

Installation, Operation and Maintenance Manual

## Steambath Generator Systems

Residential Models: MS90E - MS400E and MSSUPER1E - 3E

**IMPORTANT:** Leave this material with the home owner.

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#### **READ ME FIRST!**

tions, 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 installation and operation:

hazardous situation, which, if not avoided, could result in death or serious injury.

hazardous situation, which, if not avoided may result in minor or moderate injury or product damage.

**NOTICE** is used to address practices not related to physical injury.

**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. MrSteam reserves the right to make changes at any time without notice. More current instruc-tions may be available at www.mrsteam.com. 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 Supervise children at all times.
- 3. NARNING Steam is hot and can cause injury or death if improperly used. Steam rooms contain steam and elevated temperatures. Please read and observe all warnings in this manual before installing or using a steam room.
- 4. **! 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 steambath 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. SUPERVISE CHILDREN AT ALL TIMES.
- 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 WHICH IS KEPT:

THE OWNER'S MANUAL CAN BE FOUND AT WWW.MRSTEAM.COM

USE OF STEAM ROOM IN CONJUNCTION WITH CONSUMPTION OF ALCOHOL CAN BE DANGEROUS AND CAN RESULT IN INJURY THROUGH SLIP AND FALL OR OTHERWISE.

mr, steam<sup>®</sup> 43-20 34th Street , Long Island City NY 11101 1 800 76 STEAM www.mrsteam.com PUR100378 3.22

**HYPERTHERMIA** occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include:

- a) Failure to perceive heat;
- b) Failure to recognize the need to exit the steambath;
- c) Unawareness of impending risk;
- d) Fetal damage in pregnant women;
- e) Physical inability to exit the steambath and
- f) Unconsciousness.

**WARNING** The use of alcohol, drugs, or medication can greatly increase the risk of hyperthermia.

#### **✓**/İ WARNING

This peel and stick warning label is an essential part of providing a safe environment for steam room users. This peel and stick warning label must be applied to the wall of the shower or steam enclosure, at a point that is visible to all users. Failure to install this sticker may result in serious injury or death. The location where this owner's manual is kept shall be written in the space provided on the label using permanent ink.

PUR 100472 REV 5.22









#### **RESIDENTIAL STEAMBATH GENERATOR SYSTEMS**

INSTALLATION, OPERATION & MAINTENANCE MANUAL

MODELS: MS90E, MS150E, MS225E, MS400E, MSSUPER1E, MSSUPER2E, MSSUPER3E

SERIAL NO.		

MODEL \_\_\_\_\_

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#### **SELECT YOUR MrSteam**

#### MrSteam @ Your Fingertips:

Start working smarter with MrSteam's mobile sizing app, now available for the iPad®, iPod® and most smart phones.

Visit **mrsteam.com** to size your generator automatically or go directly to: **http://isizing.mrsteam.com** 

Materials of construction, room size and special design features such as large glass areas, <u>all affect</u> 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. Construction Materials:				
For ceramic or porcelain tile on cement board or mortar bed	Add 0%			
For natural stones: natural marble, stone, shale, glass block or concrete	Add 50%			
For acrylic or fiberglass subtract	Add 40%			
3. Ceiling Height: For each foot above 8 feet (max 10 feet)	Add 15% to the volume with material adjustment			
4. Total Room Room Volume				

**INCOMP.** In considering the purchase or use of this steambath system, please note that 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, MrSteam recommends that you obtain the approval of a physician before use. For information about this product and safety issues, please call 1.800.76.STEAM

#### **IMPORTANT NOTES:**

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

The MrSteam Sizing Chart allows for up to 60 feet of insulated steam piping from the MS generator to the steam room. If the 60 foot steam piping is exceeded consult with factory. The steam generator control locations must be taken into account. A 30 foot cable is standard. Contact MrSteam to purchase an optional 60 ft. cable PN 103990-60 for iTempo® and AirTempo® and PN 104117-60 for iSteam®. The maximum cable length is 60 feet.

Compare your **Room Volume** to the **Chart** below and select the appropriate model.

RESIDENTIAL STEAM GENERATORS SPECIFICATION CHART							
Model No.	KW	Amps (for 240v/1PH)†	Wire Size‡	Total Adj. Room Vol.	Water Usage Gallons††	Dimensions*	Shipping Wt. (lbs)**
MS90E	5	21	10	0-71	0.67	14½"L x 14¾"H x 6¾"D	27
MS150E	6	25	8	72-107	0.80	14½"L x 14¾"H x 6¾"D	27
MS225E	7.5	32	8	108-161	1.0	14½"L x 14¾"H x 6¾"D	27
MS400E	9	38	8	162-257	1.2	14½"L x 14¾"H x 6¾"D	27
MSSUPER1E	10	42	8	258-339	1.4	17"L x 18½"H x 7%"D	39
MSSUPER2E	12	50	6	340-411	1.6	17"L x 18½"H x 7%"D	39
MSSUPER3E	15	63	4	412-482	2.0	17"L x 18½"H x 7%"D	39
	Model No. MS90E MS150E MS225E MS400E MSSUPER1E MSSUPER2E	Model No.         KW           MS90E         5           MS150E         6           MS225E         7.5           MS400E         9           MSSUPER1E         10           MSSUPER2E         12	Model No.         KW         Amps (for 240v/1PH)†           MS90E         5         21           MS150E         6         25           MS225E         7.5         32           MS400E         9         38           MSSUPER1E         10         42           MSSUPER2E         12         50	Model No.         KW         Amps (for 240v/1PH)†         Wire Size‡           MS90E         5         21         10           MS150E         6         25         8           MS225E         7.5         32         8           MS400E         9         38         8           MSSUPER1E         10         42         8           MSSUPER2E         12         50         6	Model No.         KW         Amps (for 240v/1PH)†         Wire Size‡         Total Adj. Room Vol.           MS90E         5         21         10         0-71           MS150E         6         25         8         72-107           MS225E         7.5         32         8         108-161           MS400E         9         38         8         162-257           MSSUPER1E         10         42         8         258-339           MSSUPER2E         12         50         6         340-411	Model No.         KW         Amps (for 240v/1PH)†         Wire Size‡         Total Adj. Room Vol.         Water Usage Gallons††           MS90E         5         21         10         0-71         0.67           MS150E         6         25         8         72-107         0.80           MS225E         7.5         32         8         108-161         1.0           MS400E         9         38         8         162-257         1.2           MSSUPER1E         10         42         8         258-339         1.4           MSSUPER2E         12         50         6         340-411         1.6	Model No.         KW         Amps (for 240v/1PH)†         Wire Size‡         Total Adj. Room Vol.         Water Usage Gallons††         Dimensions*           MS90E         5         21         10         0.71         0.67         14½"L x 14¾"H x 6¾"D           MS150E         6         25         8         72-107         0.80         14½"L x 14¾"H x 6¾"D           MS225E         7.5         32         8         108-161         1.0         14½"L x 14¾"H x 6¾"D           MS400E         9         38         8         162-257         1.2         14½"L x 14¾"H x 6¾"D           MSSUPER1E         10         42         8         258-339         1.4         17"L x 18½"H x 7%"D           MSSUPER2E         12         50         6         340-411         1.6         17"L x 18½"H x 7%"D

#### IMPORTANT NOTES:

- Add C1 suffix to Model No. for 240V/1Ph; Add B1 suffix to Model No. for 208V/1Ph.
- All MrSteam MS Models are cULus Listed and CE approved.

#### NOTICE

All MS 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.

See MrSteam Installation and Operation Manual for complete dimensional and installation information.

\*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**

Carefully inspect the Steam Generator and packaging for shipping damage. In the event of shipping damage, please contact the carrier for claim information. Our customer service department can assist you with any missing or damaged parts.

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:

- 1. Verify that the model and accessories specifications are correct for the incoming line voltage.
- 2. 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 and selection guide on page 3.
- 3. Marble or glass walls or ceilings. "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.
- 4. The physical size of the unit, clearance for plumbing servicing, and its distance from the steam room must all be considered before final installation.
- 5. Consider any controls and accessories before initiating installation. Read the Installation and Operation Manual of all controls and accessories available at www.mrsteam.com technical downloads.
- 6. **NOTICE** Record the serial number of the steam generator in the space provided in the table of contents of this manual.

#### 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 steam containment.
- 3. **WARNING** To prevent slip and fall hazards, non-slip flooring or non-slip floor strips must be installed in the steam room.
- 4. Check the suitability of any materials with the manufacturer. 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.
- 6. Provide a floor drain.
- 7. No heating, venting or air conditioning devices should be installed inside the steam room.
- 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.
- Windows that are part of the steam room should be double paned and tempered safety glass.
- 10. Limit steam room ceiling height to 8 feet. Exceeding 8 feet may require a higher-rated steam generator.

this manual is an essential part of providing a safe environment for steam room users. The peel and stick warning label must be applied to the wall of the shower or steam enclosure, at a point that is visible to all users. Failure to install this sticker may result in serious injury or death. The location where this owner's manual is kept shall be written in the space provided on the label using per-manent ink. For a replacement warning label contact MrSteam customer service at 1-800-76-STEAM or hello@mrsteam.com

#### **I** WARNING

#### REDUCE THE RISK OF OVERHEATING AND SCALDING

- EXIT IMMEDIATELY IF UNCOMFORTABLE, DIZZY OR SLEEPY.
   STAYING TOO LONG IN A HEATED AREA IS CAPABLE OF CAUSING OVERHEATING.
   SUPERVISE CHILDREN AT ALL TIMES.
- 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.
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Not Actual Size

**WARNING** d equipment, doing so may result in an inoperative or hazardous installation.

- Discontinue use of the steam generator and control if the steam generator or control are da maged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation
- ELECTRICAL SHOCK HAZARD. MrSteam steam generators are connected to 208V or 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 or failure to use MrSteam parts may result in property damage or in a hazardous condition.
- The MS series of steam generators are for residential use only.
   Commercial or other nonresidential applications void the warranty and may adversely affect product performance and may represent a safety hazard.

**CAUTION** If acrylic, fiberglass or other non-heat resistant mate-rials are used as part of the steam room enclosure. Consult with the material manufacture and see pg. 9, "Installing the Steamhead" for additional details.

#### **IMPORTANT NOTES:**

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

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. MrSteam steam generators are intended to be operated with MrSteam iSteam®, AirTempo®, iTempo/Plus®, iTempo® Home Wizard® and iGenie® 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 or accessories.

#### WATER QUALITY INFORMATION

For optimum results, the water supply should be tested prior to installation. If the mineral content exceeds the following recommended limits, various external treatment processes are recommended to correct the problem.

**NOTICE** An analysis of the on-site water must be made by a recognized and reliable water treatment company to ascertain the existing condition and treatment required.

Poor water quality can affect efficiency or result in steam generator damage. Water contains impurities in solution and suspension. These impurities concentrate in the generator. The concentration of these impurities increases as more feedwater is introduced into the generator and steam is produced. If the suspended solids are allowed to concentrate beyond certain limits, a deposit or "scale" will form on the generator internal surfaces. This deposit can interfere with the proper generator operation and cause generator failure. The concentration of these impurities is generally controlled by the water quality and by periodic draining of the generator.

### RECOMMENDED FEEDWATER QUALITY

Hardness, ppm 8 – 85 (~0.5 – 5 gpg) P-Alkalinity, ppm 85 – 410 (~5 – 24 gpg) T. Alkalinity, ppm 200 – 500 (~7 – 0 gpg) pH (strength of alkalinity) 8.0 – 11.4

Every 2 months, or more often in "hard" water areas, the manual drain valve should be opened fully flushing out accumulated materials, salts and other particles which are natural by-products of boiling water.

The optional AutoFlush System feature automatically drains the MrSteam® generator 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.

#### LOCATING THE STEAM GENERATOR

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

**NOTICE** 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 is available as a special order part for iTempo® and AirTempo®, PN 103990-60 and PN 104117-60 for iSteam®. The maximum cable length is 60 feet.

**IMPORTANT NOTE:** The control cable should be run in a dedicated 1" conduit to facilitate installation and service.

**NOT** route iSteam, AirTempo, iTempo/Plus, iTempo, HomeWizard or iGenie 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.

#### WARNING (Items 1-4)

- DO NOT install steambath generator inside steam room, a shock hazard will occur
- 2. <u>DO NOT</u> install steambath generator outdoors or wherever environmental conditions may result in a shock hazard or affect performance of the generator.
- 3. To prevent damage to the steam generator or a fire hazard <u>DO NOT</u> 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.
- 4. Burn Hazard. Steam piping, safety valve, drain valve and plumbing 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.

#### ! CAUTION (Items 5-7)

- 5. <u>DO NOT</u> install steambath generator or plumbing lines in unheated attic or any locations where water could freeze and cause pipes to rupture and cause property damage.
- 6. Install steambath generator on a solid and level surface. Provide supports under steam generator when wall mounting. Keyhole slots are provided for wall mounting. Insure the steam generator is properly secured and

- level when mounting with keyhole slots to prevent damage to the steam generator.
- 7. Install steambath generator in an upright position only to prevent damage to the generator.

#### **IMPORTANT NOTES: (Items 8-12)**

- 8. Install anti-water hammer device as necessary.
- Provide a minimum of (12) inches at both ends and top of the steam generator or as required for servicing. See page 10.
- 10. Provide unions as required to facilitate installation and disconnection of piping.
- 11. MrSteam controls can be located inside the steam room or on the outside of the steam room. See the Control Installation Manual for your specific control package for specific details.
- 12. The MS series of steam generators are for residential use only. Commercial or other nonresidential applications void the warranty and may adversely affect product performance and may represent a safety hazard.

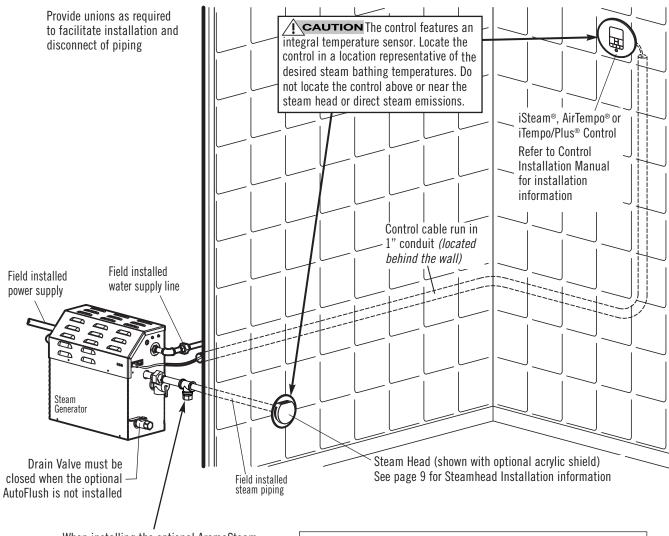
MrSteam Generators (inclusive of the iTempo, AirTempo and iSteam series Controls) are CE and UL listed.

**EXAMPLE 1** Suitable for operation in ambient not exceeding 45 °C (113° F)

#### TYPICAL MrSteam INSTALLATION

#### **NOTICE** Drawings for illustrative purposes only.

Consult with qualified designer, architect or contractor for steam room construction details.



When installing the optional AromaSteam, install a downward facing 90-degree T in the steam piping. See the AromaSteam Installation Manual for complete information.

I CAUTION To avoid unintentional steambath operation, do not locate the control where other controls, accessories, shower heads, valves, body sprays or similar within the shower could cause confusion or interfere with the MrSteam control's intended use and function.

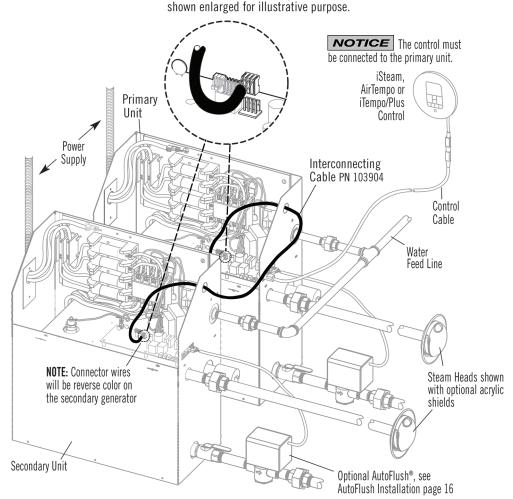
#### TYPICAL MULTI-INSTALLATION INSTRUCTIONS

(shown with optional AutoFlush)

- 1. Install each steam generator as in a single installation. Install generators as close as practical to each other, not exceeding 10 feet. The interconnecting cable length is 12 feet.
- 2. NARNING Shock Hazard. Power must be disconnected at the main electrical supply. Remove steam generator covers. Retain screws and covers for reuse.
- 3. Connect the iSteam®, iTempo/Plus® or AirTempo® control to either unit as per the Installation Manual supplied with each control. The control must be connected to the primary unit.
- 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. 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.
- Connect separate plumbing and power supplies for each unit.
   Replace covers with cover screws.
- Provide unions as required to facilitate installationand disconnection of piping

#### NOTICE

The secondary unit will de-energize when the steam room reaches steam bathing temperature resulting in a more gentle and energy efficient operation.



Printed Circuit Board Component

#### **INSTALLATION**

#### **PLUMBING**

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

- 1. Use unions on all pipe connections.
- 2. Use only brass piping or rigid copper tubing as permitted by codes.
- 3. DO NOT use black, galvanized, PVC pipe or PEX except as noted below.

**(I)** WARNING Water supply and steam piping must be flushed to remove flux and other debris prior to connecting the steam generator. Failure to flush the steam piping may result in flux poisoning or a hazardous condition. Failure to flush the steam piping may result in blockage or an inoperable system.

#### WATER SUPPLY (3/8" NPT)

1. Connect to cold water line.

**NOTICE** Water feed line may be flexible copper tubing, braided hose, PVC or PEX if permissible by local codes.

- 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.
- Strainer recommended upstream of feed water connection.
- In order to reduce operating noise, reducing feed water pres-sure to between 15 - 20 psi is recommended.
   Optional pres-sure reducing valve part number 104198.
- 7. Provide anti-water hammer device as required.
- 8. Install an approved backflow preventer as required by local codes.

#### DRAIN (1/2" NPT)

CAUTION The drain from the generator should not share an under sink trap, unless the generator is mounted higher than the sink to prevent damage to the generator if the drain backs up.

**NOTICE** 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 plumb-ing code for receptor, trap and vent requirements. Do not connect Drain line and Safety Valve line together. **Unit drains by gravity.** 

**NOTICE** Do not plumb the generator drain and condensation pan drain together in such a way that will cause drain water to back into condensation pan. 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 causing a scalding hazard.

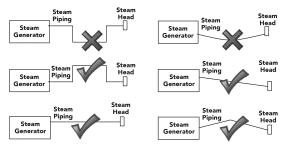
**WARNING** DO NOT connect the drain valve to the steam piping

#### **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 piping. See the MrSteam AromaSteam Operation and Instruction Manual (PN: 100402) for installation information before the steam piping is installed at the technical downloads section of www.mrsteam.com

#### STEAM PIPING (1/2" NPT)

- 1. DO NOT install any valve in steam piping. 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 piping with fiberglass pipe insulation or similar insulation rated 212° F or higher.
- 4. Pitch steam piping 1/4" per foot towards steam head or steam generator to avoid valleys and trapping of condensate.



for condensate to drain, may cause condensate to block the flow of steam. Blocking the steam flow may cause steam pressure to discharge boiling water through the steamhead, resulting in a scalding hazard. Blocking the flow of steam may cause steam to discharge through the safety valve, resulting in a scalding hazard.

**NOTICE** A 1.5" hole in the steam room is required to mount the steamhead. For Linear steamhead, please refer to the installation instructions.

#### 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 or any obstruction in steam supply pipe. DO NOT connect the safety-valve output into the steam piping.

#### CONDENSATION PAN

MrSteam strongly recommends the use of a condensation pan in the unlikely event of a plumbing leak. Check local plumbing codes for receptor, trap and vent requirements. Condensation pans drain by gravity. The condensation pan is equipped with an integral 3/4" fitting. See page 17 for additional condensation pan installation information.

**NOTICE** Do not plumb the generator drain and condensation pan drain together in such a way that will cause drain water to back into condensation pan.

All drawings are for illustrative purposes only

### INSTALLING THE ROUND OR SQUARE AROMASTEAM STEAMHEAD (1/2" NPT)

**NOTICE** A  $1\frac{1}{2}$ " clearance hole around the steam pipe is needed to mount the steamhead.

#### STFP 1

Locate steam head 6-12 inches above floor, except for:

- 1. 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 103938.
- 3.To prevent door seals from deteriorating do not locate the steam head where direct steam emission would contact door seals.
- 4. To reduce noise, do not locate steamhead within 12" from a wall.

#### 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.

#### STEP 3

Secure a bronze drop ear fitting to a header and run  $\frac{1}{2}$ " copper steam piping 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 ¼" from that dimension and select a brass nipple of that length to finish the installation.

#### STEP 5

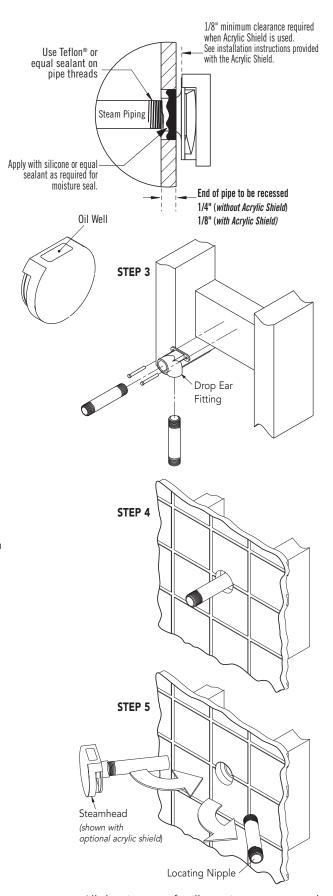
Wrap teflon tape around the threads of the new nipple and screw the nipple into the steamhead. Do not use wrenches or tools which would damage the steamhead's finish. Wrap teflon tape around the threads of the nipple and screw the nipple and steamhead assembly you just made into the drop ear fitting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

**IMPORTANT NOTE:** DO NOT disassemble steamhead. MrSteam's steamhead is shipped fully assembled and requires no additional assembly.

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.

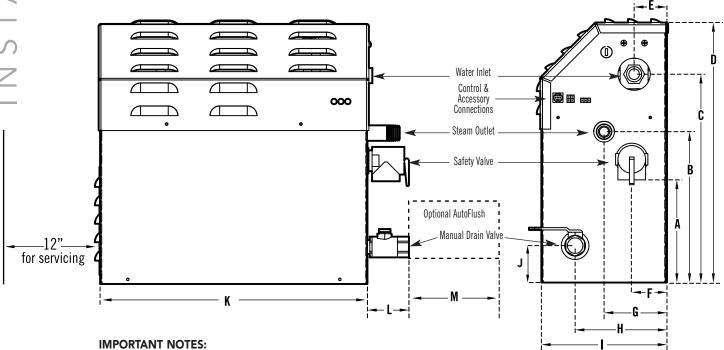
**CAUTION** Because the steam head and direct steam emissions are very hot, locate the steam head where incidental contact by bather with the steam head or direct steam emission cannot occur.

Consult with supplier of acrylic, fiberglass and other non-heat resistant enclosures for recommended steamhead location. Use Acrylic Shield PN 103938 (round) or PN 103938SQ (square). See instructions provided with steam shield.



All drawings are for illustrative purposes only

#### **GENERATOR DIAGRAM**



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.

The minimum clearance from combustible surfaces is zero all around.



	MS90	E - 400E	MSSu	per1E-3E
Α	5	(127)	71/4	(184)
В	81//8	(206)	97/8	(251)
С	11 <sup>1</sup> / <sub>4</sub>	(392)	15½	(394)
D	141/4	(392)	18 <sup>3</sup> / <sub>4</sub>	(476)
Ε	17/8	(48)	11/4	(32)
F	2	(51)	21/4	(57)
G	5 <sup>7</sup> /8	(149)	6	(152)
Н	5	(127)	47/8	(124)
Τ	6 <sup>7</sup> /8	(175)	71/8	(200)
J	2	(51)	2	(51)
K	14½	(368)	17	(432)
L	2½	(64)	21/2	(64)
М	6 <sup>3</sup> / <sub>8</sub>	(162)	6 <sup>3</sup> / <sub>8</sub>	(162)

#### NOTICE

1. M = Optional AutoFlush 2. All units in inches (MM)

WATER INLET	¾″ NPT
STEAM OUTLET	½" NPT
SAFETY VALVE	¾" NPT
MANUAL DRAIN VALVE	½" NPT
AUTOFLUSH VALVE	½" NPT

ELECTRICAL CHART

Phase

22

49

28

42

24

58

34

50

29

73

42

63

10

8

8

6

8

4

8

4

10

6

8

6

8

4

8

6

8

3

6

4

Volts<sup>†</sup>

Wire Size | Wire Size

Amps (AWG)for 40°C (AWG) for 45°C

#### **ELECTRICAL**

**WARNING** 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. (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 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.

						Ambient	Ambient
			208	1	24	10	8
MS90E	71	5.0		3	14	12	12
			240	1	21	10	10
				3	12	12	12
			208	1	29	8	8
MS150E	107	6.0		3	17	10	10
			240	1	25	8	8
				3	14	12	12
			208	1	36	8	8
MS225E	161	7.5		3	21	10	10
			240	1	32	8	8
				3	18	10	10
			208	1	44	8	6
MS400E	257	9.0		3	25	8	8
			240	1	38	8	8

208

240

208

240

208

240

3

3

3

3

3

**MSSuper** 

1E

MSSuper

MSSuper

3E

339

411

482

10.0

12.0

15.0

Vol

Model No. (Cu. Ft.\*)

Max Room

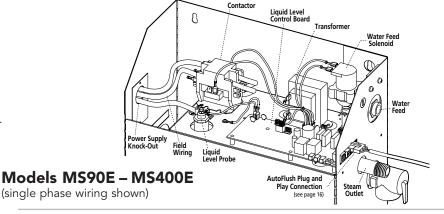
KW

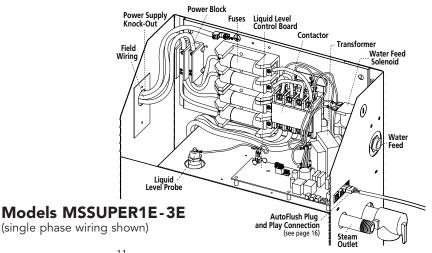
WARNING

PROVIDE A POWER SUPPLY DISCONNECT WITHIN SIGHT OF THE STEAM GENERATOR OR ONE THAT IS CAPABLE OF BEING LOCKED IN THE OPEN POSITION AS REQUIRED BY CODE.

#### FIELD POWER WIRING

- TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT POWER SUPPLY DIRECTLY TO ELEMENTS!!!
- 2. L1, L2, Ground to be field wired
- 3. Super 1E 240/1 models are not supplied with internal fusing.
- 4. All Drawings are for illustrative purposes only. Consult with qualified licensed electrician for electrical installation.



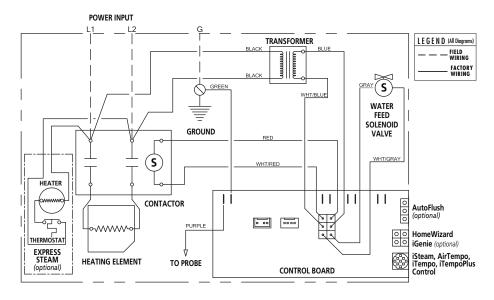


<sup>\*</sup>See page 3 for room sizing.

<sup>&</sup>lt;sup>†</sup>All specifications shown are for 208V and 240V Consult factory for other voltage specifications.

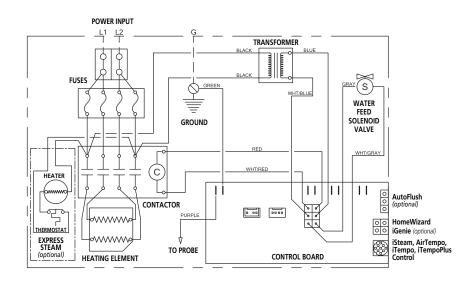
#### **SINGLE PHASE 208/240 VOLT WIRING DIAGRAMS**

MODELS MS90E, MS150E, MS225E, MS400E



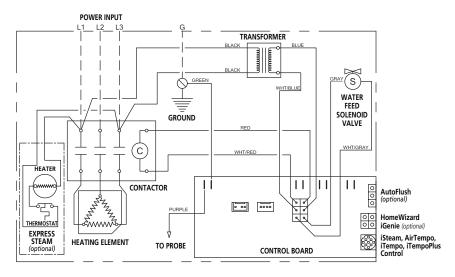
#### MODELS MSSUPER1E, MSSUPER2E, MSSUPER3E

(Note: Super1E 240V does not have fuses)



#### THREE PHASE 208/240 VOLT WIRING DIAGRAM

MODELS MS90E, MS150E, MS225E, MS400E, MSSUPER1E, MSSUPER2E, MSSUPER3E

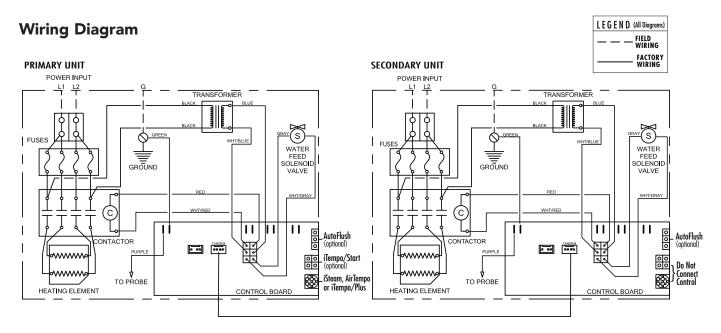


#### **MULTI-INSTALLATION INSTRUCTIONS**

- 1. Install each unit as in a single installation. Install the two generators as close to each other as possible.
- 2. NARNING Shock Hazard. Power must be disconnected at the main electrical supply before removing steam generator covers.
- 3. Connect the iSteam®, AirTempo® or iTempo/Plus® control to either generator per the control instructions.

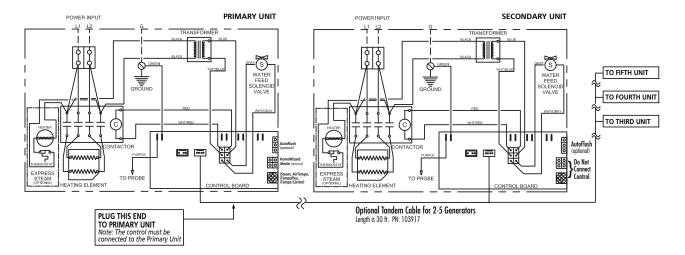
**NOTICE** The control must be connected to the primary unit.

- 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 the Diagram on page 7. Connect each end to the printed circuit board as shown.
- 5. Connect separate plumbing and power supplies for each unit.



#### **OPTIONAL TANDEM CABLE**

For connecting more than 2 steam generators in tandem



#### **INITIAL START-UP AND CHECKOUT**

- 1. Turn on control. Follow specific instructions 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.
- Check all internal and external plumbing fittings for leaks while the steam is on.

#### **OPTIONAL & ACCESSORY EQUIPMENT**

Refer to specific instruction manual for installation, operation and maintenance of optional equipment and accessories such as iSteam®, AirTempo®, iTempo/Plus®, iTempo®, Home Wizard®, iGenie® and MSTS.

#### TROUBLESHOOTING / WARNING All electrical troubleshooting to be performed by a qualified licensed electrician

**IMPORTANT NOTE:** The model and serial number is printed on the data plate on the front of the steam bath generator.

**Step 1** Check main incoming power to the unit.

**Step 2** Ensure the black wires from the primary side of the transformer are connected to the quick connect tabs on the line side of the contactor.

**Step 3** Verify that you have 24VAC coming out of the transformer, WHT & WHT/BLU wires, into the board.

**Step 4** Verify that you have the green light on the PC board.

**Step 5** Push the white test button to run the generator for 10 minute test cycle. Make sure the steam room is empty.

**Step 6** Verify that you have 24 VAC to the water feed solenoid, GRY & WHT/GRY wires (will fill when needed).

**Step 7** Temporarily short out the WLS (Purple wire) and GND (Green wire) terminals and verify the contactor engages.

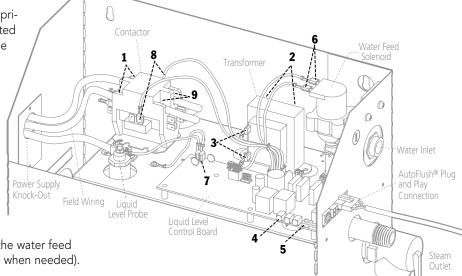
**Step 8** When the red light is on, verify 24 VAC, RED & WHT/RED wires, to the contactor.

**Step 9** Check main voltage on the load side of the contactor when it is engaged.

**Step 10** If all steps on the power path were verified, turn off power to the unit and pull the heating element via the left hand access panel for inspection.

DO NOT disassemble internal components, internal components contain no serviceable parts.





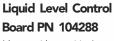
#### **SYSTEM STATUS CODES**

The control (either iSteam®, AirTempo®, iTempo® or iTempo/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	Water Supply is off	Turn on Water Supply
	satisfied within 5	Defective water feed solenoid Water	Check/replace water solenoid valve
	min.	feed probe not functioning	Check/clean probe. Check probe wiring.
		Drain Valve Open AutoFlush not	Check/Close drain valve
		functioning	Check/Replace AutoFlush
Prr1 Temperature Probe Error		Control cable/MSTS cable cut	Replace control cable/ MSTS
or Prr2		Internal problem with control/MSTS	Replace control / MSTS
Err1	Incorrect Field Supply Voltage (green light on liquid level control board will be oft)	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	Control cover misalignment	Remove and reinstall control cover
	more than 5 minutes	Debris behind control cover	Remove control cover and clean cover, control and keypad with a damp cloth
Errb	Water level not satisfied in a tandem set up	o - Check secondary generators, see H20.	
Err7	Liquid Level Control Board malfunction	Memory error in LLCB	Press ON/OFF to clear. Replace control if code remains.

#### 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 BUTT ON	Press this button to operate the generator. This button is for trouble shooting only and will operate TEST 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.



(shown without wiring) Green (Power) Yellow (Water Level) Red (Heater) Force On

Test Buttor

#### OPTIONAL AUTOFLUSH®

#### **Box Contents**

AutoFlush Valve with Cord Installation Instructions.

#### **OPERATION**

The optional AutoFlush System feature automatically drains the MrSteam generator 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.

**NOTICE** If the Express Steam® option has been installed, the AutoFlush will drain for ten minutes then refill with fresh water to begin the pre-heat cycle.

#### 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 ½" NPT. Check plumbing code for receptor, trap and vent requirements.
- 2. Use copper or brass nipple ½" 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)

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.
- 5. The AutoFlush valve must be installed within the orientation range shown.

**IVARNING** 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 dis-charge boiling water causing a scalding hazard.

#### **SWEAT FITTINGS**

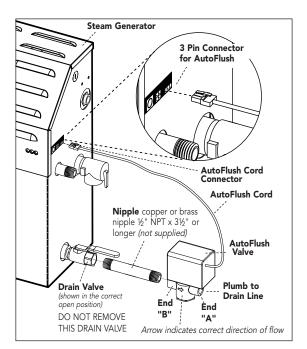
When using sweat fittings use only tin base solder with a melting point below 600 degrees F. DO NOT overheat. Ends of water supply tubing must be thoroughly clean for a minimum distance of 1" from ends. DO NOT remove valve cover.

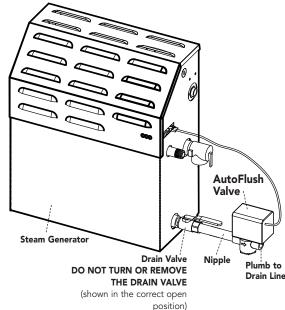
#### TO CHECK OPERATION

- 1. Turn on MrSteam and allow tank to fill with water.
- 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

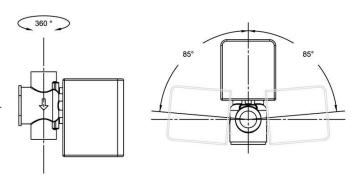
#### CAUTION

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





**AutoFlush Shown Fully Assembled** 



All drawings are for illustrative purposes only

#### **OPTIONAL CONDENSATION PAN**

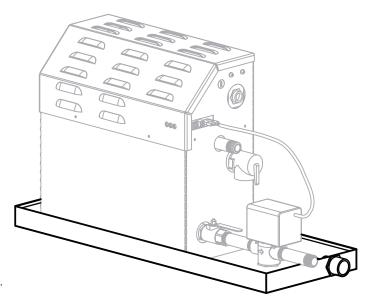
MrSteam strongly recommends the use of a condensation pan in the unlikely event of a plumbing leak.

Locate the condensation pan on a solid level surface and place the steam generator inside the condensation pan. Insure the steam generator is level (see page 5 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. Condensation pans drain by gravity.

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

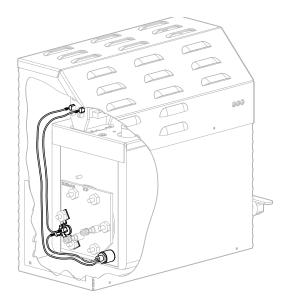
**NOTICE** Do not plumb the generator drain and condensation pan drain together in such a way that will cause drain water to back into condensation pan.



#### **OPTIONAL EXPRESS STEAM®**

(only available factory installed)

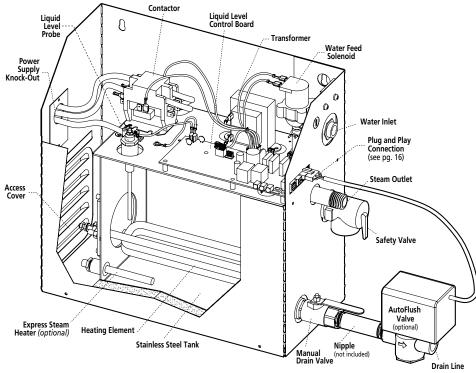
Available for all MS Models. Express Steam generators are equipped with a low power heating element and thermostat to keep the water in the tank warm enough to bring up steam quicker. All Express Steam components and wiring are installed at the factory. No additional wiring or plumbing is required by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



#### PARTS IDENTIFICATION DIAGRAMS

## MS REGULAR MODELS: MS90E - MS400E

(with AutoFlush®) shown with cover removed



#### NOTICE

#### FOR ILLUSTRATIVE PURPOSES ONLY.

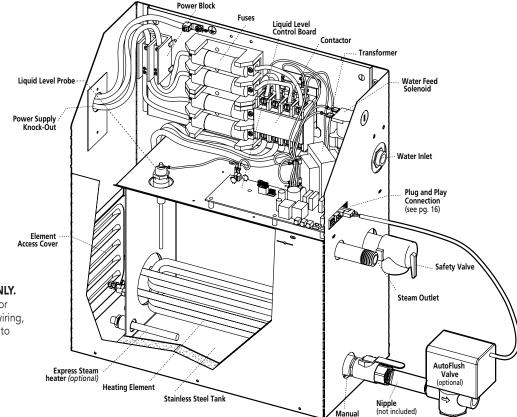
Some components may be omitted or altered for clarity. DO NOT use for wiring, repair or other purposes not related to component identification.

#### MS SUPER MODELS: MSSUPE1E - MSSUPER3E



(with AutoFlush®)

models are not supplied with internal fusing.



Drain Valve

#### NOTICE

#### 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	Generator
99178MS	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
104288	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
103990-60	Cable for iTempo® Control (60 ft.)	All Models
104117-30	Cable for iSteam®, AirTempo® & iTempo/Plus® (30 ft.)	All Models
104117-60	Cable for iSteam (60 ft)	All Models
MSTS	Remote Temperature Probe (integral 30ft cable)	All Models
MSTS-60	Remote Temperature Probe (integral 60ft cable)	All Models
100476-2	Contactor 50A 2-pole	MS90E-400E, Single phase
99012	Contactor 50A 3-pole	All 3-Phase Models
103453	Contactor 50A 4-pole	MSSuper1E-3E
100471-2	Probe Assembly	All Models
99096MS	Heating Element Gasket	All Models
103938RD	Acrylic Shield for Round Steamhead	All Models
103938SQ	Acrylic Shield for Square Steamhead	All Models
99314	Power Fuse 60A 250V	MSSuper2E-3E
29051BMS	Heating Element 5 KW 208V Single Phase	MS90E
29051CMS	Heating Element 5 KW 240V Single Phase	MS90E
29061BMS	Heating Element 6 KW 208V Single Phase	MS150E
29061CMS	Heating Element 6 KW 240V Single Phase	MS150E
29071BMS	Heating Element 7.5 KW 208V Single Phase	MS225E
29071CMS	Heating Element 7.5 KW 240V Single Phase	MS225E
29091BMS	Heating Element 9 KW 208V Single Phase	MS400E
29091CMS	Heating Element 9 KW 240V Single Phase	MS400E
29101BMS	Heating Element 10 KW 208V Single Phase	MSSUPER1E
29101CMS	Heating Element 10 KW 240V Single Phase	MSSUPER1E
29121BMS	Heating Element 12 KW 208V Single Phase	MSSUPER2E
29121CMS	Heating Element 12 KW 240V Single Phase	MSSUPER2E
29151BMS	Heating Element 15 KW 208V Single Phase	MSSUPER3E
29151CMS	Heating Element 15 KW 240V Single Phase	MSSUPER3E

For other voltages and phases contact MrSteam

#### **CONTROL INSTALLATION**

Refer to Control Manual for specific installation requirements

#### **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** To avoid unintentional steambath operation, DO NOT locate the control where other controls, accessories, shower heads, valves, body sprays or similar within the shower could cause confusion or interfere with the MrSteam control's intended use and function.

CAUTION DO NOT use any iSteam®, AirTempo®, iTempo/Plus®, iTempo®, HomeWizard® or iGenie® controls without reading and understanding its own manual and the MrSteam steam generator Installation and Operation Manual. Failure to read and understand these instructions may result in an inoperative or hazardous installation.

**MARNING** A peel and stick warning sticker must be read and permanently affixed in a conspicuous location near the steam room. Failure to read and affix this warning sticker in a conspicuous location may result in serious injury or death.

Install the iSteam, AirTempo, iTempo or iTempo/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 an iSteam, AirTempo, iTempo or iTempo/Plus control is installed outside the steam room a Remote Temperature Probe (PN MSTS) 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 steam room.

Plus, iTempo, HomeWizard or iGenie 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 MrSteam product. Doing so may result in an inoperative or hazardous installation and will void the UL listing and warranty.

#### **IMPORTANT NOTES:**

- 1. 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.
- 2. DO NOT operate iSteam, AirTempo, iTempo/Plus, iTempo, HomeWizard or iGenie controls with other than a MrSteam iSteam, AirTempo, or iTempo compatible steam generator. MrSteam residential steam generators with serial numbers lower than 900000, or any other brand of steam generator are not to be operated with iTempo controls. Doing so may result in an inoperative or hazardous installation. If iSteam is used with a generator having serial number less than 1174000, contact MrSteam technical support for an upgraded PC board.
- 3. This document contains important safety, operation and maintenance information. Leave this document with the homeowner. Do not discard this document.
- 4. Discontinue use of the steam generator or control if the steam generator is damaged or otherwise not functioning properly. Operating a damaged steam generator may result in an inoperative or hazardous installation

#### **CONTROL ROUGH IN**

Refer to Installation Instructions for the specific control

**IMPORTANT NOTE:** The control cable should be run in a dedicated 1" conduit to facilitate installation and service.

- 1. Determine the desired installation location of the control. The iSteam®, AirTempo®, iTempo® and iTempo/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 steam room the control must be located:
- 2. 4 5 feet above the floor near the bather seating area **(ICAUTION**
- 3. The control features an integral temperature sensor. Locate the control in a location representative of the desired steam bathing temperatures. DO NOT locate the control above or near the steam head or direct steam emissions.

#### 4. On a vertical wall

The iSteam and iTempo control cable length is 30 feet. Insure that the control and/or steam generator are located accordingly. An optional 60 foot cable is available, PN

103990-60 for AirTempo and iTempo and PN 104117-60 for iSteam. Contact a MrSteam technical service representative if a 60 foot cable is required. Excess control cable should be neatly coiled and twisted into a figure 8. The AirTempo dongle is provided with a 3 foot cable. The maximum cable length is 60 feet

#### **IMPORTANT NOTES:**

- If the control is installed outside the steam room a Remote Temperature Probe Part Number MSTS must be installed inside the steam room, depending on the control.
- Insure MrSteam steam generator is iSteam, AirTempo or iTempo compatible and has a serial number 900000 or higher. If iSteam is used with a generator having serial number less than 1174000, contact MrSteam technical support for an upgraded PC board.
- See instructions for the MSTS Temperature Probe (located in the Control Installation Manual related to your specific control package) before rough-in or installation of control.

### HOMEOWNER SECTION

#### **READ ME FIRST!**

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 installation & operation:

hazardous situation, which, if not avoided, could result in death or serious injury.

hazardous situation, which, if not avoided may result in minor or moderate injury or product damage.

**NOTICE** is used to address practices not related to physical injury.

**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. MrSteam reserves the right to make changes at any time without notice. More current instructions may be available at www.mrsteam.com.

**HYPERTHERMIA** occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include:

- a) Failure to perceive heat;
- b) Failure to recognize the need to exit the steambath;
- c) Unawareness of impending risk;
- d) Fetal damage in pregnant women;
- e) Physical inability to exit the steambath
- f) Unconsciousness.

drugs, or medication can greatly increase the risk of hyperthermia.

When using this steam bath equipment, basic safety precautions should always be followed, including the following:

## IMPORTANT SAFETY INSTRUCTIONS 1. READ AND FOLLOW ALL INSTRUCTIONS

- 2. NARNING Supervise children at all times. D. Excessive temperatures have a high
- 3. **WARNING** Steam is hot and can cause injury or death if improperly used. Steam rooms contain steam and elevated tempera-tures. Please read and observe all warnings in this manual before installing or using a steam room.
- **4. NARNING** 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 tempera-ture 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 hig 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 med-ications may affect heart rate, blood pressure and circulation.

#### **SAVE THESE INSTRUCTIONS**

and stick warning label located in this manual is an essential part of providing a safe environment for steam room users. The peel and stick warning label must be applied to the wall of the shower or steam enclosure, at a point that is visible to all users. Failure to install this sticker may result in serious injury or death.

The location where this owner's manual is kept shall be written in the space provided on the label using permanent ink.

For a replacement warning label contact MrSteam customer service at 1-800-76-STEAM or hello@mrsteam.com

#### ! WARNING

#### REDUCE THE RISK OF OVERHEATING AND SCALDING

- EXIT IMMEDIATELY IF UNCOMFORTABLE, DIZZY OR SLEEPY.
   STAYING TOO LONG IN A HEATED AREA IS CAPABLE OF CAUSING OVERHEATING.
- 2. SUPERVISE CHILDREN AT ALL TIMES.
- 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 WHICH IS KEPT:

THE OWNER'S MANUAL CAN BE FOUND AT WWW.MRSTEAM.COM

USE OF STEAM ROOM IN CONJUNCTION WITH CONSUMPTION OF ALCOHOL CAN BE DANGEROUS AND CAN RESULT IN INJURY THROUGH SLIP AND FALL OR OTHERWISE.

mr.steam\* 43-20 34th Street , Long Island City NY 11101 1 800 76 STEAM www.mrsteam.com PURIO

Not Actual Size

### SETTING THE STEAM BATH TEMPERATURE AND DURATION

**EXAMPLING** Set the steam bathing temperature according to personal preference, however it is highly recommended to begin steam bathing at a low temperature setting to gauge comfort and safety levels. Set duration to a maximum of 10 minutes to gauge comfort and safety levels. This will allow the steam generator to heat up and begin producing steam.

### SAFETY AND OPERATING INFORMATION

AirTempo®, iTempo/Plus®, iTempo®, HomeWizard® or iGenie® controls without reading and understanding the MrSteam steam generator Installation and Operation Manual. Failure to read and understand these instructions may result in an inoperative or hazardous installation.

**WARNING** The peel and stick warning sticker located in this manual must be read and permanently affixed in a conspicuous location near the steam room. Failure to read and affix this warning sticker in a conspicuous location may result in serious injury or death.

If an iSteam, AirTempo, iTempo or iTempo/Plus control is installed outside the steam room a Remote Temperature Probe (PN MSTS) 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 steam room.

**WARNING** To prevent slip and fall hazards non-skip strips must be installed on the steam room floor.

**PARNING** DO NOT alter or modify any MrSteam product. Doing so may result in an inoperative or hazardous installation and will void the UL listing and warranty.

**IMPORTANT NOTES:** Malfunction due to power spikes, lightning, fire, freezing or flooding is not covered under the warranty.

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 condition.

### CARE TIPS FOR ALL CONTROLS AND STEAMHEADS

- 1. Use only mild soap and water on a soft cloth to clean the control and steamhead.
- 2. DO NOT use abrasive cleansers.
- If the decorative cover is damaged on the iTempo or iTempo/Plus call MrSteam technical service for replacement parts.

**NOTICE** Replacement of the decorative covers requires removal and reinstallation of the control from the mounting surfaces.

#### STEAM GENERATOR MAINTENANCE

MrSteam steambath generators require little maintenance. Other than periodic draining, maintenance procedures are minimal. Every 2 months, or more often in "hard" water areas, the manual drain valve should be opened fully flushing out accumulated materials, salts and other particles which are natural byproducts of boiling water.

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

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 MrSteam AutoFlush® system is recommended for generator longevity.

**WARNING** Failure to allow the water to cool will expose the equipment and user to scalding water and cause property and personal injury.

**IMPORTANT NOTE:** The model and serial number is printed on the data plate on the front of the steam bath generator.

#### **USING MrSteam ESSENTIAL OILS**

Enjoy AromaSteam essential oils by placing a drop or two into an unheated AromaSteam steamhead as shown in the illustration. Only use MrSteam AromaSteam essential oils in the MrSteam AromaSteam steamhead.

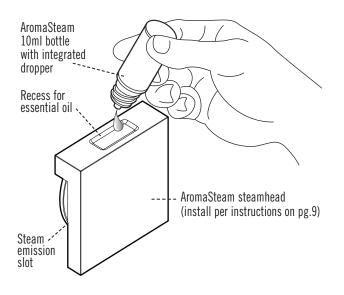
**Essential** oils and/or aroma therapy can cause inflammation, burns, headache, nausea and allergic reactions. Consult a physician before using aromatherapy.

#### ! CAUTION (Items 1-4)

- 1. 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 steamhead recess prior to turning on the steambath. DO NOT place drops in a hot steam head as serous injury can result if you do not follow this warning.
- 3. Start with one drop to gauge strength and suitability. Limit to a maximum of a few drops for a steam bathing session.
- 4. 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.

<u>CAUTION</u> Aromatic oils should be added to steamhead <u>before</u> turning on the steambath unit. DO NOT add oil during steam bathing or when the steam head is heated.

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



All drawings are for illustrative purposes only

#### **WARRANTY**

To view or download the MrSteam Residential Generator Warranty and register your Product go to: **blog.mrsteam.com/wr** 

### NOTES

### NOTES

# mr.steam®

Feel Good Inc.º

#### www.mrsteam.com

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.

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