AQUABRASS Aquasteam N2787/N2789/N2782

steambath generator 7.5KW 9KW 12KW générateur de vapeur 7.5KW 9KW 12KW

Installation Guide Guide d'installation



last revision: 10/20/2016 aquabrass.com

Steambath Generator Systems

INSTALLATION, OPERATION & MAINTENANCE MANUAL

Table of Contents

| Read Me First! & Warning Placard | 1 |
|--|-------|
| Select Your Aquasteam Model | 2 |
| Specification Chart | |
| Before Installing | 3 |
| Steam Room Guidelines | 3 |
| Locating the Steam Generator Unit | 4 |
| Typical Installation | 4 |
| Installation: Plumbing, Water Supply, Drain, Steam O | utlet |
| Safety Valve, Drip Pan, AromaSteam | 6 |
| Water Quality Information | 6 |
| Installing the AromaSteam steamhead | 6 |
| Generator Dimensions | 8 |
| Electrical Specifications & Field Power Wiring | 9 |
| Field power wiring | 9 |
| Wiring Diagrams | 10 |
| Initial Start-Up & Checkout, | |
| Maintenance, | 11 |
| System Status Codes, Liquid Level Control Board | 12 |
| Troubleshooting | 13 |
| AutoFlush® System | |
| Replacement Parts List | 15 |
| Replacement Parts Diagram | 16 |
| | |



Controls

| | | _ | | | | | | |
|------|------|-----|---------|-------|---------|------|----|---|
| Care | Tips | for | Control | s and | l Steam | head | 17 | 7 |

General

| Care | 18 |
|----------|----|
| Warranty | 19 |

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:

WARNING

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

CAUTION

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. NWARNING Do not permit children under the age of 16 to use this steambath.
- 3. / WARNING To reduce the risk ofinjury:
- 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

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 ofimpending risk;
- d) Fetal damage in pregnant women;
- e) Physical inability to exit the steambath
- f) Unconsciousness.

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

Select Your Model

Materials of construction, room size 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 ROOM Multiply the Length ____ x Width___ x Height _ VOLUME 2. Construction Materials: For natural stones: natural marble, Add 110% stone, shale, glass block or concrete For ceramic or porcelain tile on Add 40% cement board or mortar bed 3. Ceiling Height: For each foot above 8 feetAdd 15% 4. Add all figures above to obtain TOTAL ADJUSTED the Total Room Volume required **ROOM VOLUME**

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, Aquasteam recommends that you obtain the approval of their physician before use.

IMPORTANT NOTES:

- The guidelines for selecting the steambathgenerator is a recommendation only. Because of variablesin construction, these sizing instructions and specifications should beconsidered as guidelines only. Aquabrass will review the model selected provided we receive complete information, including working drawings, specifications, and pertinent electrical and construction details. Otherwise, the manufacturer disclaims responsibilityfor the sizing of a model selected.
- For steam rooms constructed of acrylic or synthetic materials, select next lower-rated model.
- The total adjusted room volume allows for up to 60 feet of insulated steam line from the generator to the steam room. If the 60 feet line is exceeded consult with factory. When locating the steam generator consideration of the control / temperature probemust betaken into account. The maximum length for a control cableis 60 feet.b

| Steam Genera | ators Spec | ificat | ion Chart | | | | | |
|--------------|------------|--------|-------------------------|------------------------|---------------|--------------------|---|-------------------------|
| | Model No. | KW | Amps (for 240v/1PH)† | Total Adj Room Vol. | Wire Size‡ | Water Usage Gpm | Dimensions* | Shipping Wt. (lbs)** |
| | N2787 | 7.5 | 25 | 225 | 8 | 0.05 | 14 ^{1/2} "L x 14 ^{3/4} "H x 6 ^{3/4} "D | 30 |
| | N2789 | 9 | 38 | 360 | 8 | 0.06 | 14 ^{1/2} "L x 14 ^{3/4} "H x 6 ^{3/4} "D | 30 |
| 100 | N2782 | 12 | 50 | 575 | 6 | 0.08 | 17"L x 18½"H x 7%"D | 40 |

Before Installing

Carefully inspect the CT 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 steam generator has been fully qualified for shipment, 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.
- 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.
- Consider any controls and accessories before initiating installation. Read the Installation and Operation Manual of all controls and accessories.

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. If tile-type or other smooth surfaced flooring is used provide suitable anti-skid strips or equivalent, to prevent a slipping hazard.
- 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.
- 8. 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.
- 9. 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.

AWARNING

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. Children under the age of 16 should not use the steam bath.
- Check with a doctor before use if pregnant, diabetic, in poor health or under medical care.
- 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

Use care when entering or exiting the steam room. Floor may be slippery. Note: For additional safety considerations see owner's manual.

L2065 Rev 7/2008

<u>Never use damaged equipment, doing so</u> may result in an inoperative or hazardous installation.

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

ELECTRICAL SHOCK HAZARD. Aquasteam 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 or failure to use Aquasteam parts may result in property damage or in a hazardous condition.

NARNING Do Not alter or modify any Aquasteam product. Doing so may result in an inoperable or hazardous installation and will void the warranty

If acrylic, fiberglass or other non-heat resistant materials are used as part of the steam room enclosure. Consult with the material manu-facture and see pg. 6, "Installing the Steamhead" for additional details.

IMPORTANT NOTES:

This document contains important safety, operation and maintenance infor-mation. Leave this document with the club/spa management. 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.

Aquasteam are intended to be operated with N2762 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.

Locating the Steam Generator Unit

IMPORTANT NOTE: The control cables should be run in dedicated 1" conduit to facilitate installation and service Select a location as near as practical to the steam room. Typical locations include: closet, vanity cabinet, heated attic or basement.

NOTE: The maximum length of the N2762 is 60 feet. Using optional 2760 cable. Standard is 30 feet. It connects to the steam generator.

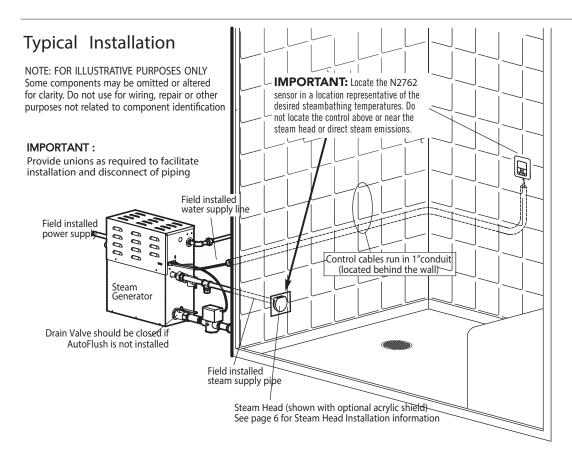
WARNING (Items 1-7)

- 1. <u>DO NOT</u> install steambath generator or plumbing lines in unheated attic or any locations where water could freeze.
- 2. <u>DO NOT</u> install steambath generator inside steam room.
- 3. <u>DO NOT</u> install steambath generator outdoors or wherever environmental conditions may affect the safety and/or performance of the generator.
- 4. <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.
- 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 water filter or 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.

NOTE: Aquasteam Generators and controls are CE and UL listed.



When the calculated steam-room volume exceeds 575 cubic feet, the generator can be combined

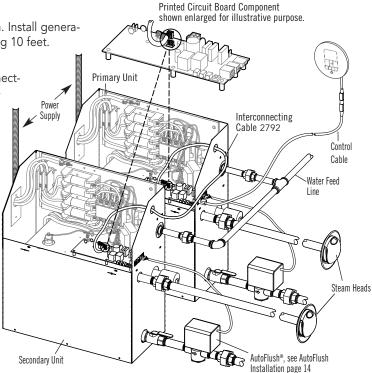
TYPICAL INSTALLATION INSTRUCTIONS

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 N2762 control to either unit as per the Installation Manual supplied with each control.
- 4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (2792) through the knock-outs as shown in diagram. Connect each end to the printed circuit board connector labeled "TANDEM" as shown.
- Prevent the interconnecting cable from contacting hot surfaces such as steam outlet, safety valve and the like.
- 6. Connect separate plumbing and power supplies for each unit. Replace covers with cover screws.
- 7. Provide unions as required to facilitate installation and disconnection of piping.

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



Room volume up-to

| 2 * N2787 | 675 cubic feet |
|-----------|------------------|
| 2 * N2789 | 800 cubic feet |
| 2 * N2782 | 1 075 cubic feet |

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

Water Supply (3/8 "NPT)

- 1. Connect to cold water line.
- 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 water filter and/or anti-water hammer device as required.
- 8. Install an approved backflow preventer as required by local codes.b

Drain (1/2" NPT)

The drain from the generator should not share an undersink trap, unless the generator is mounted higher than the sink.

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. Do not connect Drain line and Safety Valve line together. **Unit drains by gravity.** Do NOT connect the drain valve to the steam line.

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 construction in steam supply pipe.

Steam Outlet (1/2 " NPT)

- Do not install any valve in steam line. Flow of steam must be unobstructed.
- 2. Use ½ inch brass pipe or copper tubing from unit to steam head as permitted by codes.
- 3. Insulate steam line with fiberglass pipe insulation or similar insulation rated 212° F or higher.
- 4. Pitch steam line ½" per foot towards steam head or steam generator to avoid valleys and trapping of condensate.

IMPORTANT NOTES:

- Running the steam line down and then up will create a steam trap blocking the flow of steam.
- A 1.5" hole in the steam room is required to mount the steamhead.

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.

NOTE: 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

The AutoFlush® System feature automatically drains the Aquasteam 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.

Installing the AromaSteam Steamhead

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

STEP 1

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

- 1. Tub/shower enclosures, install 6 inches above tub top edge.
- Consult with supplier of acrylic, fiberglass and other non-heat resistant enclosures for recommended steamhead location.
- 3. Use Acrylic Shield, instructions provided with steam shield.

STEP 2

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 3

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 \(^{1}/8\)" from that dimension and select a brass nipple of that length to finish the installation.

STEP 4

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.

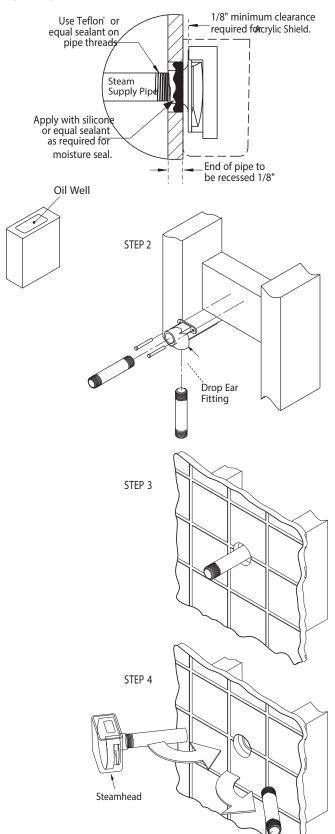
IMPORTANT NOTE:

- Do not disassemble steamhead, steamhead is shipped fully assembled and requires no additional assembly.
- To preserve steam head finish, do not use wrenches or other tools to tighten. DO NOT use abrasive cleansers or chemicals. Use only water with mild soap and a non-abrasive sponge.

CAUTION

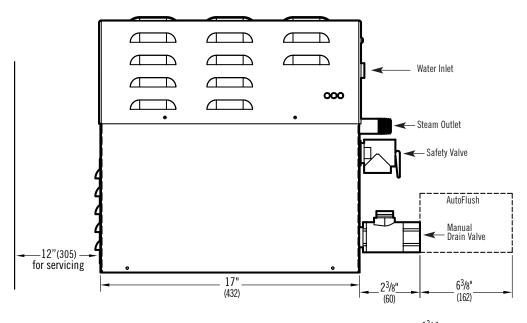
Because the steam head and direct steam emissions are very hot, locate the steam head where incidental contact by bather with the steam head or direct steam emission cannot occur.

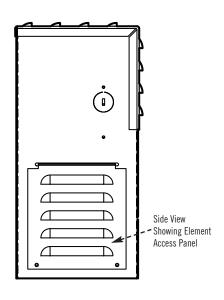
(¹/2" NPT)

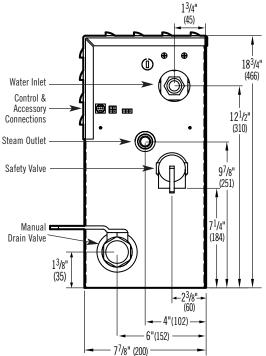


Locating Nipple

Generator Dimensions (N2782)







IMPORTANT NOTES:

- 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.

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

NOTE:

All units in inches (MM)

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

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)

| | | Ampere | Chart | | |
|-----------|---------------------------------|-----------------|-------------------|---------|------------------------|
| Model No. | Maximum Room Volume ft³ (m²) | KW | Voltage/ phase | Amperes | Wire Size AWG (mm²) |
| ABSC02787 | 225(6.37) | 7.5 | 240/1 | 32 | 8 (10) |
| ABSC02789 | 360 (10.19) | ði ⁰ | 240/1 | 38 | 8 (10) |
| ABSC02782 | 575 (16.82) | 12 | 240/1 | 50 | 6 (16) |

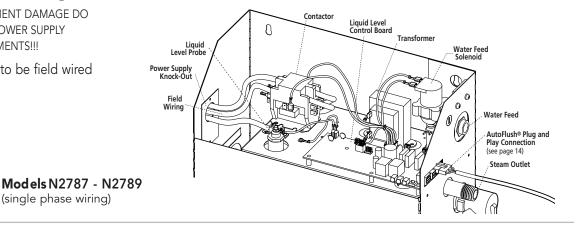
5. use two-wire supply source and equipment grounding wire. Neutral (white) wire is not required.

(single phase wiring)

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 permitted by code.d

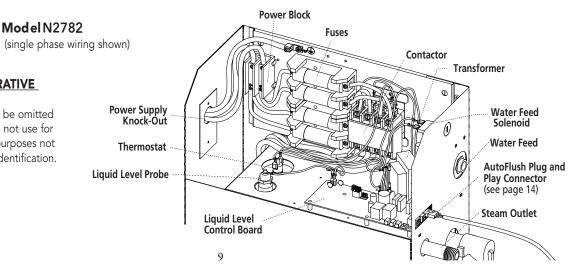
Field Power Wiring

- 1. TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT POWER SUPPLY DIRECTLY TO ELEMENTS!!!
- 2. L1, L2, Ground to be field wired



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.



Single Phase POWER INPUT **Wiring Diagrams** LEGEND (All Diagrams) Transformer — — FIELD WIRING FACTORY WIRING Express Steam GREEN GRAY (S) WATER **MODEL** = GROUND FEED N2787-N2789 **SOLENOID** VALVE WHT/GRAY C THERMOSTAT WHT/RED Π Π CONTACTOR AutoFlush MSTS TEMP. PROBE PURPLE ~/////// CT-SteamStop N2762 Control **HEATING ELEMENT** To Probe

POWER INPUT TRANSFORMER **MODEL** N2782 FUSES GREEN GRAY S Express Steam WATER = GROUND FEED SOLENOID VALVE 5 WHT/GRAY C) Π Π AutoFlush CONTACTOR CT-SteamStop N2762 Control To Probe CONTROL BOARD Heating Element

Initial Start-Up and Checkout

- 1. Turn on control. Follow specific instructions provided with controls.
- Steam will beginto appear in approximately 4 minutes at the steam head. Steam will shut off when
 desired temperature is reached and will automatically
 resume when room temperature drops belowset
 point.
- 3. To shut steam off manually, turn con-trol OFF. To clear steam from enclosure area, turn shower on beforeopening 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.
- Refer to specific instruction sheets for installation, operation and maintenance of optional equipment and Control.b

Maintenance

Aquasteam steambath generators require little maintenance. Since it features the AutoFlush system

Other than draining, maintenance procedures are minimal. (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, after each use.)



With Autoflush, the unit will drain after 2 hours

(Draining immediately after a steam cycle may expose PVC and other piping to high temperature water.)

Steam Generator Operation

Aquabrass recommends beginning steam bathing at a low temperature setting to gauge comfort and safety levels.

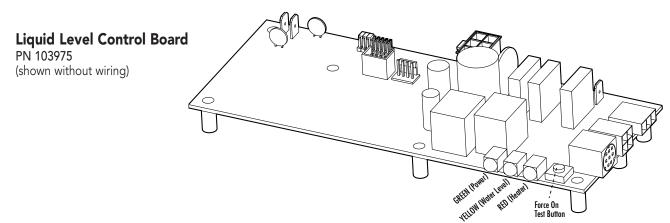
System Status Codes

The N2782 control 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 min. | Defective water feed solenoid | Check/replace water solenoid valve |
| | | Water feed probe not functioning | Check/clean probe. Check probe wiring. |
| | | Drain Valve Open | Check/Close drain valve |
| | | AutoFlush not functioning | Check/Replace AutoFlush |
| Prr1 | Temperature Probe Error | Control/Remote sensor cable cut | Replace Control Cable/Sensor |
| or Prr2 | | Internal problem with control/Remote Sensor | Replace ControlSensor |
| 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. |

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. |



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

8

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).

Power Supply

Field Wiring

Liquid

Level Probe

Liquid Level Control Board

Knock-Out

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.

All drawings are for illustrative purposes only

Water Feed

0

Water Feed

AutoFlush

Connectio

and Play

2

Transformer

AutoFlush®

Box Contents

- AutoFlush Valve with Cord
- Installation instructions.

Operation

The AutoFlush System feature automatically drains the 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 1/2" NPT. Check plumbing code for receptor, trap and vent requirements.
- **2.** Use copper or brass nipple 1/2" NPT x $3\frac{1}{2}$ " or longer (not supplied) to connect AutoFlush valve to the Drain Valve, noting the direction of flow on the valve body.



- **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.

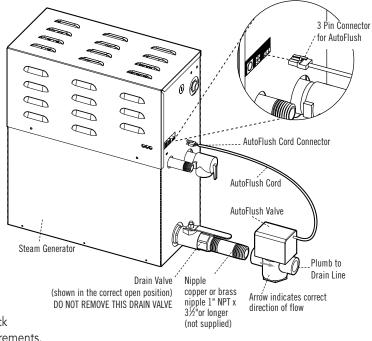
WARNING Do not drain into a steam enclosure or any location where accidental contact with drain water may occur. In the event of a power failure the AutoFlush System valve will open and may discharge boilingwater.

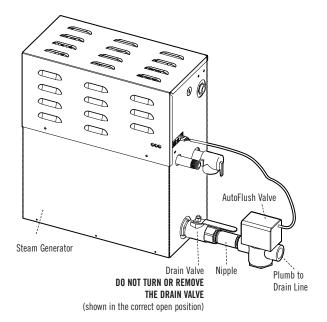
Sweat Fittings

When using sweat fittings use only tin basesolder with a melting point below600 degrees F. Do not overheat. Ends of water supply tubingmust bethoroughly clean for a minimum distance of 1" from ends. Do not remove valve cover.

To Check Operation

- 1. Turn on Aquasteam and allow tank to fill with water.
- Turn off Aquasteam 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. Repeatb





CAUTION

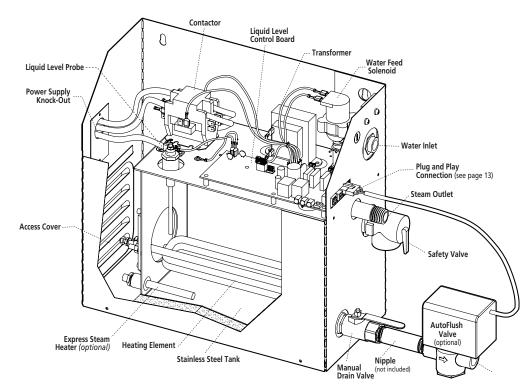
PROVIDE DRAIN PLUMBING ACCORDING TO LOCAL CODES. PLUMB AS REQUIRED FOR AUTOFLUSH SYSTEM.

Replacement Parts List

| Part No. | Part No. Description | |
|----------|---------------------------------------|-------------------------------|
| 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 |
| 100476-2 | Contactor 50A 2-pole | N2787 & N2789 Single phase |
| 103453 | Contactor 50A 4-pole | N2782 |
| 100471-2 | Probe Assembly | All models |
| 99096MS | Heating Element Gasket | All models |
| 103412 | Acrylic Shield | All Models |
| 99314 | Power Fuse 60A 250V | N2782 |
| 29071CMS | Heating Element 7.5 KW 240V | N2787 |
| 29091CMS | Heating Element 9 KW 240V | N2789 |
| 29121CMS | Heating Element 12 KW 240V | N2782 |
| 104016 | Thermostat | All models |

Models N2787-N2789

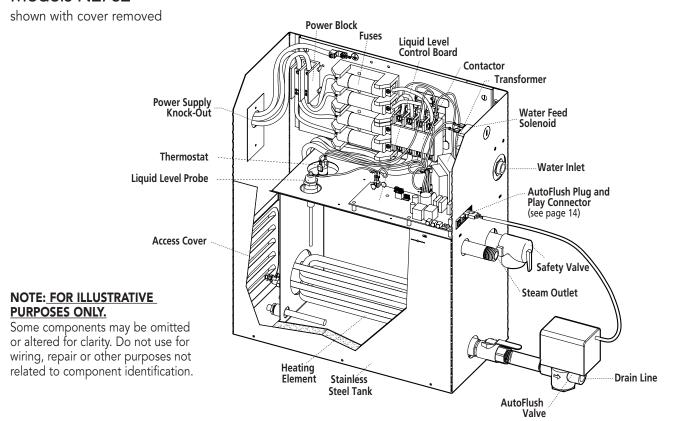
shown with cover removed



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 N2782



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.
- 3. If the decorative cover is damaged on the iTempo/ 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.

17

AQUABRASS Aquasteam N2787/N2789/N2782

steambath generator 7.5KW 9KW 12KW générateur de vapeur 7.5KW 9KW 12KW

Care Entretien

To clean your Aquabrass faucet or accessory, wash with a wet nonabrasive soapy cloth. Then wipe dry with a soft towel or cloth. We recommend this be done on a regular basis.

DO NOT USE ANY ABRASIVE, CHEMICAL OR CORROSIVE, POWDER OR ANY OTHER STRONG CLEANERS INCLUDING DETERGENTS, WINDOW CLEANERS AND DISINFECTANTS ON YOUR Aquabrass PRODUCT as they will destroy the finish and therefore VOID THE WARRANTY.

Toothpaste remnants should also be rinsed off when necessary. Ask your plumbing retailer about our PROTECTANT-CLEANER now available from Aquabrass. This product is specially manufactured to clean and polish leaving a protective coating to maintain your product's shine and finish.

Pour nettoyer et conserver l'apparence de vos robinets ou accesoires Aquabrass, lavez-les avec un linge mouillé à l'eau tiède et enduit d'un savon doux non-abrasif. Puis essuyer avec un linge doux et sec. Nous vous recommandons cet entretien sur une base réaulière.

NE JAMAIS UTILISER DE PRODUITS ABRASIFS, CHIMIQUES, CORROSIFS, INCLUANT DE TRÈS FORTS DÉTERGENTS, EN LIQUIDE OU EN POUDRE, NETTOYANTS POUR VITRES ET DÉSINFECTANTS sur votre produit Aquabrass. Cela pourrait en détériorer le fini et ANNULER LA GARANTIE.

Les restants de pâte à dentifrice doivent aussi être rincés au besoin. Demander à votre détaillant le PROTECTEUR NETTOYANT Aquabrass spécialement concu pour nettoyer, faire briller et protéger en laissant un mince film protecteur sur vos robinets et vos articles décoratifs.

AQUABRASS AQUASTEAM N2787/N2789/N2782

Limited lifetime warranty

steambath generator 7.5KW 9KW 12KW générateur de vapeur 7.5KW 9KW 12KW

All Aquabrass products carry a full warranty against defects in materials and workmanship. The warranty will be applied only if the product is purchased from an authorized Aquabrass dealer. The Aquabrass warranty is limited strictly to the original consumer purchaser of the product. Proof of purchase must be made available to aquabrass for all limited warranty claims. Products that are deemed defective must be returned to our factory for inspection prior to replacement. The limited warranty is not transferable and is limited to products sold and installed in Canada and the United States.

Residential Applications

- mechanical working parts including ceramic disc cartridges for both side valves and pressure balance, thermo cartridges, stops, diverters etc. all carry our full limited lifetime warranty to the original purchaser.
- Aquabrass polished chrome and brushed nickel finishes are warranted for the life of the product to the original purchaser. All other finishes will be warranted for five years (Satin Nickel Natural [#210] is designed to develop a patina over time). Raw Brass (#400) is a living finish for which there is no warranty Normal wear and tear is not covered by this warranty.
- all electronic components and faucets are warranted for two years.
- all glass and ceramic basins are warranted for one year.
- stone resin bathtubs and sinks are warranted for five years.
- vanity collections are warranted for one year.
- all other Aquabrass products are warranted for five years.

Commercial Industrial Applications

All the above product applications will be warranted for two years with the exception of the glass and ceramic basins which will carry a one year warranty.

The Aquabrass warranty does not cover the following:

- damages resulting in whole or part from installation error, product abuse, misuse, neglect, improper maintenance, abrasives, corrosion and/or accidents whether caused or performed by a professional or anyone else.
- any and all Aquabrass products that are subjected to any type of harsh abrasive, such as detergents or window cleaners.
- normal wear of the finish.
- the damage is caused by hard water, calcareous deposits or sediments.
- the damage or loss is sustained in a natural calamity such as fire, earthquake, flood, thunder, electrical storm, etc.

Aquabrass is not responsible for any labor or shipping charges, or damages whatsoever incurred in whole or in part from installation, removal, re-installation, repair or replacement of any Aquabrass product or part, as well as any incidental or consequential damages, expenses, losses, direct or indirect, arising from

To obtain warranty service, please contact the retailer where the product was purchased.

The original sales receipt must be available to exercise our warranty.

This warranty is extended to the first purchaser at retail. This warranty is NOT transferable.

Aquabrass reserves the right to make product specification changes without notice or obligation and to change or discontinue certain models.

Garantie limitée à vie

Les produits Aquabrass ont une garantie complète contre les défauts de matériel et de main d'œuvre.

La garantie est applicable seulement si le produit est acheté chez un détaillant Aquabrass dûment autorisé. La garantie Aquabrass est strictement limitée au premier acheteur et une preuve d'achat doit être présentée pour toutes réclamations. Les produits considérés comme défectueux doivent être retournés à nos entrepôts pour inspection avant tout remplacement.

La garantie Aquabrass n'est pas transférable et est limitée aux produits vendus et installés au Canada et aux États-Unis.

Applications résidentielles

- toutes les parties mécaniques incluant les cartouches à disques en céramique pour les valves et les pressions équilibrées, les cartouches thermostatiques, les déviateurs ont une garantie complète au premier acheteur.
- les finis chrome poli et nickel brossé Aquabrass ont une garantie à vie limitée au premier acheteur.
- tous les autres finis ont une garantie de cinq (5) ans (le nickel satiné naturel [#210] se patinera avec le temps), excepté le laiton brut (#400) qui est un fini vivant pour lequel il n'y a pas de garantie.
- l'usure normale d'un fini n'est pas couverte par la garantie.
- toutes les composantes et les robinets électroniques ont une garantie de deux (2) ans.
- toutes les vasques en verre, les lavabos en porcelaine ont une garantie de un (1) an.
- les bains et lavabos en composite de pierre / résine ont une garantie de cinq (5) ans.
- les collections de mobilier de salle de bain ont une garantie de un (1) an.
- tous les autres produits ont une garantie de cinq (5) ans.

Applications commerciales et industrielles

Tous les produits ci-dessus sont garantis pour deux (2) ans à l'exception des vasques en verre ou en porcelaine qui sont garanties un (1) an.

La garantie Aquabrass ne couvre pas:

- dommages causés en entier ou en partie par une erreur d'installation, d'abus de produit, de négligence, d'utilisation non conforme, d'usage de produits abrasifs, de corrosion et/ou d'accidents causés par un professionnel ou par toute autre personne
- tout produit Aquabrass nettoyé avec des produits abrasifs, comme les détergents ou les nettoyants à vitres.
- usure normale du fini.
- dommages causés par l'equ dure, les dépôts de calcaire ou les sédiments.
- les dommages ou les pertes résultant d'une catastrophe naturelle telle qu'un feu, un tremblement de terre, le tonnerre, un orage électrique, etc.

Aquabrass n'accepte aucune responsabilité pour tout frais de main d'œuvre ou d'expédition, ou pour tout autre dommage causé en totalité ou en partie lors de l'installation du produit, de son retrait, de sa réinstallation, de sa réparation, ou le remplacement de tout produit ou pièce Aquabrass, ainsi que tout dommage occasionnel ou conséquent, dépense, perte directe ou indirecte, provenant de quelque cause que ce soit.

Pour obtenir la garantie de service, veuillez contacter le détaillant d'où le produit a été acheté. La preuve d'achat originale sera exigible pour l'application de la garantie.

Cette garantie s'applique au premier acheteur au détail et n'est PAS transférable.

Aquabrass se réserve le droit de modifier des caractéristiques de ses produits sans avis ni obligation ainsi que de remplacer ou de retirer certains modèles.