

Club Therapy Steambath Generator Systems
Installation, Operation & Maintenance Manual



Models CT 6E, CT 9E, CT 12E

Club Therapy® Steambath Generator Systems Installation, Operation & Maintenance Manual

MODEL _____

SERIAL NO. _____

MODELS: CT6E, CT9E, CT12E

READ ME FIRST!

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.

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

IMPORTANT SAFETY INSTRUCTIONS

1. READ AND FOLLOW ALL INSTRUCTIONS

2.  **WARNING** Do not permit children under the age of 16 to use this steambath.

3.  **WARNING**
To reduce the risk of injury:

A. The wet surfaces of steam enclosures may be slippery. Use care when entering or leaving.

B. The steam head is hot. Do not touch the steam head and avoid the steam near the steam head.

C. Prolonged use of the steam system can raise excessively the internal human body temperature and impair the body's ability to regulate its internal temperature (hyperthermia). Limit your use of steam to 10-15 minutes until you are certain of your body's reaction.

D. Excessive temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnancy or possibly pregnant women should consult a physician regarding correct exposure.

E. Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a steambath.

F. Persons using medication should consult a physician before using a steam-bath since some medication may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.

SAVE THESE INSTRUCTIONS

WARNING

REDUCE THE RISK OF OVERHEATING AND SCALDING

1. EXIT IMMEDIATELY IF UNCOMFORTABLE, DIZZY OR SLEEPY.
STAYING TOO LONG IN A HEATED AREA IS CAPABLE OF CAUSING OVERHEATING.
2. CHILDREN UNDER THE AGE OF 16 SHOULD NOT USE THE STEAM BATH.
3. CHECK WITH A DOCTOR BEFORE USE IF PREGNANT, DIABETIC, IN POOR HEALTH OR UNDER MEDICAL CARE.
4. BREATHING HEATED AIR IN CONJUNCTION WITH CONSUMPTION OF ALCOHOL, DRUGS, OR MEDICATION IS CAPABLE OF CAUSING UNCONSCIOUSNESS.
5. DO NOT CONTACT STEAM HEAD OR STEAM AT THE STEAM HEAD.

REDUCE THE RISK OF SLIPPING AND FALL INJURY

1. USE CARE WHEN ENTERING OR EXITING THE STEAM ROOM. FLOOR MAY BE SLIPPERY.

NOTE: FOR ADDITIONAL SAFETY CONSIDERATIONS SEE OWNER'S MANUAL

mr.steam® 43-20 34th Street, Long Island City, NY 11101 1 800 76 STEAM www.mrsteam.com PUR100378 6.4/08

←
A warning placard has been provided in the Information envelope. This placard is to be applied to the wall of the installed shower or steam enclosure.

mr.steam®
Sussman-Automatic
Corporation®
info@mrsteam.com
www.mrsteam.com

43-20 34th Street
Long Island City, NY 11101
TEL: 1 800 76 STEAM
FAX: 718 472 3256

9410 S. La Cienega Blvd.
Inglewood CA 90301
TEL: 1 800 72 STEAM
FAX: 310 216 2944



MADE IN USA
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Club Therapy® Steambath Generator Systems Installation, Operation & Maintenance Manual

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SELECT YOUR MR.STEAM

Materials of construction, room size (including room height) and special design features such as large glass areas, all affect the steam generator model selection.	
1. Measure length, width & height in feet of the steam/shower or tub/shower	
Multiply the Length _____ x Width _____ x Height _____ =	ROOM VOLUME
2. Adjustments to Room Volume:	
For natural stones: natural marble, stone, shale, glass block or concrete	Add 100%
For ceramic or porcelain tile on cement board or mortar bed	Add 30%
For each exterior wall or extra glass panel	Add 15% each wall or panel
For each foot exceeding 8ft. in height	Add 15% each foot
3. Add all figures above to obtain the Total Room Volume required	TOTAL ADJUSTED ROOM VOLUME

Compare your TOTAL ADJUSTED ROOM VOLUME to the Specification Chart below and select the appropriate model.


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

IMPORTANT: The guidelines 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. Mr.Steam[®] 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.

IMPORTANT: For steam rooms constructed of acrylic or synthetic materials, select next lower-rated CT model.

WARNING: In considering a purchase of this steambath system, please note that if users are pregnant, have a coronary condition, are in poor health, are being treated for any other medical condition, or are using medication or drugs, Mr.Steam recommends that you obtain the approval of their physician before use. For information about this product and safety issues, please call us at 1-800-76-STEAM or log onto www.mrsteam.com for a copy of the Installation/Operation/Maintenance Manual.

IMPORTANT: The total adjusted room volume allows for up to 60 feet of insulated steam line from the CT generator to the steam room. If the 60 feet line is exceeded consult with factory. When locating the steam generator consideration of the control and MSTs location must be taken into account. The maximum length for a control cable is 60 feet. The maximum length of the MSTs cable is 60 feet.

Residential Steam Generators Specification Chart								
	Model No.	KW	Amps (for 240v/1PH)†	Total Adj Room Vol.	Wire Size‡	Water Usage gallons††	Dimensions*	Shipping Wt. (lbs)**
	CT6E	6	25	150	8	0.80	17"L x 18½"H x 7⅞"D	40
	CT9E	9	38	360	8	1.2	17"L x 18½"H x 7⅞"D	40
	CT12E	12	50	575	6	1.6	17"L x 18½"H x 7⅞"D	40

IMPORTANT: Add C1 suffix to Model No. for 240v/1Ph; Add B1 suffix to Model No. for 208V/1Ph. **IMPORTANT:** All CT MS Models are cUL us Listed and CE; approved.

NOTES: All CT Generators available in 240v/1PH, 208v/1PH and other voltages/phases.

† Amps are for 240/1PH rated units.

‡ Wire size (AWG) based on minimum 90°C rated THHN copper conductors.

Refer to the National Electrical Code for other types of conductors.

*Dimensions are for generator only, without AutoFlush[®] or plumbing features.

**Shipping weight and pricing are for generator only, without control or steamhead.

†† Water usage based on 20 minutes of operation.

BEFORE INSTALLING

IMPORTANT NOTES:

- This document contains important safety, operation and maintenance information. Leave this document with the manager. Do not discard this document.
- Discontinue use of the steam generator and control if the steam generator or control are damaged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation

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

Read these instructions before installation or service.

Although this CT 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 and selection guide on page 2.

- 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.
- Consider any options and accessories before initiating installation. Read the Installation and Operation Manual of all options and accessories available at www.mrsteam.com technical downloads.

IMPORTANT: CT units are intended to be operated with Mr.Steam eTEMPO/PLUS, CT-STEAMSTOP 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. Mr.Steam 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.
8. Windows that are part of the steam room should be double paned and tempered safety glass.
9. Try to limit steam room ceiling height to 8 feet. Exceeding 8 feet may require a higher-rated steam generator.
10. A warning sticker (shown below) has been provided in the Information envelope. This sticker is to be secured to the wall of the installed shower or steam enclosure.

! WARNING The CT series of steam generators are for Commercial use only.

! CAUTION If acrylic, fiberglass or other non-heat resistant materials are used as part of the steam room enclosure. Consult with the material manufacturer and 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 tile 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.

! WARNING

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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.

NOTE: THE LENGTH OF THE CABLE FOR CONNECTING THE MSTs TO THE STEAM GENERATOR IS 30 FEET.

! WARNING (ITEMS 1-7)

1. **DO NOT** install steambath generator or plumbing lines in unheated attic or any locations where water could freeze.
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 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.
5. Install steambath generator on a solid and level surface. Keyhole slots are provided for wall mounting. Insure the steam generator is properly secured and level when mounting with keyhole slots.
6. Install steambath generator in an upright position only.
7. 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.

IMPORTANT: (ITEMS 8-11)

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. The eTempo/Plus should be placed in a location only accessible by the facility's staff. The CT-STEAMSTOP and remote sensor (MSTs) are required to be installed inside the steamroom.

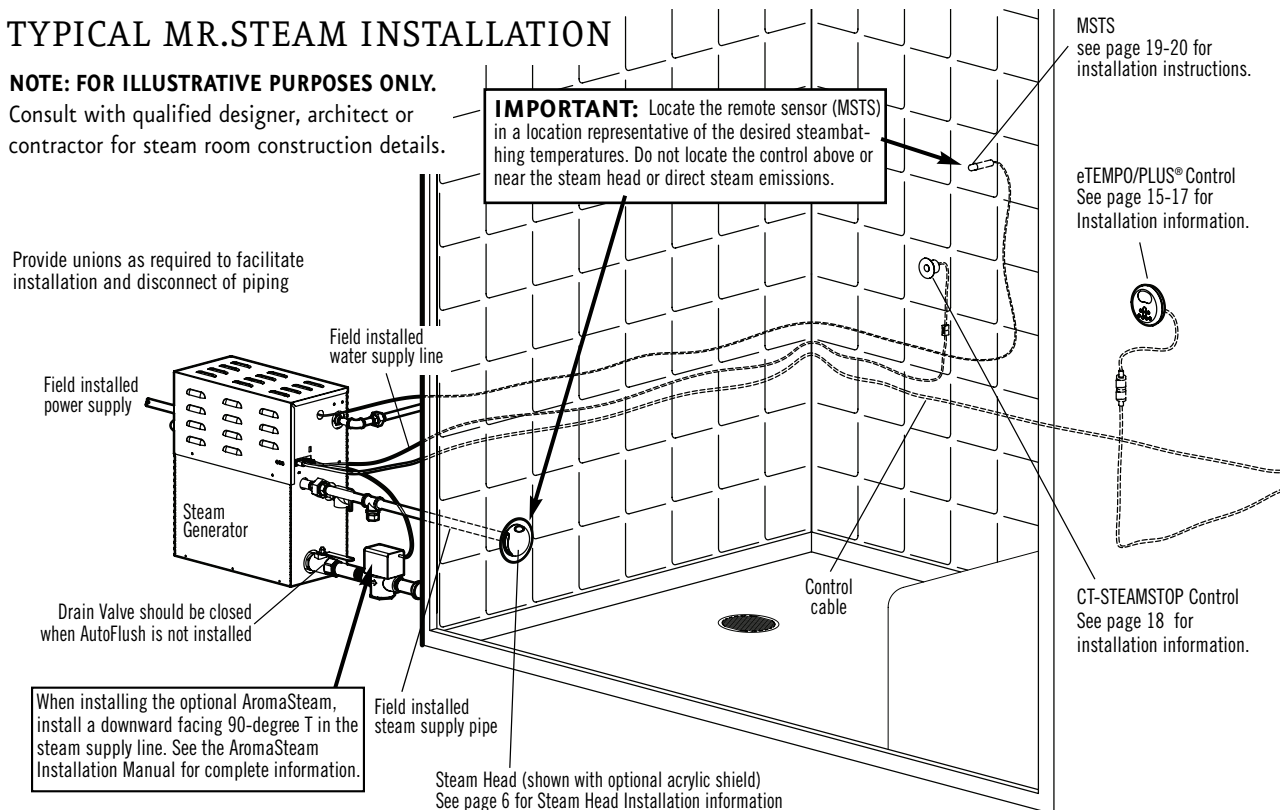
NOTE: Mr.Steam Generators (inclusive of the eTempo series Controls) are CE and UL listed.

! WARNING The CT series of steam generators are for Commercial use only.

TYPICAL MR.STEAM INSTALLATION

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 as permitted by codes.
- Do not use black, galvanized, PVC, or PEX pipe.

Water Supply ($\frac{3}{8}$ " NPT)

1. Connect hot or cold water line. If hot water line is used hot water temperature 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.
7. Provide anti-water hammer device as required.
8. Install an approved backflow preventer as required by local codes.

Drain (1" 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. Two hours after the generator has been turned off the AutoFlush valve automatically will open and drain the generator.

Steam Outlet ($\frac{1}{2}$ " 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 as permitted by codes.
3. Insulate steam line using pipe insulation rated 212° F or higher.
4. Pitch steam line $\frac{1}{4}$ " 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.

NOTE: A 1.5" hole in the steam room is required to mount the steamhead.

Safety Valve ($\frac{3}{4}$ " 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 or any construction in steam supply pipe.

Drain Pan

Mr. Steam strongly recommends the use of a drain pan in the unlikely event of a plumbing leak. Check local plumbing codes for receptor, trap and vent requirements. Drain pans drain by gravity. The drain pan is equipped with an integral $\frac{3}{4}$ " NPT fitting. See page 12 for additional drain pan installation information.

Aromasteam

If the optional Aromasteam Electronic Oil Delivery System (PN: MS AROMA) is to be installed, a 90 degree T plumbing fitting must be installed at a designated location on the steam outlet line. See the Mr.Steam Aromasteam Operation and Instruction Manual for installation information before the steam line is installed at www.mrsteam.com technical downloads.

INSTALLING THE AROMASTEAM STEAMHEAD

Steam Head Installation (1/2" NPT)

IMPORTANT: Do not disassemble steamhead. Mr.Steam's steamhead is shipped fully assembled and requires no additional assembly.

CAUTION 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.

NOTE: A 1.5" clearance hole around the steam pipe is needed to mount the steamhead.

STEP 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-103938.

STEP 2

Install steamhead with the oil well facing up as shown. 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. DO NOT use abrasive cleansers or chemicals. Use only water with mild soap and a non-abrasive sponge.

CAUTION Consult with supplier of acrylic, fiberglass and other non-heat resistant enclosures for recommended steamhead location. Use Acrylic Shield PN MS-103938. See instructions provided with steam shield.

STEP 3

Secure a bronze drop ear fitting to a header and run a 1/2" copper steam line from the steam generator to the drop ear fitting. Install a temporary nipple (6" or longer) in the drop ear fitting to locate the steamhead after the wall is finished.

STEP 4

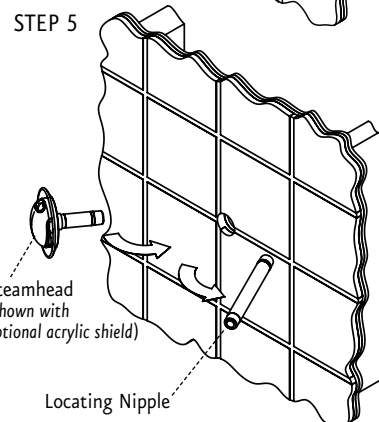
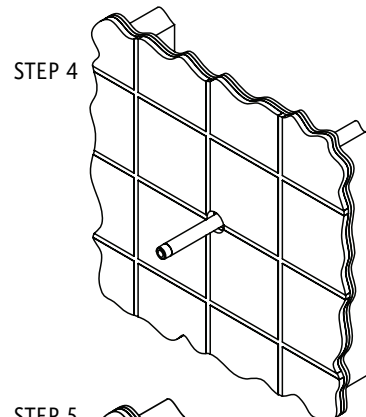
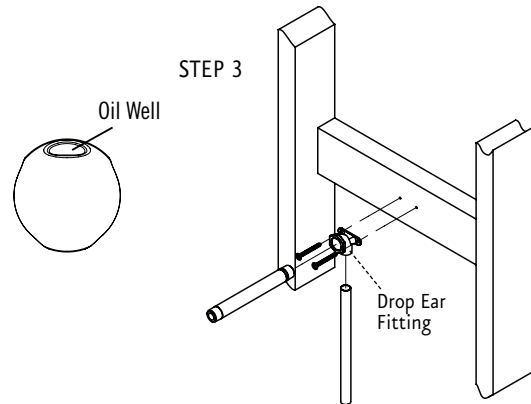
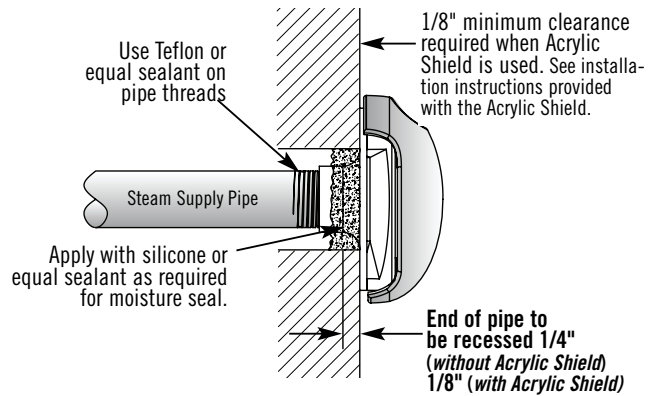
After the wall has been finished, mark on the nipple where the surface of the wall is. Remove the nipple and measure the portion that was in the wall (the end to your mark). Subtract 1/4" from that dimension and select a brass nipple of that length to finish the installation.

STEP 5

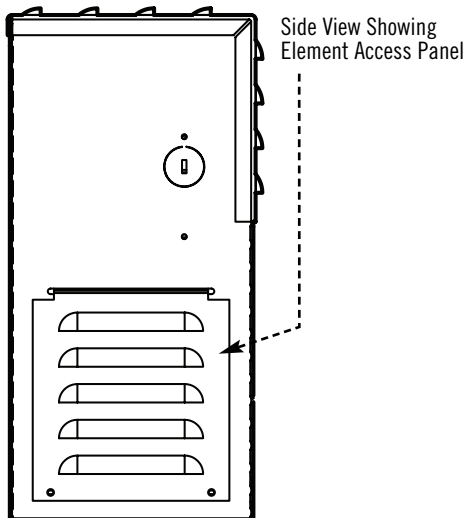
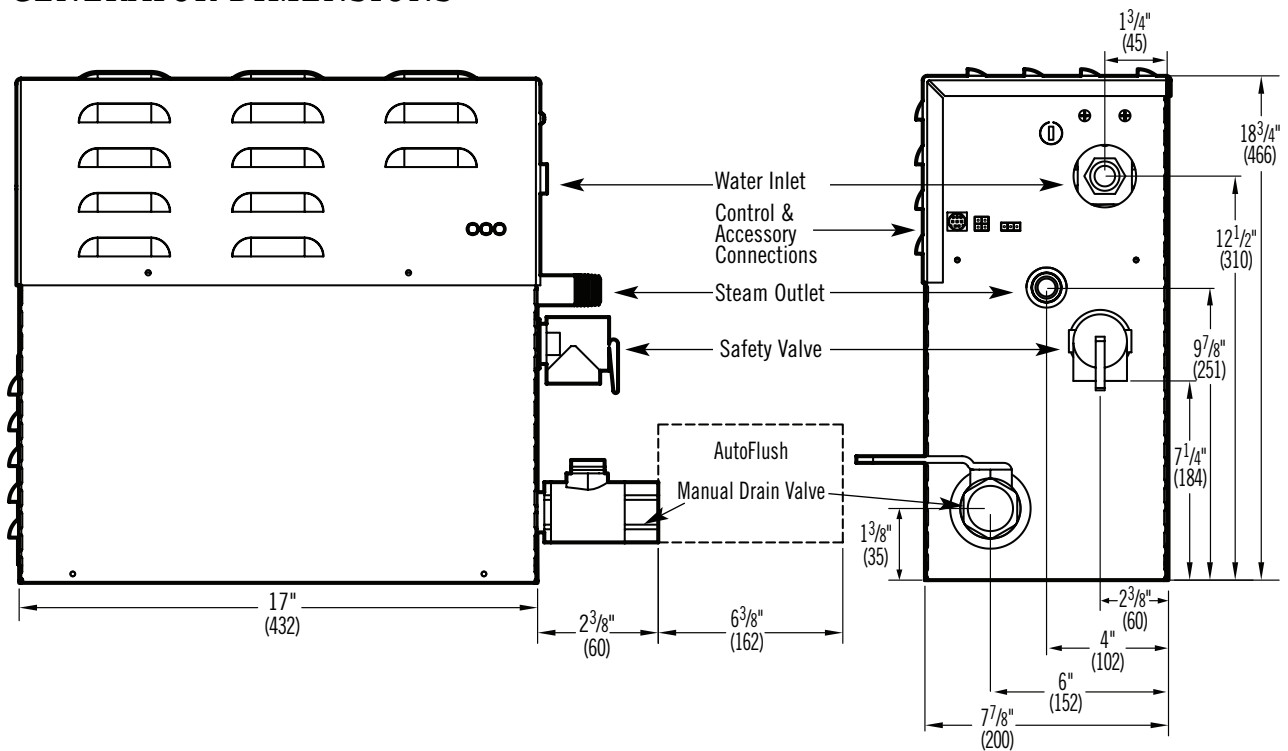
Wrap teflon tape around the threads of the new nipple and screw the nipple into the steamhead. Do not use wrenches or tools which would damage the steamhead's finish. Wrap teflon tape around the threads of the nipple and screw the nipple and steamhead assembly you just made into the drop ear fitting in the wall. The steamhead should be flush with the wall and the well must be facing up.

Care Tips for Steamheads

1. Use only mild soap and water on a soft cloth to clean the steamhead.
2. Do not use abrasive cleaners.



GENERATOR DIMENSIONS



IMPORTANT NOTE: Provide a minimum of (12) inches at both ends and top of the steam generator or as required for servicing. Alternately, provide unions as required to facilitate installation and disconnection of the steam generator.

IMPORTANT NOTE: The minimum clearance from combustible surfaces is zero all around.

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)

WATER INLET	3/8" NPT
STEAM OUTLET	1/2" NPT
SAFETY VALVE	3/4" NPT
MANUAL DRAIN VALVE	1" NPT
AUTOFLUSH VALVE	1" NPT

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 (below)

1. Check power voltage. Use 240V rated unit when supply is greater than 208V. 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 current in Ampere Chart. If allowed by codes, NM cable may require a larger wire size than as listed on the 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.

CHART

MODEL NO.	MAX ROOM VOL (CU. FT.)*	KW	VOLTS 1 PH†	AMPS	WIRE SIZE (AWG)
CT6E	150	6.0	208 240	29 25	8 8
CT9E	360	9.0	208 240	44 38	8 8
CT12E	575	12.0	208 240	58 50	6 6

*See page 2 for room sizing.

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



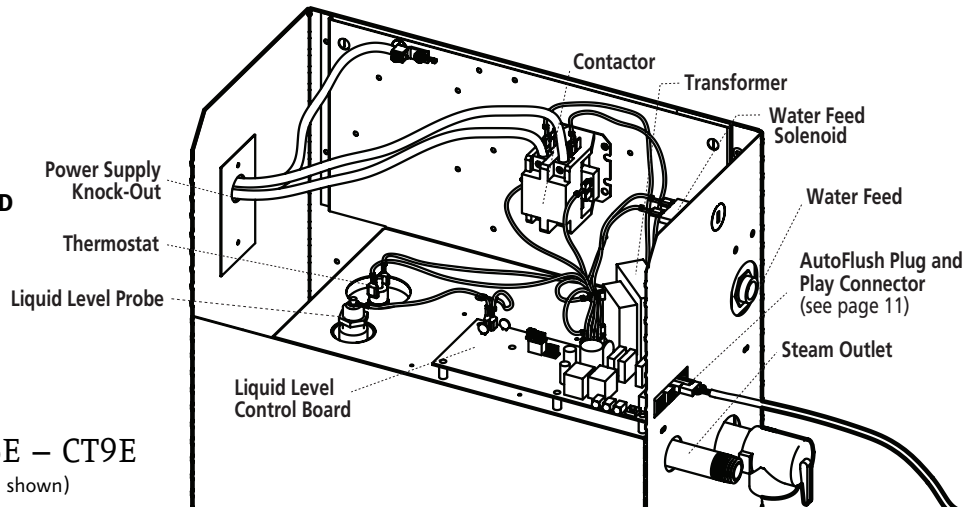
Provide a power supply disconnect within sight of the steam generator or one that is capable of being locked in the open position as permitted by code.

FIELD POWER WIRING

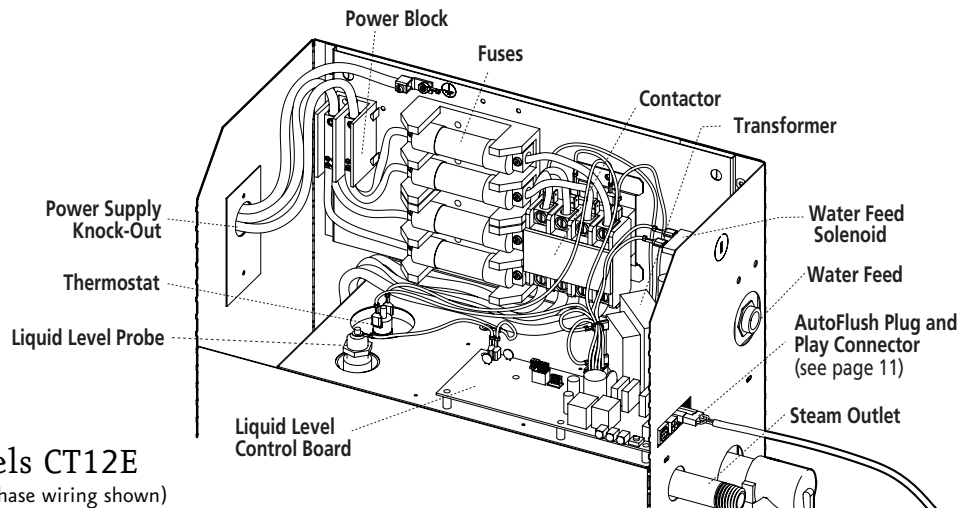
TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT POWER SUPPLY DIRECTLY TO ELEMENTS!!!

L1, L2, GROUND TO BE FIELD WIRED

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. CONSULT WITH QUALIFIED LICENSED ELECTRICIAN FOR ELECTRICAL INSTALLATION.

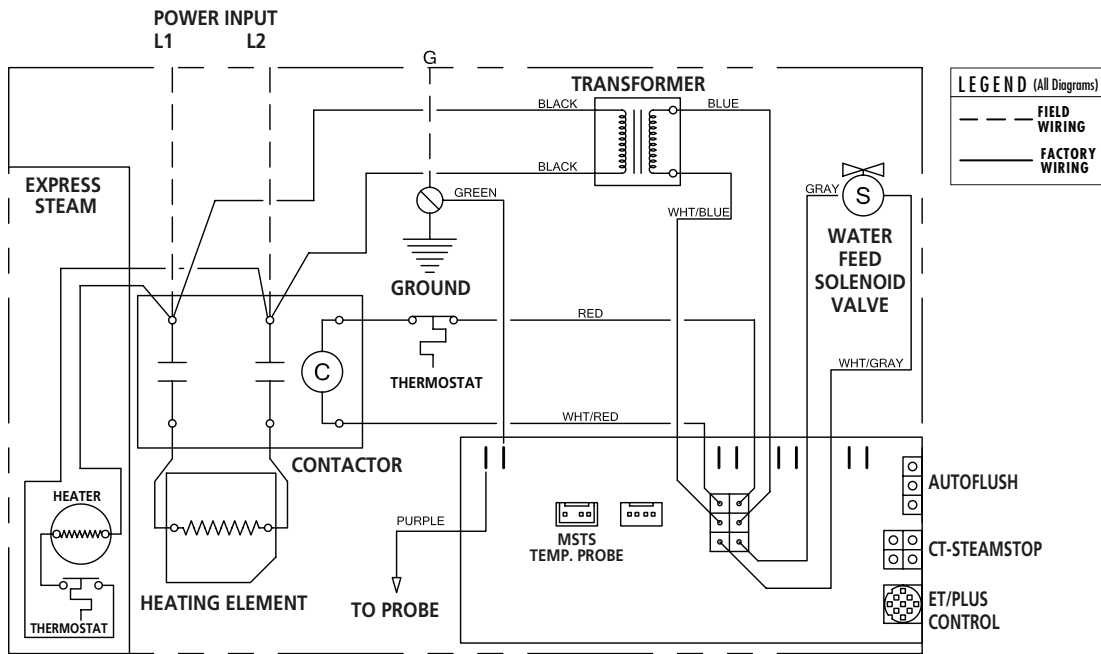


Models CT6E – CT9E
(single phase wiring shown)

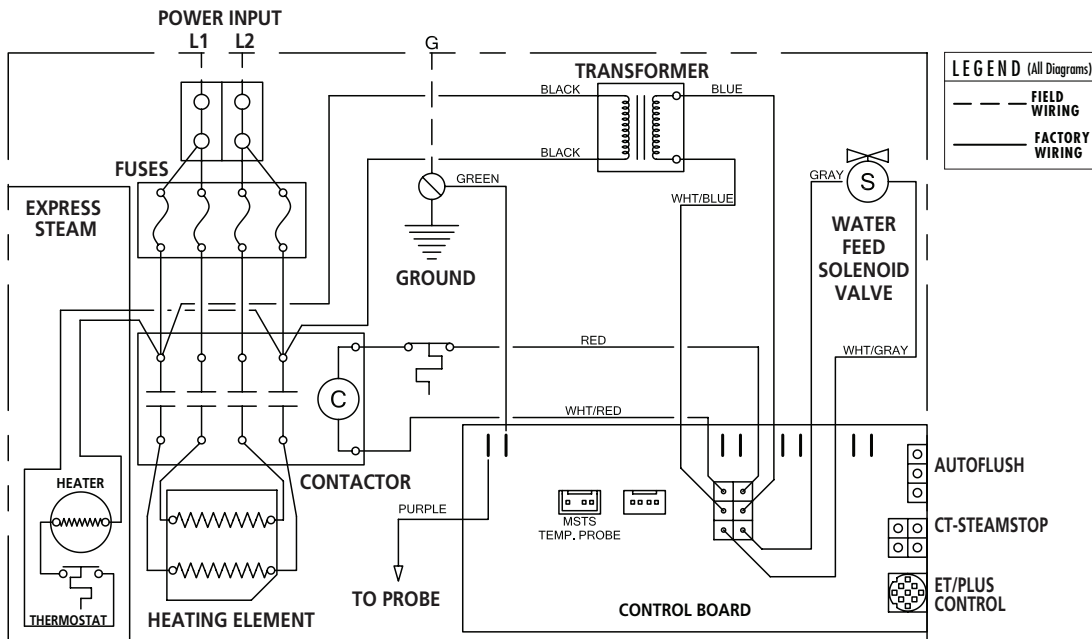


Models CT12E
(single phase wiring shown)

SINGLE PHASE WIRING DIAGRAMS
with eTempo/Plus® Controls



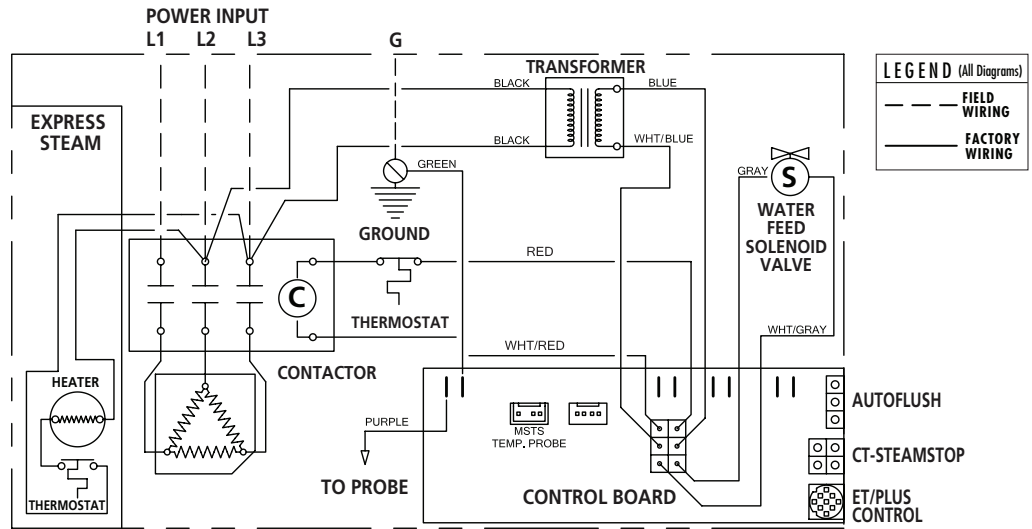
MODEL CT6E & CT9E



MODEL CT12E

TRIPLE PHASE WIRING DIAGRAMS with eTempo/Plus® Controls

MODEL CT6E,
]CT9E & CT12E



Initial Start-Up and Checkout

1. Turn on control. Follow specific instructions pages 21-22 or those provided with controls.
2. Steam will begin to appear in approximately 5 minutes (unless equipped with factory-installed Express Steam option) at the steam head. 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 control counts down to zero. To shut steam off manually, turn control OFF. To clear steam from enclosure area, turn shower on before opening door.
4. If unit does not start and control does not turn ON (control display does not light up) then turn breaker off for 20 seconds and try again.
5. Refer to specific instruction sheets for installation, operation and maintenance of optional equipment and eTEMPO/PLUS, CT-STEAMSTOP and MSTs.

Maintenance

Mr.Steam steambath generators require little maintenance. Other than periodic draining, maintenance procedures are minimal. Every 2 months, or more often in “hard” water areas, when AutoFlush is not installed the manual drain valve should be opened fully flushing out accumulated materials, salts and other particles which are natural by-products of boiling water.

CAUTION Flush a minimum of two-three hours after the control has been turned off to insure that the water has cooled.

WARNING 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 hard water, a Mr.Steam AutoFlush system is recommended for generator longevity.

System Status Codes

The eTempo/Plus may display a status code if the steam generator is not functioning properly.

Code	Code Meaning	Probable Cause	Suggested Remedy
H20	Water level is not satisfied within 5 min.	Water Supply is off Defective water feed solenoid Water feed probe not functioning	Turn on Water Supply Check/replace water solenoid valve Check/clean probe. Check probe wiring.
Prr1 or Prr2	Temperature Probe Error	Control cable/MSTS cable cut Internal problem with control/MSTS	Replace control cable/MSTS Replace control / MSTS
Err1	Incorrect Field Supply Voltage (green light on liquid level control board will be off)	Incorrect voltage supplied to Generator	Supply steam generator with the correct voltage noted on the data plate label.
Err2	Button on control is pressed for more than 5 minutes	Control cover misalignment Debris behind control cover	Remove and reinstall control cover Remove control cover and clean cover, control and keypad with a damp cloth
Err7	Liquid Level Control Board malfunction		Memory error in LLCB Press ON/OFF to clear. Replace control if code remains.

AUTOFLUSH

Box Contents

- AutoFlush Valve with Cord
- Installation instructions.

Operation

The optional AutoFlush System feature automatically drains the CT system following each use. A time delay allows the water to cool down (about two hours) before it drains by gravity for a safe and gentle operation. **Unit drains by gravity.**

Installation Instructions

1. 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 System valve outlet is threaded 1" NPT. Check plumbing code for receptor, trap and vent requirements.
2. Use copper or brass nipple 1" NPT x 3½" 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)

CAUTION DO NOT REMOVE THE DRAIN VALVE
Removal may cause equipment and property damage. If there is not enough room for the valve, an elbow and a short nipple (not provided) can be added.

3. Open Drain Valve (handle must be aligned with brass nipple).
4. Connect the AutoFlush System cord connector to the three pin connector as shown.

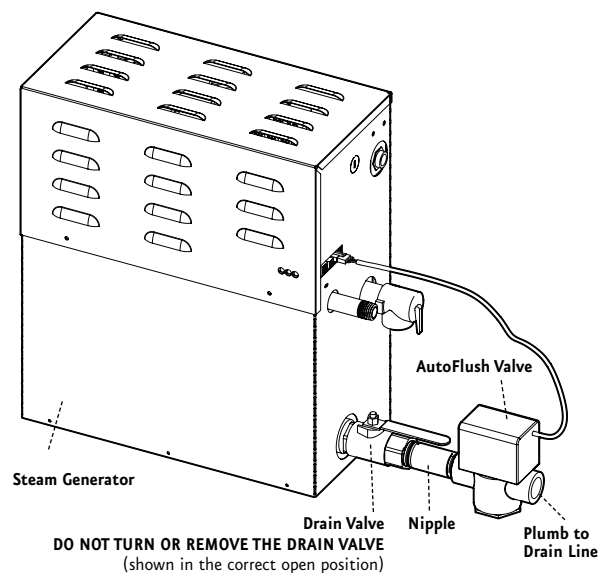
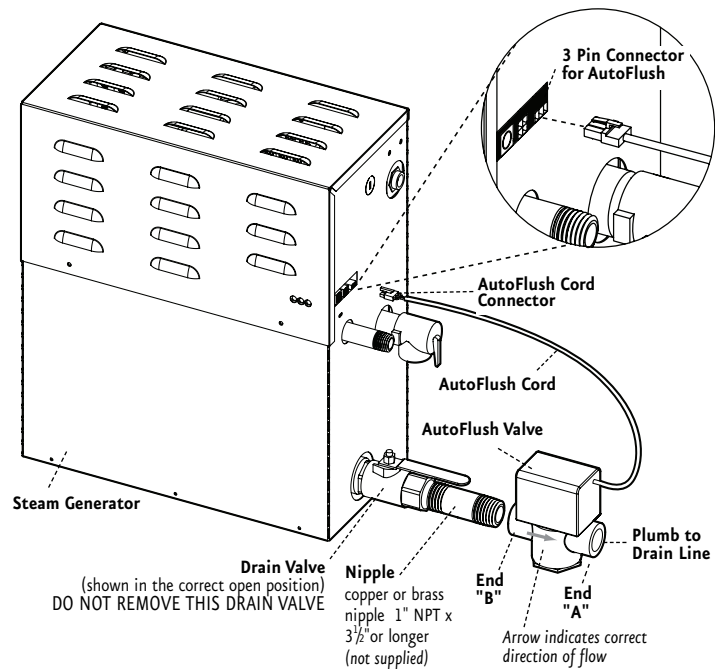
WARNING Do not drain into a steam enclosure or any location where accidental contact with drain water may occur. In the event of a power failure the AutoFlush System valve will open and may discharge boiling water.

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 Check Operation

1. Turn on Mr.Steam and allow tank to fill with water.
2. Turn off Mr.Steam 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



CAUTION

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

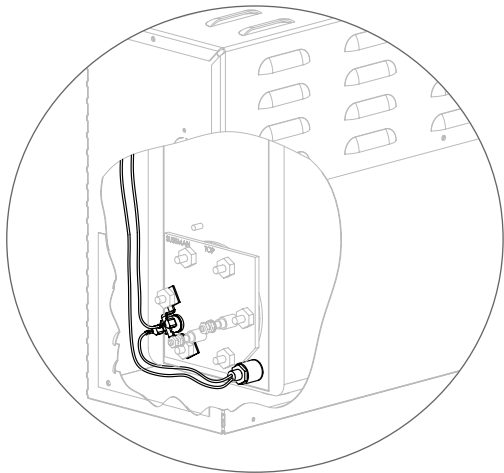
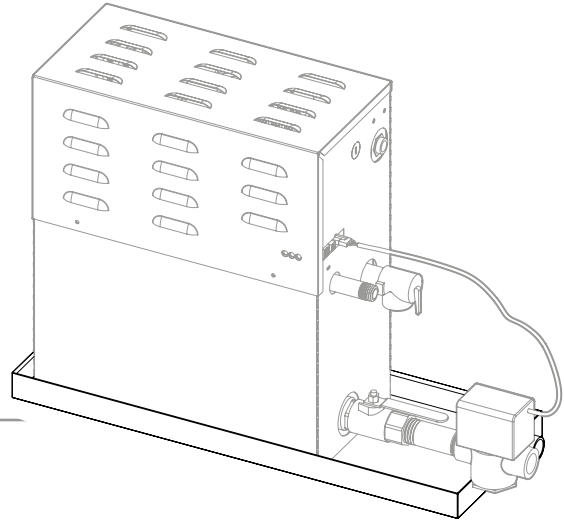
DRAIN PAN

Mr. Steam provides a drain pan in the unlikely event of a plumbing leak.

Locate the drain pan on a solid level surface and place the steam generator inside the drain pan. Insure the steam generator is level (see page 4 for locating the steam generator).

All plumbing shall be performed by a qualified licensed plumber and in accordance with applicable national and local codes. Check local plumbing code for receptor, trap and vent requirements. Drain pans drain by gravity.

The drain pan is equipped with an integral $\frac{3}{4}$ " NPT fitting.



EXPRESS STEAM

(Factory installed)

All CT models have Express Steam standard.

Express Steam is equipped with a low power heating element and thermostat to keep the water in the tank warm enough to bring up steam quicker. All Express Steam components and wiring are installed at the factory. No additional wiring or plumbing is required by installers.

LIQUID LEVEL CONTROL BOARD - Explanation of LED Indicators

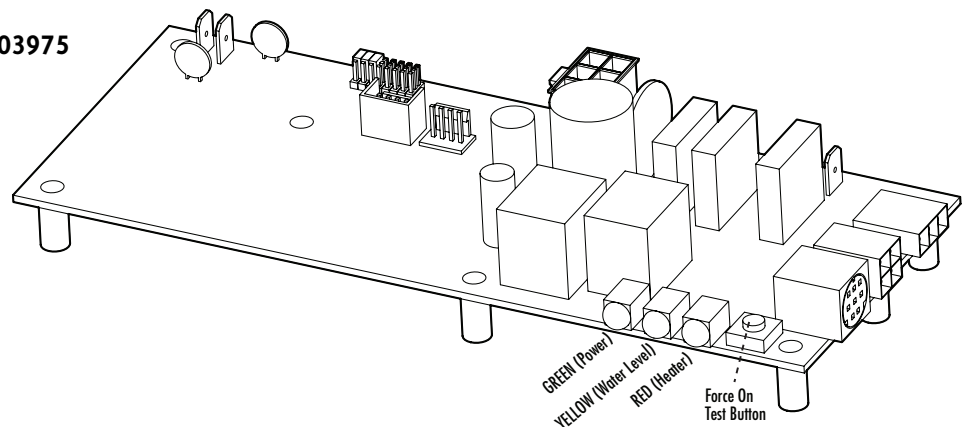
- GREEN** LED is ON when there is 208/240 Volt incoming power connected, 24 Volt transformer secondary output and on-board 5 Volt DC control power are present.

- YELLOW** Water level indicator—LED is OFF when no water is detected (for more that 5 seconds). ON when water level is satisfactory. For units with AutoFlush, if more than five hours have elapsed since last usage and this LED is ON it is indicative of an AutoFlush or water level probe circuit malfunction.

- RED** Contactor relay indicator—LED is ON when relay is closed and sending 24 Volts to the contactor coil. (This LED comes ON if the generator is ON.)

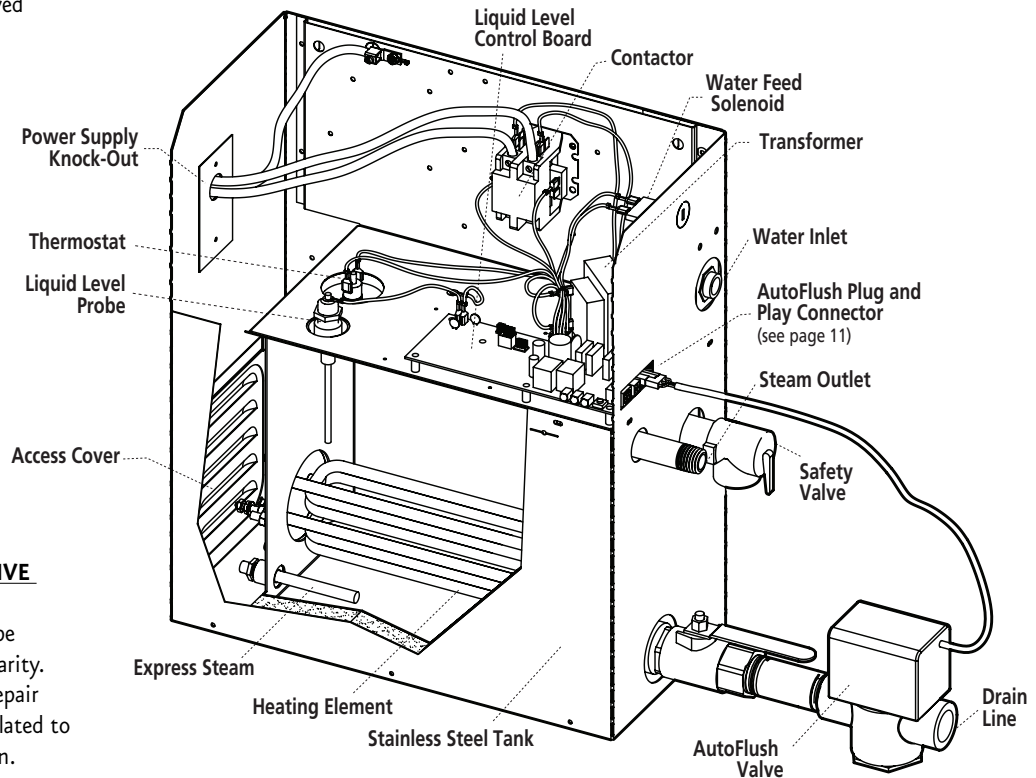
- FORCE ON TEST BUTTON** This button is for trouble shooting only and will operate if a control is connected or not. Pressing the button again will shut the generator OFF. The test button will only allow the generator to operate for 10 minutes.

Liquid Level Control Board PN 103975
(shown without wiring)



Models CT6E & CT9E

shown with cover removed

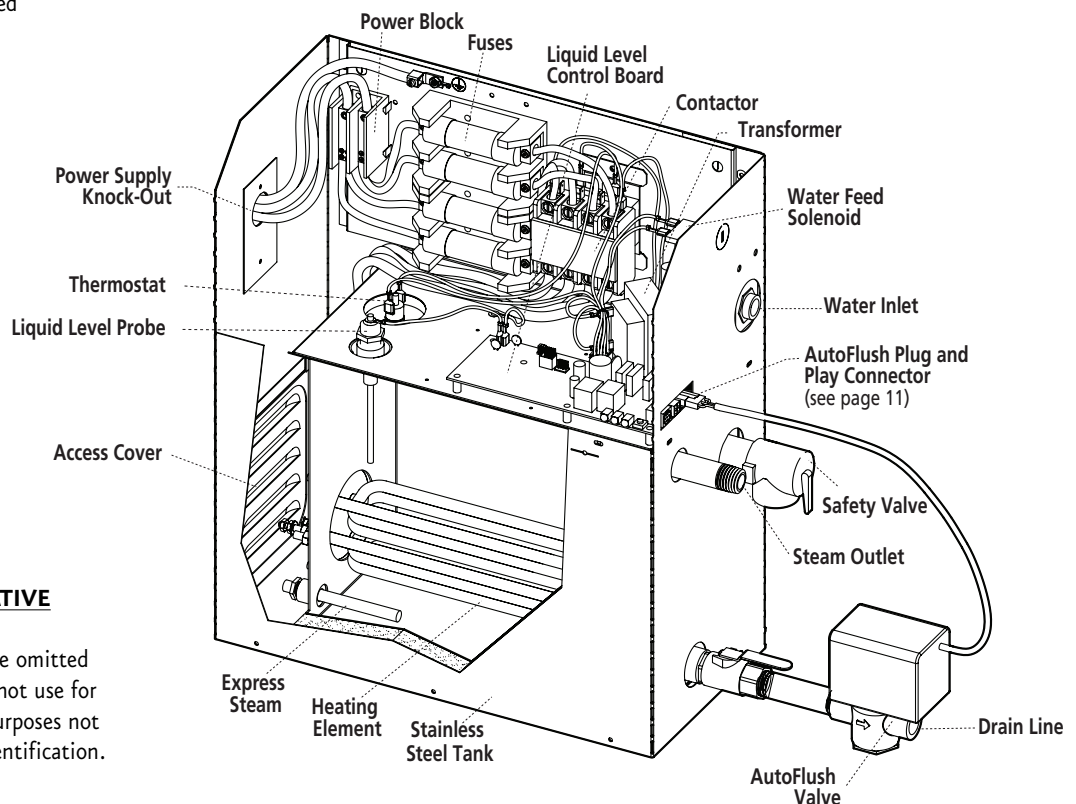


NOTE: FOR ILLUSTRATIVE PURPOSES ONLY.

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

Models CT12E

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

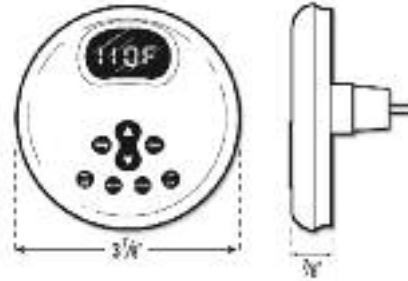
Part No.	Description	Product
99178CT	Drain Valve	All models
99297	Safety Valve 15PSI	All models
100479	Water Feed Solenoid Valve w/filter	All models
10477-3	Transformer 24VAC	All models
103975	Liquid Level Control Board	All models
103990-30	Cable for eTempo Control (30 ft.)	All models
103990-60	Cable for eTempo Control (60 ft.)	All models
MSTS-60	Remote Temperature Probe	All models
100476-2	Contactor 50A 2-pole	CT6E & CT9E, Single phase
99012	Contactor 50A 3-pole	All 3-Phase models
103453	Contactor 50A 4-pole	CT12E
100471-2	Probe Assembly	All models
99096MS	Heating Element Gasket	All models
103938	Acrylic Shield	All Models
99314	Power Fuse 60A 250V	CT12E, Single phase
29061BMS	Heating Element 6 KW 208V	CT6E
29061CMS	Heating Element 6 KW 240V	CT6E
29091BMS	Heating Element 9 KW 208V	CT9E
29091CMS	Heating Element 9 KW 240V	CT9E
29121BMS	Heating Element 12 KW 208V	CT12E
29121CMS	Heating Element 12 KW 240V	CT12E
103978-30	Cable for CT-STEAMSTOP (30 ft.)	All models
103978-60	Cable for CT-STEAMSTOP (60 ft.)	All models
104016	Thermostat	All models
104015	Express Steam Thermostat	All models
104019	Heating element for express steam	All models

eTEMPO CONTROLS

Dimensional Information for eTempo/Plus®

BOX CONTENTS:

- eTEMPO/PLUS® Control
- Control Cable (30 ft.)
- Steam head
- Tube of Silicone Sealant
- Owner's Manual



Before Installing

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

CAUTION Do not use any eTEMPO/Plus, or CT-STEAMSTOP controls without reading and understanding the Club Therapy steam generator Installation and Operation Manual (PUR 100426 Revision number 1.0/08 or higher). Failure to read and understand these instructions may result in an inoperative or hazardous installation.

A warning placard has been provided in the Information envelope. This placard is to be applied to the wall of the installed shower or steam enclosure.

Install the eTEMPO/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.

Locate the remote sensor (MSTS) in a location representative of the desired steambathing temperatures. Do not locate the control above or near the steam head or direct steam emissions. Failure to install according to instructions will result in an inoperative control and overheating of the steam room.

WARNING Do not route eTEMPO/Plus or CT-STEAMSTOP 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 eTEMPO/Plus or CT-STEAMSTOP controls. Doing so may result in an inoperative or hazardous installation.

IMPORTANT NOTES:

- Turn power to the steam generator OFF before connecting the control to the generator. Failure to turn the power off will result in an inoperable control.
- Do not operate eTEMPO/Plus, or CT-STEAMSTOP controls with other than a Mr.Steam Club Therapy generator. Mr.Steam Club Therapy steam generators with serial numbers lower than 900000, or any other brand of steam generator are not to be operated with eTEMPO 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

eTEMPO/PLUS CONTROLS

Installation Instructions for eTempo/Plus®

Step 1

Determine the desired installation location of the control. The eTEMPO/Plus controls are designed to be installed outside the steam room in a location only accessible by the faculty operator.

The control cable length is 30 feet. Insure that the control and/or steam generator are located accordingly. Contact a Mr.Steam technical service representative if a longer cable is required. Contact Mr.Steam for optional 60 ft. cable, PN 103990-60

A Remote Temperature Probe Part Number MST5-60 must be installed inside the steam room.

- Do not locate the control above or near the steam head or direct steam emissions.

IMPORTANT: See installation instructions for the MST5 Temperature Probe before rough-in or installation of control (pgs. 19-20).

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. Connect the black round Mini-Din connector to the steam generator connector as shown in Diagram 2.

NOTE: The connector is keyed with the flat facing up.

IMPORTANT: Be careful not to strain, staple, pinch or otherwise damage the control cable. Route cable as required to permit replacement. Do not install cable in a metal conduit.



DIAGRAM 1

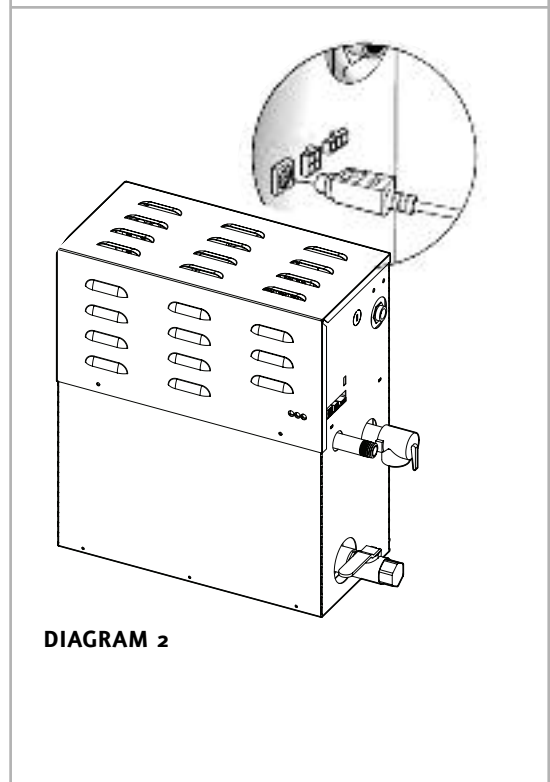


DIAGRAM 2

Installation Instructions for eTempo/Plus® (cont.)

Step 4

Firmly connect the control connector to the control. Turn on power to the steam generator and test the control to verify correct connections. Test per the instructions on pages 21-22. Proceed with installation and verification of proper control function.

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.

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 6.

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.

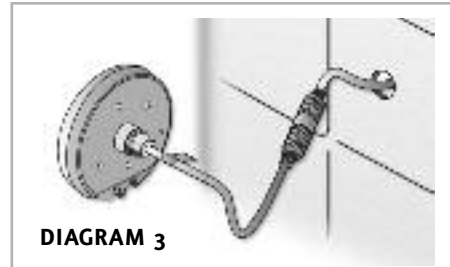


DIAGRAM 3

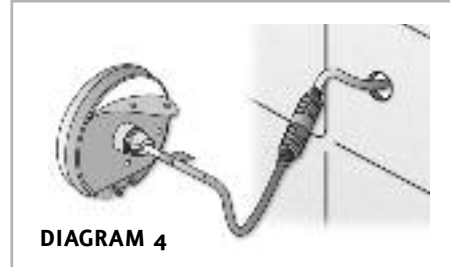


DIAGRAM 4

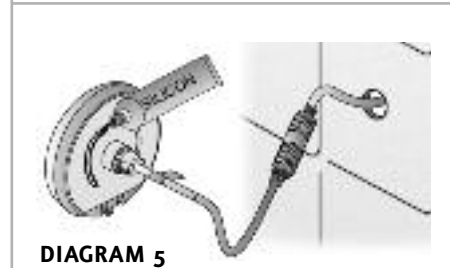


DIAGRAM 5

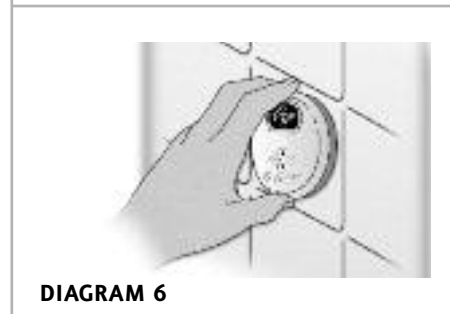


DIAGRAM 6

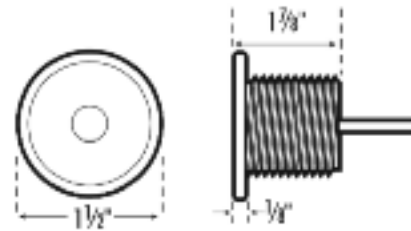
CT-STEAMSTOP™

On/Off Switch for eTempo/Plus®

Dimensional Information

Box Contents:

- CT-STEAMSTOP Control
- Owner's Manual
- Control Cable



INSTALLING THE CT-STEAMSTOP™ CONTROL

The CT-STEAMSTOP has a 30 foot cable with a Plug & Play connector at both ends. (Diagram 1)

A 60 foot control cable is available (103978-60). Contact a Mr.Steam technical service representative if a longer cable is required.

The CT-STEAMSTOP must be installed inside the steamroom.

STEP 1 -Diagram 2

Drill a 7/8 inch diameter hole in a preferred wall location. Do not oversize or undersize the hole.

STEP 2 - Diagram 3

Route the cable from the wall to the steam generator. Be careful not to strain, pinch or otherwise damage the control cable.

STEP 3 - Diagram 4

Remove and discard the peel-off paper from the switch housing to expose the adhesive as shown in Diagram 4.

STEP 4 - Diagram 5

Apply silicone (provided with eTEMPO/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.

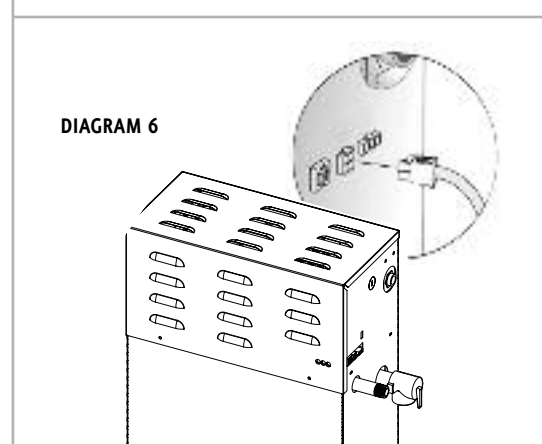
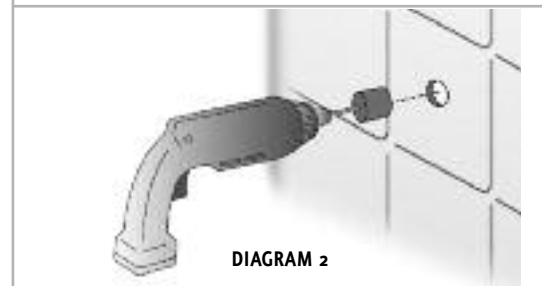
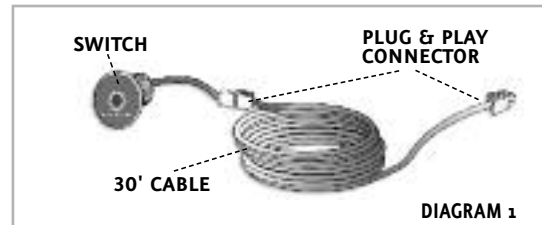
STEP 5

Push cable and switch housing into the hole firmly.

STEP 6 - Diagram 6

Firmly connect the Plug & Play connector to the steam generator connector labeled CT-STEAMSTOP.

NOTE: The connector is keyed and will only connect in one orientation with the tab facing up.



INSTALLING THE REMOTE TEMPERATURE PROBE for eTEMPO/Plus® Controls

(PN: MST5)

CAUTION The Remote Temperature Probe (MST5-60) is for use with eTEMPO/PLUS Controls only. Do not use any other controls. Do not use any other temperature probe with the eTEMPO/PLUS controls. Noncompatible products may result in an inoperative control and a hazardous condition.

CAUTION Install the eTEMPO/PLUS controls according to the installation instructions on pages 15-17. Failure to do so may result in an inoperative control and a hazardous condition.

1. The Remote Temperature Probe must be installed inside the steam room and must be:
 - a. On a vertical surface
 - b. 4-5 feet above the floor
 - c. Locate the MST5 Temperature Sensor in a location representative of the desired steambathing temperatures. Do not locate the MST5 above or near the steam head or direct steam emissions.

The probe has an integral 60' cable. Insure that the probe and/or steam generator are located accordingly.

2. Drill a 5/16 inch diameter hole in the wall as shown in Diagram 1. Do not oversize or undersize the hole. Clean area thoroughly.
3. Remove the knock-out from the steam generator jacket as shown in Diagram 2.
4. Insert the remote temperature probe cable through the knock-out and connect to the connector on the steam generator printed circuit board marked EXT TEMP as shown in Diagram 2.

**NOTE: FOR ILLUSTRATIVE
PURPOSES ONLY.**

DRAWING NOT TO SCALE

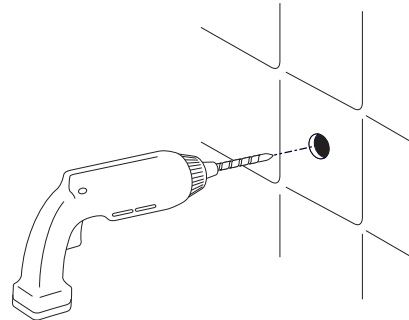
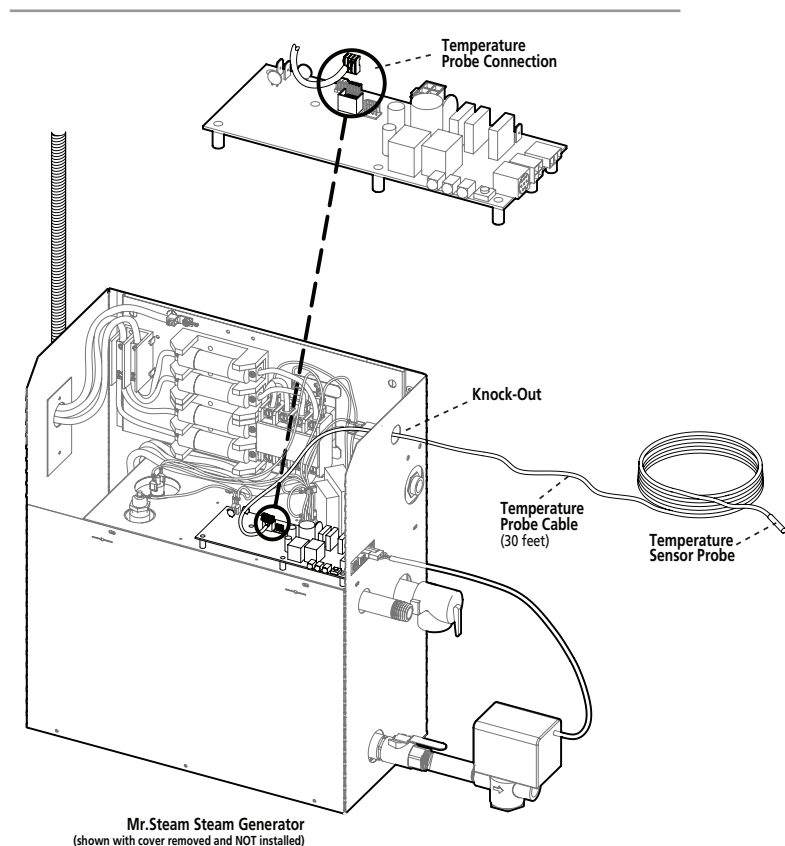


DIAGRAM 1



Mr.Steam Steam Generator
(shown with cover removed and NOT installed)

DIAGRAM 2

INSTALLING THE REMOTE TEMPERATURE PROBE

(cont.)

- Route the end of the temperature probe cable with the temperature probe through the wall into the steam room as shown in Diagram 3.

IMPORTANT NOTE: Do not strain, staple, pinch or otherwise damage the probe cable.

- With a minimal length of the cable exposed apply silicone (provided) to the hole in the wall as required to create a moisture seal as shown in Diagram 3.
- Push the temperature cable and bulb into hole as required to leave minimum 1/4", maximum 1/2" of the bulb exposed as shown below.

! WARNING Insure a minimum of 1/4" of the temperature bulb is exposed to the air. Failure to do so may result in an inoperative control and a hazardous condition.

! WARNING The exposed area of the temperature bulb must be free of silicone or any materials or obstructions that prevent direct exposure to the steam room air. Failure to do so may interfere with the ability to sense temperature and may result in excessive steam room temperatures.



Steam Room Interior
Diagram 3

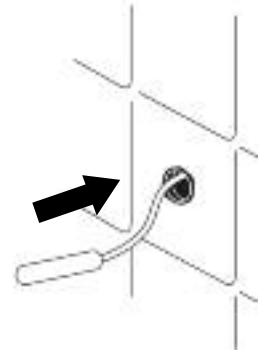
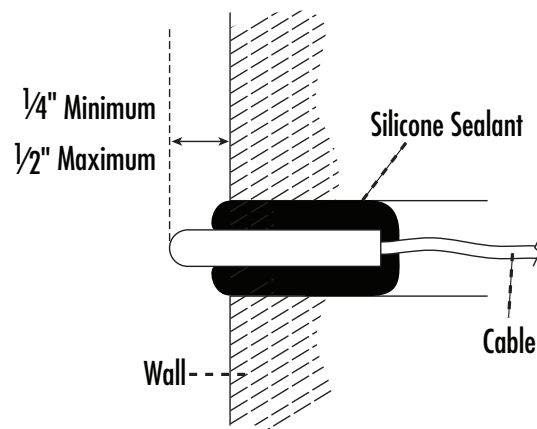
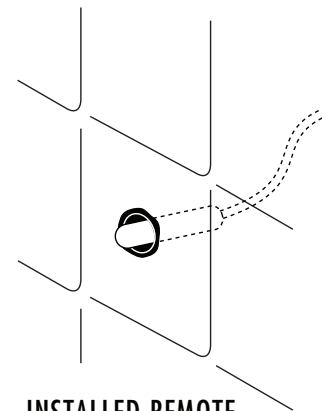


Diagram 4



SECTIONAL VIEW



INSTALLED REMOTE
TEMPERATURE PROBE

eTEMPO/PLUS® Operating Instructions

The eTEMPO/Plus Control features programmable digital temperature control, programmable time duration, clock, Aromasteam, ChromaSteam, ON/OFF and two personal settings.

! WARNING 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. Set the duration at 10 minutes max. to gauge comfort and safety levels. This will allow the steam generator to heat up and begin producing steam.

POWERING UP THE UNIT- Diagram 1

When the generator is first powered up or after a power interruption, the clock display flashes and the clock is ready to be set up.

NOTE: Pressing the **ON/OFF** will start the generator even if the clock has not been set.

ON/OFF - Diagram 2

Press the **ON/OFF** key to start or stop the flow of steam. The Set Point is displayed. Steam will begin to flow a few a few minutes after the control is turned **ON**. The duration required for the steam room to reach steambathing temperatures depends on the steam room construction and steam generator specifications. Steam may continue to flow for a short time after the control is turned OFF.

Setting the Clock - Diagram 3

When the display is not flashing: Press and hold the **TIME** key until the display starts flashing.

Use the **UP/DOWN** keys to select the desired, at this time the AM/PM logo will be displayed. Press the **TIME** key to save changes.

NOTE: The clock can only be set when the generator is off.

Setting the Time Duration/Viewing the Clock

Press **TIME** key to set or display the remaining relaxation time or the clock.(Diagram 4). The control is pre-set and will display a TIME setting of 20 minutes (default setting).

With the TIME or CLOCK displayed, press the **UP** or **DOWN** keys (Diagram 5) 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. Then, the clock time will be displayed.



DIAGRAM 1



DIAGRAM 2



DIAGRAM 3



DIAGRAM 4



DIAGRAM 5

eTEMPO/PLUS®
Operating Instructions (cont.)

Setting the Temperature

Press **TEMP** key to set the desired temperature or display the temperature setting. Diagram 6
The control is preset and will display a temperature setting of 110°F (default setting).
With the temperature displayed, press the **UP** or **DOWN** keys (Diagram 7) to set the desired temperature (100°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 6



DIAGRAM 7

Changing the Temperature units (°F/°C)

When the generator is Off, Press and hold **ON/OFF** key for 10 seconds. The temperature units will be displayed as Fahrenheit (TuF) or Celsius (TuC). Use the **UP/DOWN** keys to choose between (TuF) and (TuC). Press **ON/OFF** key to accept the new value and exit.

DIAGRAM 8



DIAGRAM 9

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 - Diagram 8

The **P1/P2** key program and store preferred settings. To program preferred settings: Press **ON/OFF** key to turn generator on. Press **P1/P2** key once to program **PROG1**. Press it twice to program **PROG2**. The selected parameter will be displayed. Enter the preferred time and temperature settings. The eTEMPO/PLUS™ will store the following settings: set point, time duration & aroma state.
To select **PROG1** or **PROG2** : Press **ON/OFF** key then press **P1/P2** key once to select **PROG1**, press it twice to select **PROG2**. The steambath will begin to operate at the stored settings.



DIAGRAM 10

AromaSteam - Diagram 9

To enjoy the benefits of the AromaSteam system, the AromaSteam system and the steam generator must be at on at the same time. Press the **ON/OFF** key to turn the steam generator on. Then, press the **AROMA** key to generated the aroma oils will mix with the steam flow The Aroma indicator will be displayed. The AromaSteam turns off automatically when the steam generator stops heating. Press the **AROMA** key to turn it off during a steam session. The logo will turn off.

ChromaSteam - Diagram 10

The ChromaSteam system will activate colored lights in the steam shower. Press the **CHROMA** key to turn lights on. Press twice to select the current light color. Press again to turn the lights off. Note that the lights can be turned on even if the steam generator is off and the ChromaSteam system hasn't timed out.



CT-STEAMSTOP™ On/Off Switch for eTempo/Plus®

Using the CT-SteamStop™ Control

This CT-STEAMSTOP control functions as an ON/OFF key of the eTEMPO/PLUS control of your system.

Note: If an error code is detected by the system the LED indicator will flash. Refer to the eTempo/Plus display for error code or call a Mr. Steam's service technician.



LED indicator will light up when the generator is ON.

USING MR.STEAM® ESSENTIAL OILS

Enjoy AromaSteam essential oils by placing a drop or two into an unheated AromaSteam steam-head as shown in the illustration. Only use Mr.Steam AromaSteam essential oils in the Mr.Steam AromaSteam steamhead.

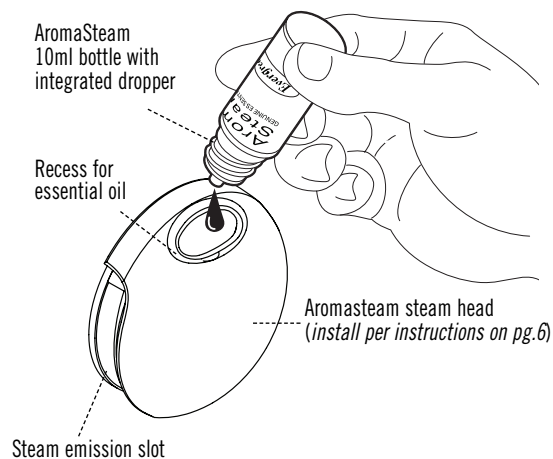
CAUTION Use essential oils with caution. Essential oils are for external use only. Keep out of reach of children. Essential oils are highly concentrated and are potent substances and should not be applied directly to the skin as they can be irritants. Use essential oils with caution.

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

CAUTION Start with one drop to gauge strength and suitability. Limit to a maximum of a few drops for a steambathing session.

CAUTION The bather should exit the steambath **IMMEDIATELY** if dizziness occurs. 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 bottles when storing oils.
Keep bottles away from sources of ignition.




CAUTION Aromatic oils should be added to steamhead before turning on the steambath unit. **DO NOT** add oil during steambathing or when the steam head is heated.

Care Tips for all Controls and Steamheads

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

NOTE: Replacement of the decorative covers requires removal and reinstallation of the control from the mounting surfaces.

Safety and Operating Information


 **WARNING** 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. Set the duration at 10 minutes max. to gauge comfort and safety levels. This will allow the steam generator to heat up and begin producing steam.

Do not install or use any eTEMPO/PLUS® or CT-STEAMSTOP™ controls without reading and understanding the Mr.Steam steam generator Installation and Operation Manual (PUR 100426 Revision number 1.0/08 or higher). Failure to read and understand these instructions may result in an inoperative or hazardous installation.

A warning placard has been provided in the Information envelope. This placard is to be applied to the wall of the installed shower or steam enclosure.

Install the eTEMPO/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.

Locate the remote sensor (MSTS) in a location representative of the desired steambathing temperatures. Do not locate the control above or near the steam head or direct steam emissions. Failure to install according to instructions will result in an inoperative control and overheating of the steam room.

 **CAUTION** Do not route eTEMPO/Plus, CT-STEAMSTOP or MSTS control wiring inside conduit together with power lines or in proximity to hot water or steam piping. Doing so may result in an inoperative or hazardous installation.

Do not alter or modify eTEMPO/Plus, CT-STEAMSTOP or MSTS controls. Doing so may result in an inoperative or hazardous installation.

IMPORTANT:

Do not operate any eTEMPO/PLUS or CT-STEAMSTOP controls with other than a MrSteam Club Therapy steam generator. MrSteam Club Therapy steam generators with serial numbers lower than 900000, or any other brand of steam generator are not to be operated with eTEMPO controls. Doing so may result in an inoperative installation.

This document contains important safety, operation and maintenance information. Leave this document with the steamroom operator. 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.

Products, information and specifications are subject to change without notice.
Please call Sales & Support at 1.800.76.STEAM (East Coast) or 1.800.72.STEAM (West Coast) for more information.

mr.steam®

Sussman-Automatic
Corporation®
info@mrsteam.com
www.mrsteam.com

43-20 34th Street
Long Island City, NY 11101
TEL: 718 937 4500
FAX: 718 472 3256

9410 S. La Cienega Blvd.
Inglewood CA 90301
TEL: 310 210 6565
FAX: 310 216 2944

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Mr.Steam and des., A LIFETIME OF PLEASURE, AROMAFLO, AUTOFLUSH, CLEAN STEAM... EVERY TIME, STEAM ON DEMAND, STEAM@HOME, STEAMTHERAPY, SUSSMAN LIFESTYLE GROUP, eTEMPO, eTEMPO/PLUS and eTEMPO/REMOTE, CLUB THERAPY, CHROMASTEAM, MUSICTHERAPY, MAKE WELLNESS A WAY OF LIFE and FROM BATHROOM TO SPA are registered trademarks of Sussman-Automatic Corporation. AROMASTEAM, Digital 1 and CT-STEAMSTOP are trademarks of Sussman-Automatic Corporation.

PUR 100426 3.0/10