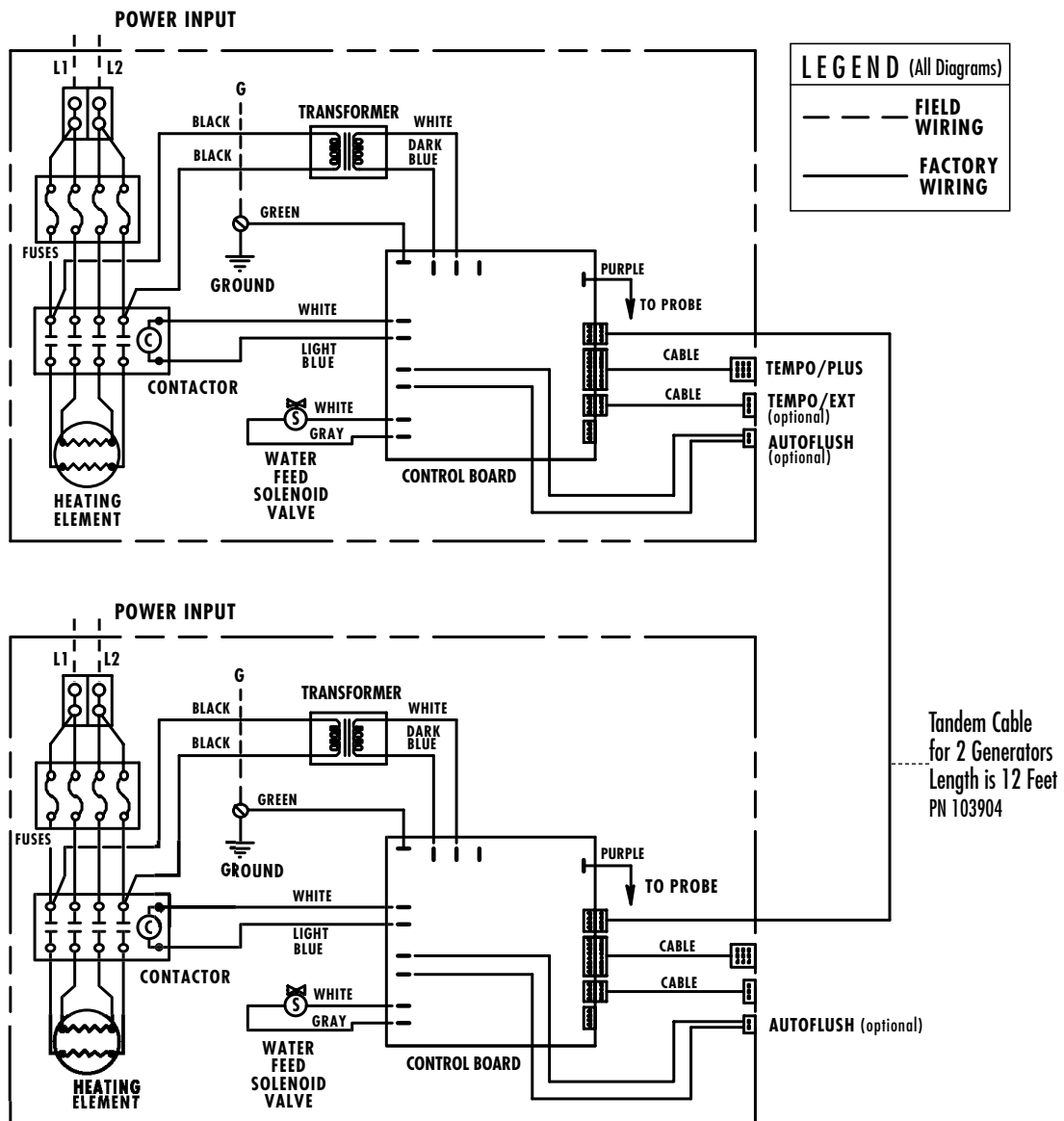
Single Phase Wiring Diagram with TEMPO/PLUS control

Installation Instructions for Models:

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

1. Install each unit as in a single installation as close to each other as possible.
2. **IMPORTANT** Power must be disconnected at the main electrical supply. Remove steam generator covers.
3. Connect the TEMPO/PLUS control to either unit per instructions supplied with the TEMPO/PLUS control.
4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (PN 103904) through the knock-outs as shown in diagram A, page 5. Connect each end to the printed circuit board as shown.
5. Connect separate plumbing and power supplies for each unit.

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



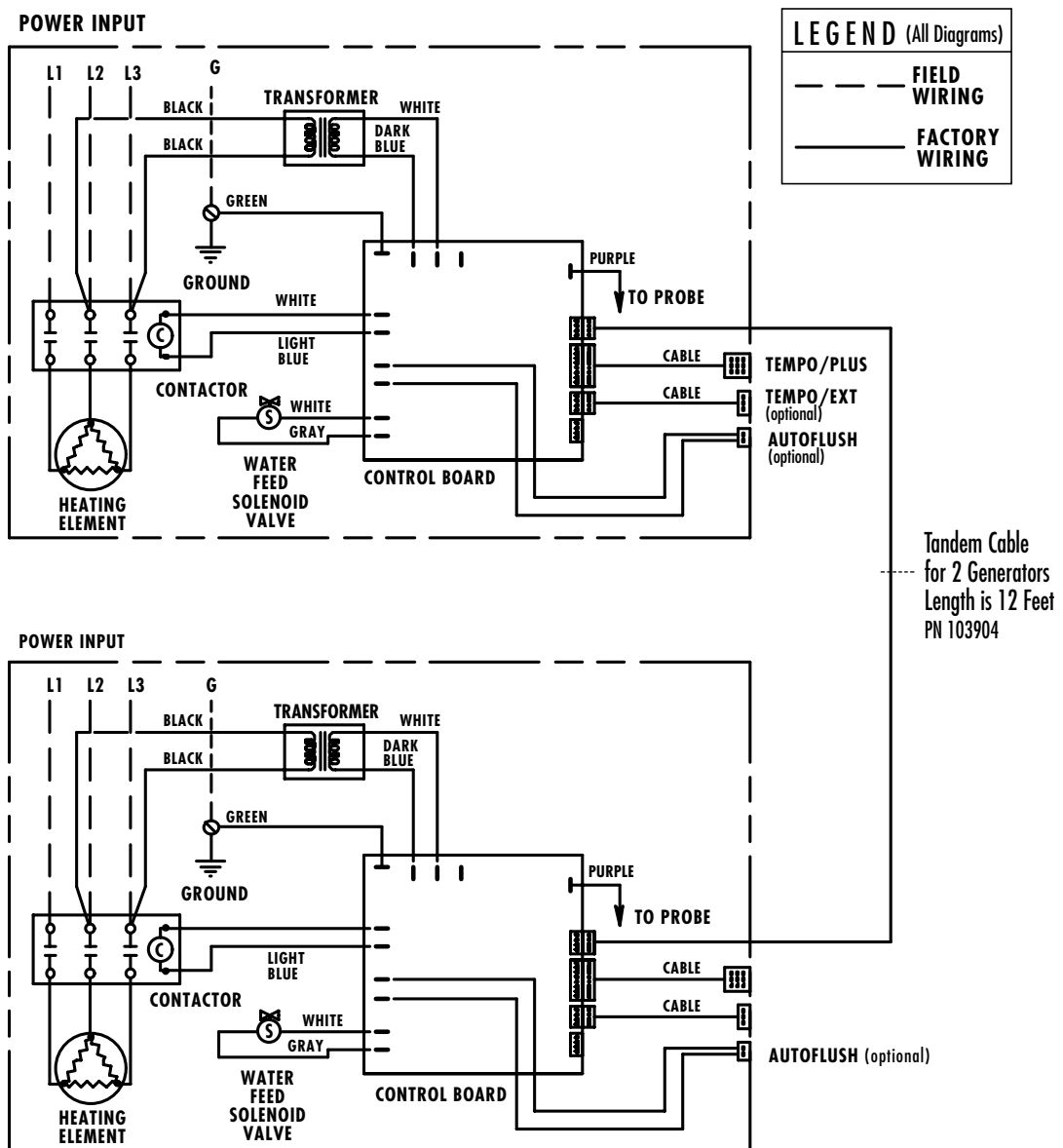
Three Phase Wiring Diagram with TEMPO/PLUS control

Installation Instructions for Models:

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

1. Install each unit as in a single installation as close to each other as possible.
2. IMPORTANT: Power must be disconnected at the main electrical supply. Remove steam generator covers.
3. Connect the TEMPO/PLUS control to either unit per instructions supplied with the TEMPO/PLUS control.
4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (PN 103904) through the knock-outs as shown in diagram A, page 5. Connect each end to the printed circuit board as shown.
5. Connect separate plumbing and power supplies for each unit.

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

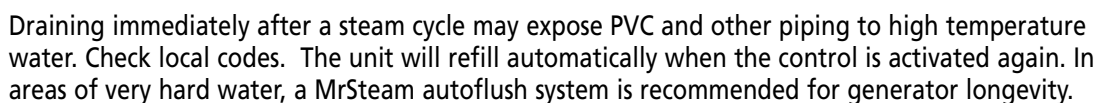




- ### ***Optional Equipment***

Maintenance

NOTE: Flush a minimum of two hours after the control has been turned off to insure that the water has cooled.



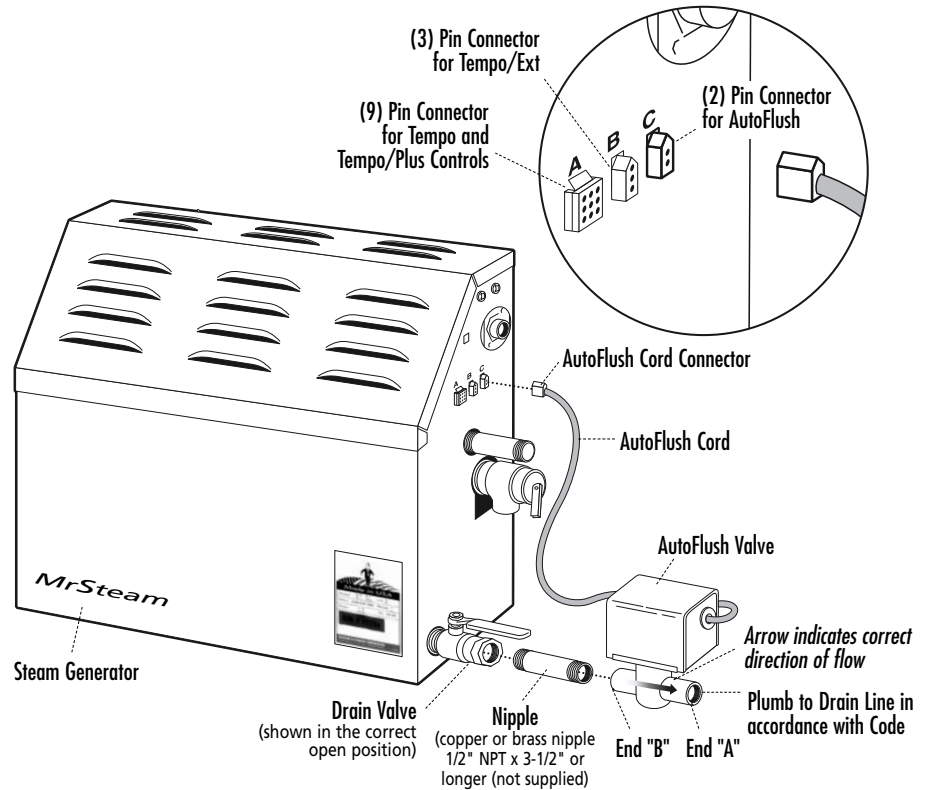
Optional AutoFlush® System

BOX CONTENTS:

- AutoFlush Valve with Cord
- Installation instructions.

Operation

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

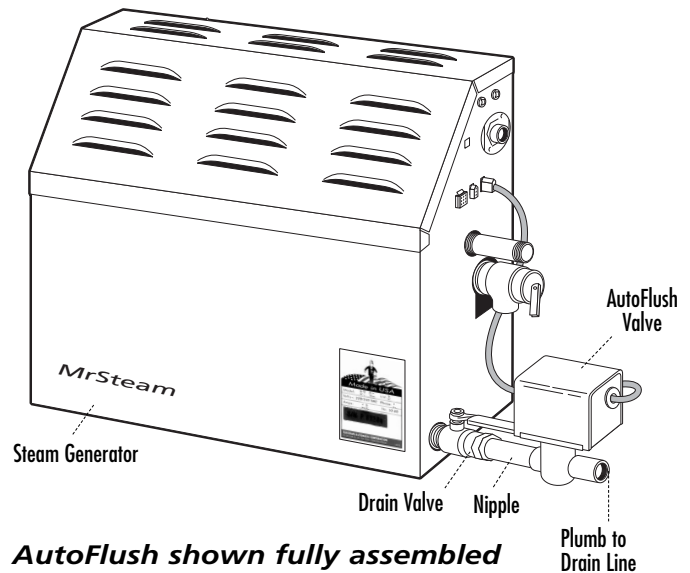


Installation Instructions

1. Disconnect all power supplied to the unit.
2. Plumbing to be performed by a qualified licensed 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.
3. Use copper or brass nipple 1/2" NPT x 3-1/2" or longer (not supplied) to connect AutoFlush valve (end "B") to the Drain Valve (valve end "A" and "B" are indicated on bottom of AutoFlush Valve)

NOTE: If there is not enough room for the valve, an elbow and a short nipple (not provided) can be added.

4. Open Drain Valve (handle must be aligned with brass nipple as shown).
5. Connect the AutoFlush cord connector to the two pin connector (C) as shown.



Do not drain into a steam enclosure or any location where accidental contact with drain water may occur. In the event of a power failure the Autoflush valve will open and discharge hot water.

(continued on next page)

NOTE: For illustrative purposes only.

Optional AutoFlush® System (cont.)

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 cleaned for a minimum distance of 1" from ends. Do not remove valve cover.

To Check Operation

1. Turn on **MrSteam** and allow tank to fill with water. (see Mr Steam 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.

Using MrSteam Essential Oils

Enjoy Aromasteam essential oils by placing a drop or two into your Aromasteam steamhead as shown in the attached illustration. Only use Mrsteam AromaSteam Essential Oils in a Mrsteam Aromasteam steam head, or any other equivalent oil deemed suitable for use in the Mrsteam AromaSteam steamhead.



Use essential oils with caution. Essential oils are for external use only. Keep out of reach of children. Essential oils are highly concentrated and are potent substances and should not be applied directly to the skin as they can be irritants. Use essential oils with caution.

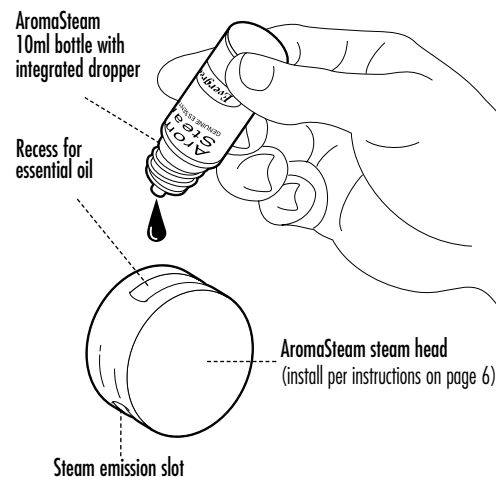


Place the drops into the Mrsteam AromaSteam steam head recess prior to turning on the steam-bath. Do not place drops in a hot steam head as **SERIOUS INJURY CAN RESULT IF YOU DO NOT FOLLOW THIS WARNING.**



Start with one drop to gauge strength and suitability. Limit to a maximum of a few drops during a steambathing session. Some people may find that the aroma makes them dizzy and the user should exit the steam bath **IMMEDIATELY**. If skin irritation occurs stop using the oils immediately. Remove any excess oil by washing in mild soap and water. If ingested, rinse mouth with water. Administer water or milk to dilute. Contact a physician immediately.

Tightly close containers when storing oils. Keep away from sources of ignition.



Liquid Level Control Board- Explanation of LED Indicators

With TEMPO or TEMPO/PLUS control OFF

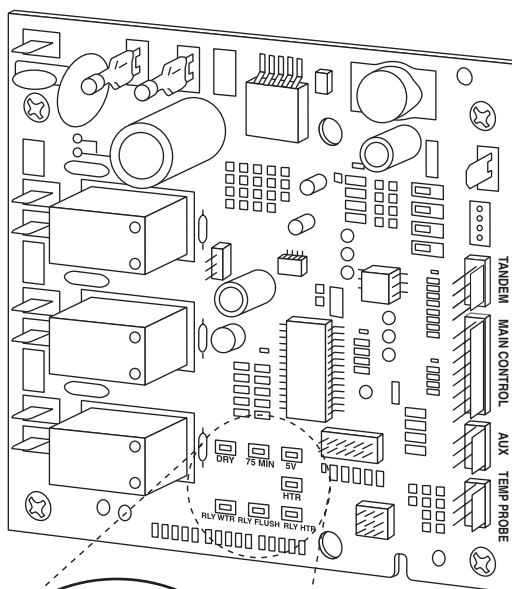
- DRY** Water level indicator–LED is ON when no water is detected (for more that 5 seconds). OFF when water level is satisfactory. For units with AutoFlush, if more that two hours have elapsed since last usage and this LED is OFF it is indicative of an autoflush or water level probe circuit malfunction.
- 75 MIN** LED is ON when 75-minute time out feature is active.
- 5V** +5 VDC indicator –LED is ON when there is 208/240 Volt incoming power connected, 24 Volt transformer secondary output and on-board 5 Volt DC control power are present.

With TEMPO or TEMPO/PLUS control ON

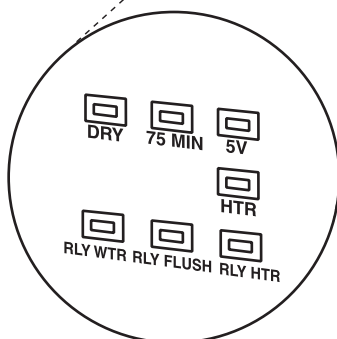
- HTR** Room temperature status indicator–LED is ON when control is calling for heat, OFF when temperature is satisfied or PAUSE button is engaged.
- RLY WTR** Water feed solenoid relay indicator–LED is ON when relay is closed and sending 24 Volts to the water feed solenoid valve coil, OFF when water level is satisfied and relay is open.
- RLY FLUSH** AutoFlush relay indicator–LED is ON when relay is closed an sending 24 Volts to AutoFlush valve motor (closing valve).
- RLY HTR** Contactor relay indicator–LED is ON when relay is closed and sending 24 Volts to the contactor coil. (This LED comes ON after LED's "DRY" & "RLY HTR" go OFF.)

Liquid Level Control Board

PN 103899 (shown without wiring)



**Enlarged Detail
of LED Indicators**



Select Your MrSteam® Model

<p>1. Measure the Length, Width, and Height (in feet) of steam shower or tub/shower being used.</p> <p>Multiply the Length x Width x Height to get the basic room volume in CUBIC FEET (a) $L \times W \times H =$</p>	<p>L _____</p> <p>W _____</p> <p>H _____</p> <p>a _____</p>
<p>2. Add 15% of (a) for each of the following design features that describe the steambath enclosure:</p> <p>b. Each exterior wall, or uninsulated attic, or crawlspace above or below ceiling or floor.</p> <p>c. Tile on mud wall</p> <p>d. An extra glass panel in addition to the door</p> <p>e. A cast iron tub or marble bench</p> <p>f. Each foot exceeding 8 ft. height</p>	<p>b _____</p> <p>c _____</p> <p>d _____</p> <p>e _____</p> <p>f _____</p>
<p>3. If the interior wall construction material within the steam enclosure is natural marble, stone, shale, glass block or concrete, copy the figure from box (a) to box (g).</p>	<p>g _____</p>
<p>Add Boxes (b) through (g) to box (a) = Total Cubic Feet required $a + b + c + d + f + g =$</p>	<p>h _____</p>

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

Visit www.mrsteam.com for sizing and selection calculators and additional information.

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. 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.

SELECTION CHART				
Model No.	Kw	Maximum Room Volume (cu.ft.)	Available Voltage 50 60/HZ	Amps
MS 65T	4.5	65	208V/1PH 240V/1PH	22 19
MS 90T	5	100	208V/1PH 240V/1PH	24 21
MS 150T	6	175	208V/1PH 240V/1PH	29 25
MS 225T	7.5	250	208V/1PH 240V/1PH	36 32
MS 300T	8.5	325	208V/1PH 240V/1PH	41 36
MS 400T	9	375	208V/1PH 240V/1PH	44 38
MS Super 1T	10	475	208V/1PH 240V/1PH	49 42
MS Super 2T	12	575	208V/1PH 240V/1PH	58 50
MS Super 3T	15	675	208V/1PH 240V/1PH	73 63
MS Super 4T	20	875	208V/1PH 240V/1PH	97 84
MS Super 5T	24	1075	208V/1PH 240V/1PH	116 100
MS Super 6T	30	1275	208V/1PH 240V/1PH	145 125

Models MS 65T – MS 400T are compatible with TEMPO or TEMPO/PLUS Controls and include a matching AromaSteam steam head.

All SUPER Models supplied standard with a TEMPO/PLUS Control and a matching AromaSteam steam head.

MS SUPER-4T includes two MS SUPER-1T steam generators and one TEMPO/PLUS Control and two matching AromaSteam steam heads.

MS SUPER-5T includes two MS SUPER-2T steam generators and one TEMPO/PLUS Control and two matching AromaSteam steam heads.

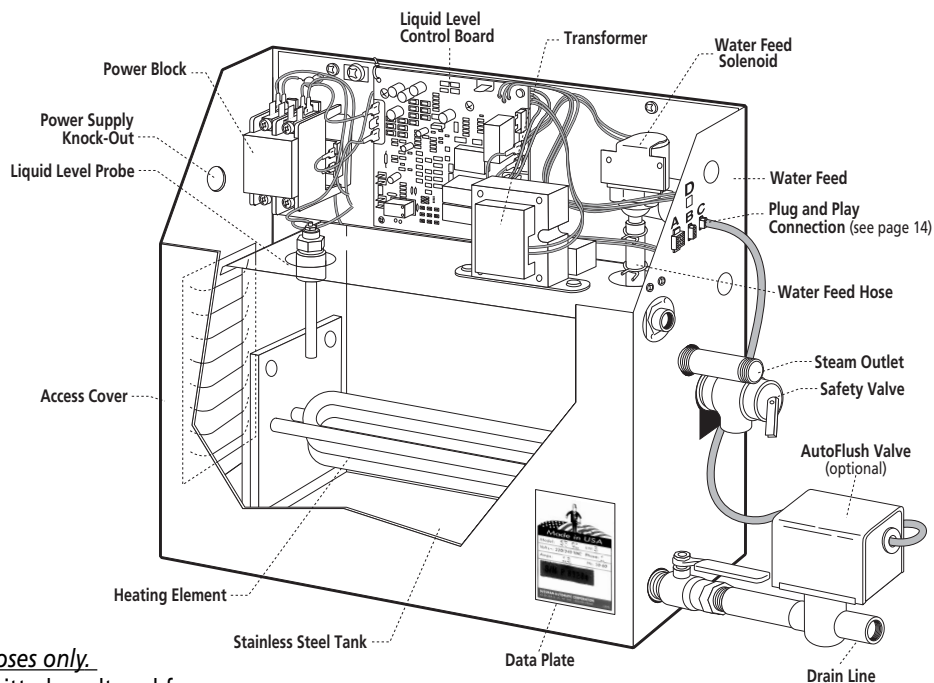
MS SUPER-6T includes two MS SUPER-3 steam generators and one TEMPO/PLUS Control and two matching AromaSteam steam heads.

MS 65T–MS 400T weighs 47 lbs.

MS SUPER-1T – MS SUPER-3T weighs 70lbs.

Call for availability of additional voltages and phases.

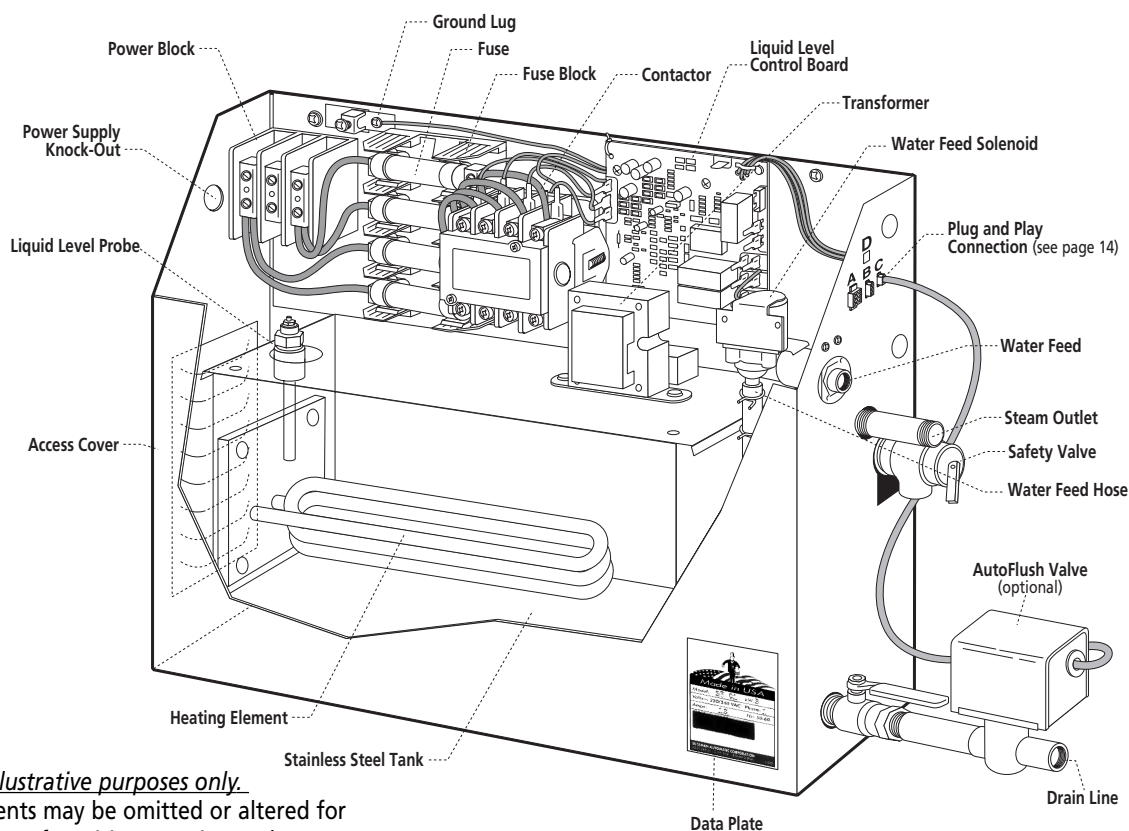
MS Regular Models MS65T-MS400T (with AutoFlush) shown with cover removed



NOTE: For illustrative purposes only.

Some components may be omitted or altered for clarity. Do not use for wiring, repair or other purposes not related to component identification.

MS Super Models MS Super 1T-MS Super 6T (with AutoFlush) shown with cover removed



NOTE: For illustrative purposes only.

Some components may be omitted or altered for clarity. Do not use for wiring, repair or other purposes not related to component identification.

Replacement Parts List

Part No.	Description	Product
99178	Drain Valve	MS Super-1T – Super-6T
99178MS	Drain Valve	MS 65T – MS 400T
99297	Safety Valve 15PSI	All models
100479	Water Feed Solenoid Valve w/filter	All models
100477-1	Transformer 24VAC	All models
103899	Liquid Level Control Board	All models
103904	Tandem Cable for 2 generators (12 ft.)	All models
103917	Tandem Cable for up to 5 generators (30 ft.)	All Models
103905	Cable for Tempo Control (30 ft.)	All models
103922	Cable for Tempo Control (60 ft.)	All models
MSTS	Remote Temperature Probe	All models
100476-2	Contactor 40A 2-pole	MS 65T,– 400T (except below)
99012	Contactor 50A 3-pole	MS 300T– 400T/208V & all 3 Phase
103453	Contactor 50A 4-pole	MS Super-1T – Super-6T
100471-2	Probe Assembly	All models
99096 MS	Heating Element Gasket	All models
MS-103412	Acrylic Shield	All Models
99314	Power Fuse 60A 250V	MS-Super 1T–6T Single phase
29041BMS	Heating Element 4.5 KW 208V	MS 65T
29041CMS	Heating Element 4.5 KW 240V	MS 65T
29051BMS	Heating Element 5 KW 208V	MS 90T
29051CMS	Heating Element 5 KW 240V	MS 90T
29061BMS	Heating Element 6 KW 208V	MS 150T
29061CMS	Heating Element 6 KW 240V	MS 150T
29071BMS	Heating Element 7.5 KW 208V	MS 225T
29071CMS	Heating Element 7.5 KW 240V	MS 225T
29081BMS	Heating Element 8.5 KW 208V	MS 300T
29081CMS	Heating Element 8.5 KW 240V	MS 300T
29091BMS	Heating Element 9 KW 208V	MS 400T
29091CMS	Heating Element 9 KW 240V	MS 400T
29101BMS	Heating Element 10 KW 208V	MS SUPER-1T & MS Super-4T
29101CMS	Heating Element 10 KW 240V	MS SUPER-1T & MS Super-4T
29121BMS	Heating Element 12 KW 208V	MS SUPER-2T & MS Super-5T
29121CMS	Heating Element 12 KW 240V	MS SUPER-2T & MS Super-5T
29151BMS	Heating Element 15 KW 208V	MS SUPER-3T & MS Super-6T
29151CMS	Heating Element 15 KW 240V	MS SUPER-3T & MS Super-6T

Care Tips for all Controls

1. Use only mild soap and water on a soft cloth to clean the control.
2. Do not use any abrasive cleansers
3. If the decorative cover is damaged on the TEMPO or TEMPO/PLUS call MrSteam technical service for replacement parts.

Safety & Operating Information



Do not install or use any TEMPO/PLUS, TEMPO, TEMPO/EXT or TEMPO/REMOTE controls without reading and understanding the MrSteam steam generator Installation and Operation Manual (PN 101289 Revision number 6.4/04 or higher). Failure to read and understand these instructions may result in an inoperative or hazardous installation.

A peel and stick warning is provided with the MrSteam steam generator Installation and Operation Manual. MrSteam strongly recommends that this warning be read and posted in a conspicuous location near the steam room.

Install the TEMPO or TEMPO/PLUS controls according to installation instructions. Failure to install according to instructions will result in an inoperative control or hazardous overheating or inadequate heating of the steam room.

If a TEMPO or TEMPO/PLUS control is installed outside the steam room a Remote Temperature Probe (Part Number MST5) must be installed inside the steam room per installation instructions supplied with the Remote Temperature Probe. Failure to install according to instructions will result in an inoperative control and overheating of the steamroom.



Do not route any Tempo/Plus, Tempo, Tempo/Ext control wiring inside conduit together with power lines or close to hot water or steam piping. Doing so may result in an inoperative or hazardous installation.

Do not alter or modify any Tempo/Plus, Tempo, Tempo/Ext or Tempo/Remote controls. Doing so may result in an inoperative or hazardous installation.

IMPORTANT NOTES:

If a TEMPO/PLUS control is to be used with a TEMPO/REMOTE control the TEMPO/PLUS must be in located for "line of sight" operation with the TEMPO/REMOTE control. See the TEMPO/REMOTE operating instructions before installation of the TEMPO/PLUS control.

Turn power to the steam generator OFF before installing the control. Failure to turn the power off will result in an inoperable control.

Do not operate any TEMPO/PLUS, TEMPO, TEMPO/EXT or TEMPO/REMOTE controls with other than a MrSteam Tempo compatible steam generator. MrSteam residential steam generators with serial numbers lower than 355500, or any other brand of steam generator are not to be operated with TEMPO controls. Doing so may result in an inoperative installation.

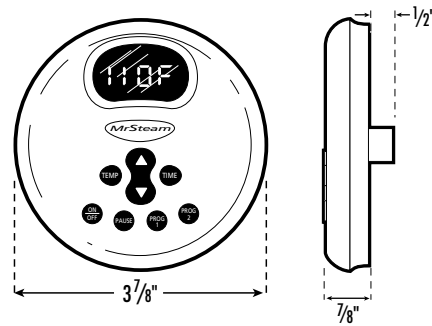
This document contains important safety, operation and maintenance information. Leave this document with the homeowner. Do not discard this document.

Discontinue use of the steam generator or control if the steam generator is damaged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation

Dimensional Information for Tempo® & Tempo/Plus™

Box Contents:

- TEMPO or TEMPO/PLUS Control
- Control Cable (30 ft.)
- Steam Head
- Tube of Silicon Sealant
- Owner's Manual



Installation Instructions for Tempo® & Tempo/Plus™

IMPORTANT: Turn power to the steam generator OFF before installing the control. Failure to turn the power off will result in an inoperable control.

Step 1

Determine the desired installation location of the control. The Tempo and Tempo/Plus controls are designed to be installed inside or outside the steam room as a matter of personal preference. If the control is installed inside the steamroom the control must be located:

- 4-5 feet above the floor
- away from the steamhead and not exposed to direct steam emission
- on a vertical wall

The control cable length is 30 feet. Insure that the control and/or steam generator are located accordingly. Contact a MrSteam technical service representative if a longer cable is required.

If the control is installed outside the steam room a Remote Temperature Probe Part Number MSTS must be installed inside the steam room.

Insure MrSteam steam generator is TEMPO compatible and has a serial number 355500 or higher.

IMPORTANT: See installation instructions supplied with the temperature Probe before rough-in or installation of the control.

Step 2

Make a one-inch diameter hole in the desired control location (Diagram 1). Do not oversize or undersize the hole.

Step 3

Route the control cable (provided with the control) from the wall cutout to the steam generator. Locate the end marked "GENERATOR END" at the steam generator. Connect the 5/8" square connector to the steam generator connector 'A' as shown in Diagram 2.

NOTE: The connector is keyed

IMPORTANT: Do not strain, staple, pinch or otherwise damage the control cable. Route cable as required to permit replacement.

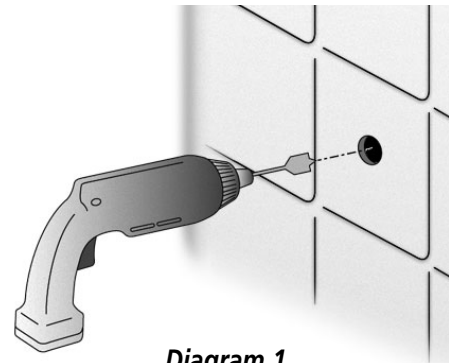


Diagram 1

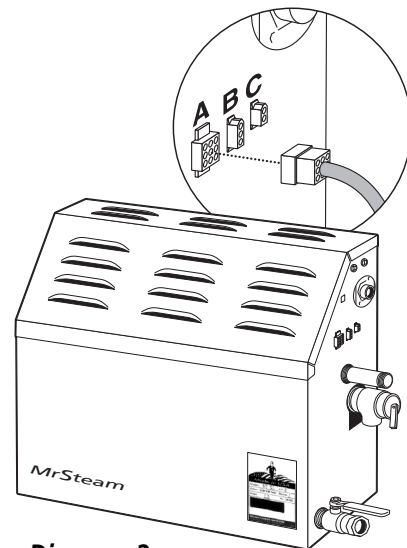


Diagram 2

Installation Instructions for Tempo® & Tempo/Plus™

Step 4

Firmly connect the connector near the "CONTROL END" marking to the back of the control. Turn on power to the steam generator and test the control to verify correct connections. Test per the instructions on page 21. Proceed with installation and verification of proper control function.

IMPORTANT: Turn power to the steam generator OFF before installing the control. Failure to turn the power off will result in an inoperable control.

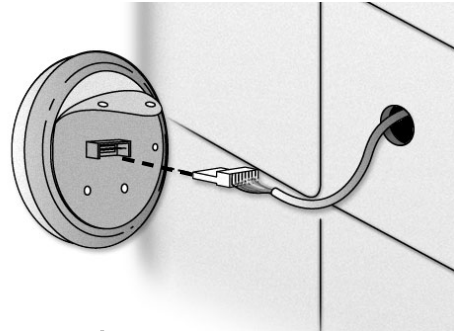


Diagram 3

Step 5

Remove & discard peel-off paper to expose adhesive liner as shown in Diagram 3.

Step 6

Run a bead of silicone (provided) as shown to the C shaped groove as shown in Diagram 4.

IMPORTANT: Do not apply excessive amounts of silicone. Do not apply silicone to any other parts of the control including the adhesive gasket.

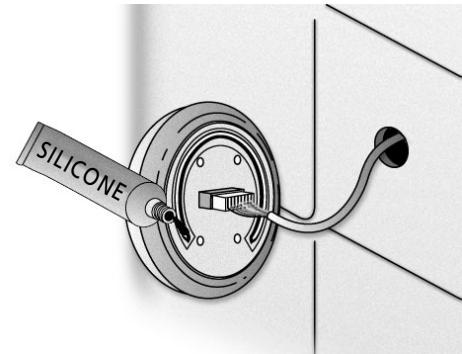


Diagram 4

Step 7

Insure the mounting surface is clean and dry as required for good adhesion. Apply silicone into the hole in the wall as required to create a moisture seal.

Hold the control with the LED display in the 12 o'clock position and press the control against the wall until the adhesive sticks and holds firmly as shown in Diagram 5.

IMPORTANT: Two registration marks are provided to facilitate level installation. The marks are located at the 3 o'clock and 6 o'clock positions on the back side of the control. Use a level as required.

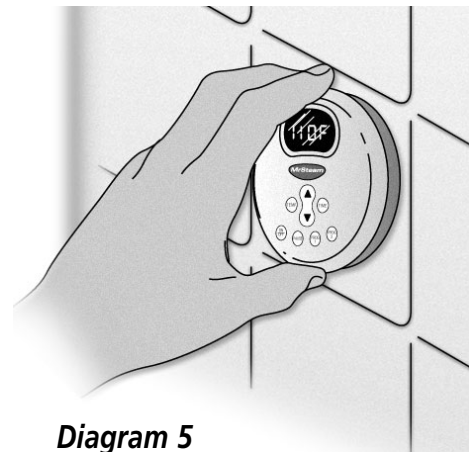


Diagram 5

Tempo® Operating Instructions

The Tempo Control features programmable digital temperature control, a fixed (60) minute duration, ON/OFF and PAUSE.

ON/OFF - Diagram 1

Press the ON/OFF key to start or stop the flow of steam.

Steam will begin to flow a few minutes after the control is turned ON. The duration required for the steamroom to reach steambathing temperatures depends on the steamroom construction and steam generator specifications. Steam may continue to flow for a short time after the control is turned OFF.



Diagram 1

PAUSE feature - Diagram 2

If a pause in steam flow is desired press the PAUSE key. The display will flash while the control is in the PAUSE mode. The timer will continue to countdown while in the PAUSE mode.



Diagram 2

Setting the temperature - Diagram 3

The control is pre-set and will display the temperature setting of 110°F (default setting). Use the UP and DOWN keys to change the temperature setting from 105 F to 120 F in one degree increments.

Set the steambathing temperature according to personal preference, however it is highly recommended to begin steambathing at a low temperature setting to gauge comfort and safety levels.



Diagram 3

Timer feature

When the control is turned ON a 60 minute time duration is initiated. The control will turn off after 60 minutes unless the control is turned off manually.

Memory feature

If the control is turned off manually before 60 minutes then the default temperature of 110°F will be used the next time the control is turned on. If the control times out at 60 minutes (not manually turned off) then the previous user temperature setting will be used when the steambath is used again.

Tempo/Plus™ Operating Instructions

The TEMPO/PLUS Control features programmable digital temperature control, programmable time duration, ON/OFF and PAUSE and two personal settings storage.

ON/OFF - Diagram 1

Press the ON/OFF key to start or stop the flow of steam.

Steam will begin to flow a few minutes after the control is turned ON. The duration required for the steamroom to reach steambathing temperatures depends on the steamroom construction and steam generator specifications. Steam may continue to flow for a short time after the control is turned OFF.



Diagram 1

PAUSE feature - Diagram 2

If a pause in steam flow is desired press the PAUSE key. The display will flash while the control is in the PAUSE mode. The timer will continue to countdown while in the PAUSE mode.



Diagram 2

Setting the time duration - Diagram 3

Press TIME key to set or display the remaining relaxation time.

The control is pre-set and will display a TIME setting of 20 minutes (default setting).

With the TIME displayed, press the UP and DOWN keys (Diagram 4) to set the desired duration time (2 - 60 minutes) in two minute increments.

Set the steambathing duration according to personal preference, however it is highly recommended to begin steambathing at a shorter duration to gauge comfort and safety levels.

The control will turn off when the relaxation period times out.



Diagram 3

Setting the temperature

Press TEMP key to set the desired temperature or display the temperature setting.

The control is pre-set and will display a temperature setting of 110°F (default setting).

With the temperature displayed, press the UP and DOWN keys (Diagram 4) to set the desired temperature (105°F to 120°F) in one degree increments.

Set the steambathing temperature according to personal preference, however it is highly recommended to begin steambathing at a low temperature setting to gauge comfort and safety levels.



Diagram 4

Memory feature

If the control is turned off manually before it times out then the default settings of 20 minutes and 110°F will be used the next time the control is turned on. If the control times out (not manually turned off) then the previous user time and temperature settings will be used when the steambath is used again.

PROG 1 and PROG 2 feature

PROG 1 and PROG 2 keys program and store preferred settings.

To program preferred settings: Press a PROG1 or PROG2 key. Enter the preferred time and temperature settings. The TEMPO/PLUS will store these settings.

To select PROG1 or PROG2 : Press ON then press PROG1 or PROG2. The steambath will begin to operate at the stored settings.

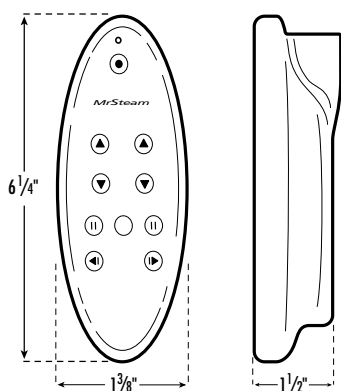
Tempo/Remote® - Wireless Remote Control

Box Contents:

- TEMPO/REMOTE Control
- Control Holder
- (2) Holder Screws
- User's Manual

The TEMPO/REMOTE Control operates all functions of the TEMPO/PLUS Control from a maximum distance of about 15 feet. It is for use inside the steam room and requires a direct line-of-sight with the TEMPO/PLUS Control. The TEMPO/REMOTE does not operate with the TEMPO Control. To operate the TEMPO/REMOTE simply point it at the TEMPO/PLUS Control and press the desired function.

Dimensional Information for Tempo/Remote®



Programming the Code

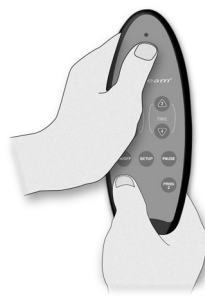
The TEMPO/REMOTE control is supplied with two AAA batteries already installed. If these batteries have been removed for more than 3 minutes or are discharged then the TEMPO/REMOTE code must be re-entered.



1. Press SETUP key.



2. Press and hold PROG 1 key. The indicator will flash.



3. While holding PROG 1 key, press CODE key for two seconds until the indicator lights up. Then release both keys.



4. Enter the 5-digit Code No. 11433.



5. The indicator will shut off if the code is correct and the setting was successful. If not, the indicator will flash twice. Check the code and repeat the programming process if necessary.

NOTE: The remote control will exit programming mode if any other keys but the numerical ones (1, 2, 3, 4) are pressed.

NOTE: Delays longer than 10 seconds between key presses automatically cancels programming mode.

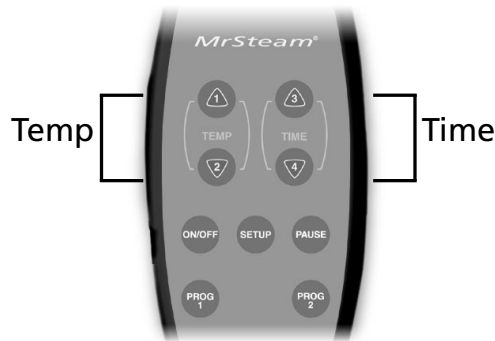
Using the Tempo/Remote®

To Control Your TEMPO/PLUS™ with the Remote Control:



Turning Unit ON/OFF

1. Press ON/OFF key to turn unit on.
2. Press ON/OFF key a second time to turn unit off.



Setting Temperature Set Point

Press the TEMP UP or TEMP DOWN key.

Setting Duration Time

Press TIME UP or TIME DOWN key.

Pausing the Unit

To Pause the Flow of Steam:

1. Press PAUSE key.

NOTE: The Timer continues to count down while in the PAUSE mode.

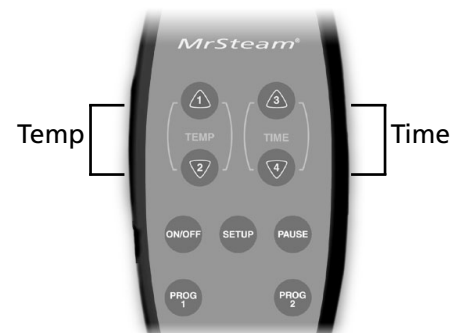
2. Press PAUSE key a second time to resume the flow of steam.



Setting the Program Values

To Set PROG 1 and PROG 2

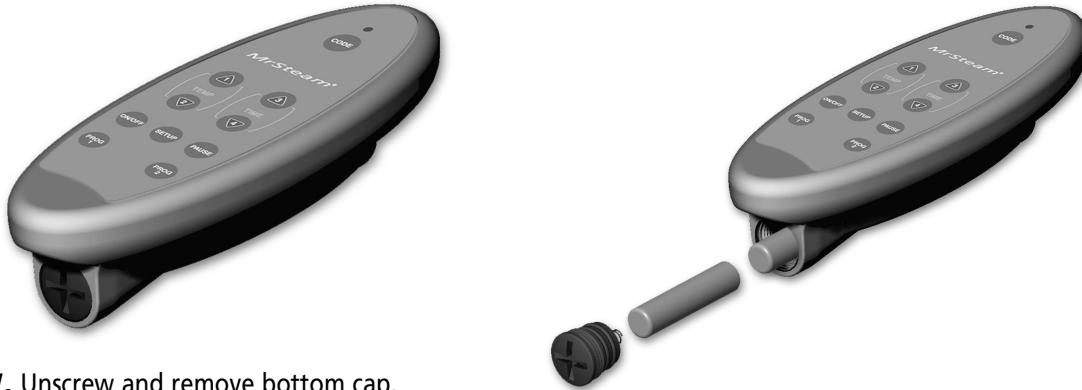
1. Press PROG 1 or PROG 2 key.
2. Press TEMP UP or TEMP DOWN key to set the desired temperature.
3. Press TIME UP or TIME DOWN key to set the desired duration time.



Battery Replacement

Your remote control is powered by two AAA batteries.

NOTE: Before you start it's important to note that you have only 3 minutes to change batteries if you want to retain codes recorded in the memory!



1. Unscrew and remove bottom cap.

Note: You can use a coin to unscrew cap.

2. Insert new batteries, making sure to match plus (+) ends with the plus markings on the battery case.

3. Replace cap (ensure the waterproof gasket is correctly positioned).

After replacing batteries:

LED indicator will flash twice indicating that programmed codes are still in memory.

If LED indicator flashes 3 times, it means that programmed code settings have been erased, reenter the code per instructions on page 25.

Installing the Tempo/Remote® Holder

A holder is provided with the TEMPO/REMOTE Control as an optional convenience.

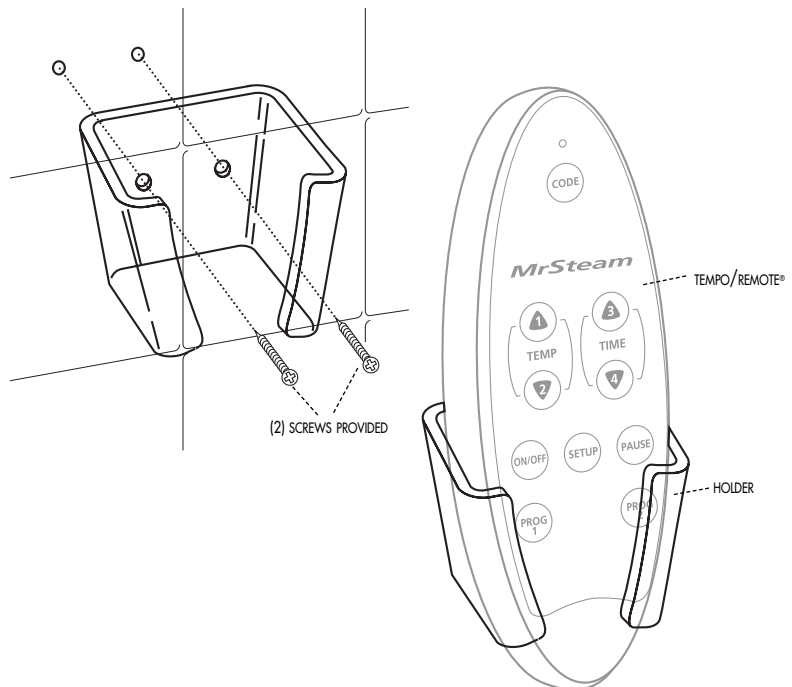
Mount the holder in a location away from direct steam emission.

Secure the holder to a wall so the TEMPO/REMOTE is oriented in the upright position as shown.

Determine if the two screws provided are suitable for the installation conditions.

Use alternate hardware or use with plastic anchors as required by installation conditions.

Seal screw holes in the wall against moisture as required.



Tempo/Ext™

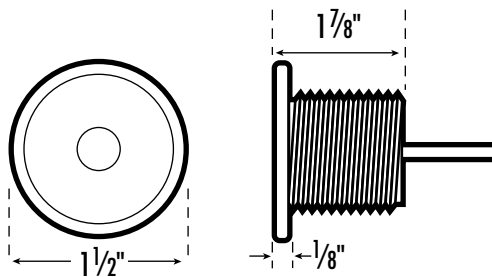
The TEMPO/EXT control can only be used together with a TEMPO or TEMPO/PLUS control

The TEMPO/EXT control functions as an external ON/OFF switch for the TEMPO or TEMPO/PLUS control

Box Contents:

- TEMPO/EXT Control
- User's Manual

Dimensional Information for Tempo/Ext™



Using the Tempo/Ext™ Control



This TEMPO/EXT control functions as an ON/OFF key of the TEMPO or TEMPO/PLUS control of your system.



LED indicator will light up when the generator is ON.

Installing the Tempo/Ext™ Control

Diagram 1

The TEMPO/EXT has a 30 foot cable with a Plug & Play connector at one end and an ON/OFF switch at the other end. Contact a MrSteam technical service representative if a longer cable is required.

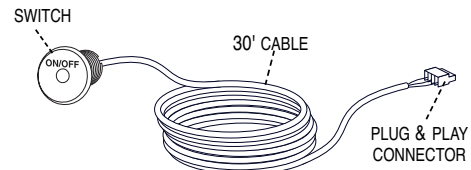


Diagram 1

STEP 1 - Diagram 2

Drill a 7/8 inch diameter hole in a wall location outside the steam room.

Do not oversize or undersize the hole.

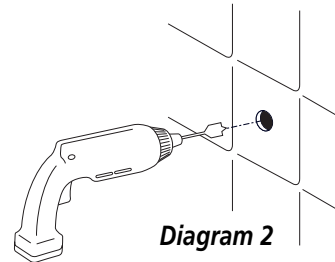


Diagram 2

STEP 2 - Diagram 3

Route the cable from the wall to the steam generator.

Do not strain, staple, pinch or otherwise damage the control cable.

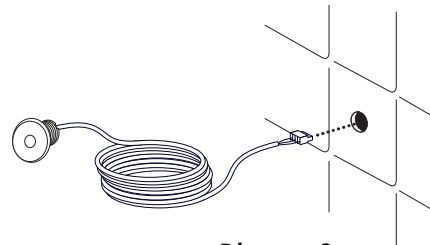


Diagram 3

STEP 4 - Diagram 5

Apply silicone (provided with TEMPO or TEMPO/PLUS control) to the hole in the wall as required to create a moisture seal. Apply silicone to the back of the switch as required to seal grout lines or as required for additional adhesion.

IMPORTANT: Use care not to apply silicone to the adhesive gasket.

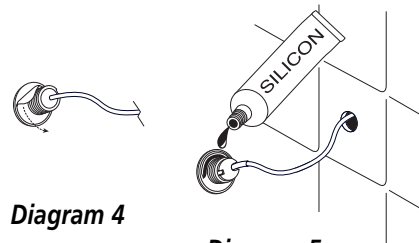


Diagram 4

Diagram 5

STEP 5

Push cable and switch housing into the hole firmly.

STEP 6 - Diagram 6

Firmly connect the Plug & Play connector to the steam generator connector "B".

NOTE: The connector is keyed and will only connect in one orientation.

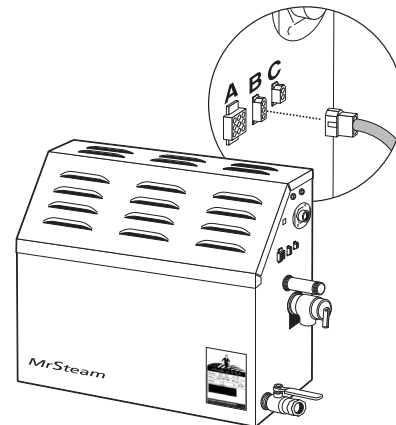


Diagram 6