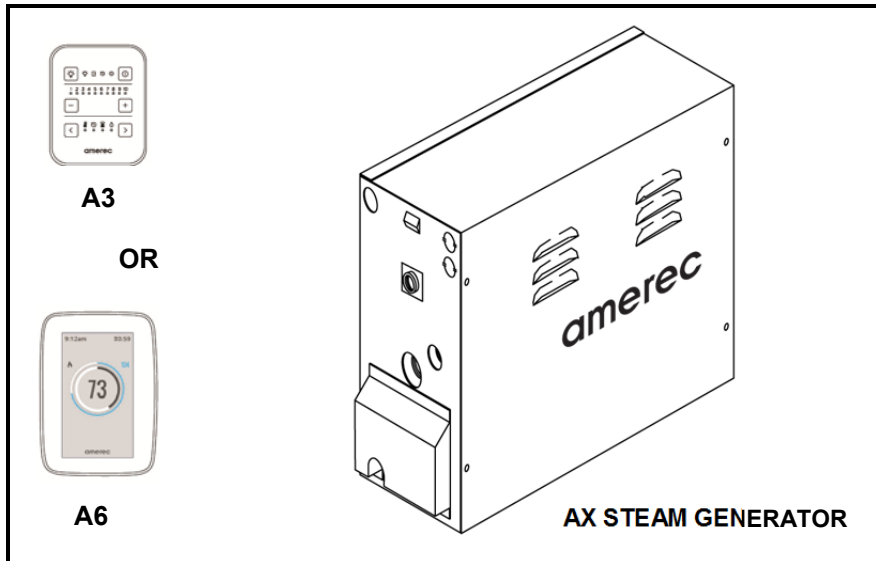


amerec AX INSTALLATION AND SERVICE INSTRUCTIONS



AMEREC AX STEAMBATH GENERATORS

Instructions for 208V and 240V 1/3 Phase Models.
(Use 240V models for 400-415V~N3 installations)

SAVE THESE INSTRUCTIONS

READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

POST SAFETY "WARNING" LABEL OUTSIDE STEAMBATH. LABEL SHOULD BE POSTED ON OR ADJACENT TO DOOR TO STEAM ROOM IN COMMERCIAL INSTALLATIONS.

SECTION 1: GENERAL INFORMATION

Amerec steam generators are tested by Intertek-ETL Laboratory. The steam generators come assembled and ready for installation. Check that the size and rating of the generator is suitable for your application; refer to the AX Steam Room Sizing and Rough-in Guide (Amerec document 4211-183).

Note: The AX steamer may be configured for single or three phase power during installation

IMPORTANT

An exhaust fan installed outside the steam room is strongly recommended to remove excess steam from the bathroom or shower area.



CAUTION

Electrical grounding is required on all AMEREC Steam bath Generators.

All electrical supplies should be disconnected when servicing generator.

All wiring must be installed by a licensed electrical contractor in accordance with local and national codes.

All plumbing must be installed by a licensed plumber in accordance with all applicable local and national codes.

AX series generators are for indoor use only.

AX series generators are not for space heating purposes.

Be certain that steam bath enclosures are properly sealed to avoid water damage from escaping steam. It is recommended that 100% silicone caulk be used to seal all pipes and fittings. Steam must be prevented from escaping into the wall cavity.

Never shut off the water to a steam generator that is in use.

Electric Shock Hazard - High voltage exists within this equipment. There are no user serviceable parts in this equipment.

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amerec AX INSTALLATION AND SERVICE INSTRUCTIONS

Thank you for purchasing your new AMEREC AX steam generator.
If we can be of any assistance do not hesitate to call our Technical Support at 1-800-363-0251.

FOR THE SAFETY OF YOU AND YOUR FAMILY OR CUSTOMERS, PLEASE READ THE FOLLOWING WARNINGS AND ALL INSTRUCTIONS BEFORE USING YOUR STEAMBATH.

POST "STEAMBATH INSTRUCTIONS" LABEL OUTSIDE STEAMBATH FOR SAFETY WARNINGS.

SAVE THIS MANUAL

FOR THE SAFETY OF YOU AND YOUR FAMILY OR CUSTOMERS, PLEASE READ THE FOLLOWING WARNINGS AND ALL INSTRUCTIONS BEFORE USING YOUR STEAMBATH. POST "STEAMBATH INSTRUCTIONS" LABEL OUTSIDE STEAMBATH FOR SAFETY WARNINGS.



WARNING



Electric Shock Hazard - High voltage exists within this equipment. Disconnect all electrical power before servicing the generator. All installation and service to this equipment should be performed by qualified licensed personnel in accordance with local and national codes. There are no user serviceable parts in this equipment.

Electrical grounding is required on all AMEREC steambath generators. The generator is designed for hookup with copper wire only, 75°C or better.

Wire the controls exactly as described. Do not connect any additional wiring or power supplies to the controls or their terminals in the generator.

Service only by authorized personnel!

All plumbing must be installed by a licensed plumber in accordance with all applicable local and national codes.

Install indoors only. Protect from freezing. Generator must be level side to side and end to end.

The pressure relief valve and generator drain must be installed in such a fashion that the risk of scalding is reduced to a minimum. Draining these outlets into the steam room may present a scald hazard and may damage materials used to construct the room.



Danger To reduce the risk of explosions, do not interconnect steam lines!!

Caution The steam outlet carries hot vapor! A separate steam line is required for each steam outlet. Do not connect a valve or shut-off in the steam line! Avoid traps and valleys in the steam line where water could collect and cause a steam blockage. The hot steam line must be insulated against user contact.

Do not install the steam head near a bench or where steam may spray or where condensation will drip on the user as this will present a scald hazard.

Be certain that steambath enclosures are properly sealed to avoid water damage from escaping steam. It is recommended that 100% silicone caulk be used to seal all pipes and fittings. Steam must be prevented from escaping into the wall cavity. Centering the steam pipe is critical in rooms made of plastic, acrylic, resin, fiberglass or similar materials. Allowing the steam pipe to touch materials not rated 240°F or higher will result in damage to these materials.

Merci pour l'achat de votre nouveau AMEREC AX générateur de vapeur.
Si nous pouvons vous être utiles n'hésitez pas à appeler notre assistance technique au 1-800-363-0251.

**POUR LE SÉCURITÉ DE VOTRE FAMILLE ET VOUS OU CLIENTS, VEUILLEZ
LIRE LES AVERTISSEMENTS SUIVANTS ET TOUTES LES INSTRUCTIONS AVANT
D'UTILISER VOTRE BAIN DE VAPEUR.**

**POST "BAIN DE VAPEUR" LABEL HORS D UN BAIN DE VAPEUR D'INSTRUCTIONS
POUR DES AVERTISSEMENTS EN MATIÈRE DE SÉCURITÉ.**

ENREISTREZ CE MANUEL

**POUR LA SÉCURITÉ DE VOTRE FAMILLE ET VOUS OU VOS CLIENTS, VEUILLEZ LIRE
APRÈS AVERTISSEMENTS ET TOUTES LES INSTRUCTIONS AVANT D'UTILISER VOTRE BAIN DE
VAPEUR. POST "BAIN DE VAPEUR" LABEL HORS D UN BAIN DE VAPEUR D'INSTRUCTIONS POUR DES
AVERTISSEMENTS EN MATIÈRE DE SÉCURITÉ.**



AVERTISSEMENT



Risque de choc électrique - Haute tension existe au sein de ce matériel. Débranchez toute source d'alimentation avant de procéder à l'entretien du générateur. Toutes les instructions d'installation et service à cet équipement doit être effectuée par du personnel autorisé qualifié conformément aux codes locaux et nationaux. Il n'y a pas de pièce réparable par l'utilisateur à cet équipement.

Mise à la terre électrique est requis sur tous les générateurs bain de vapeur AMEREC. Le générateur est conçu pour connecter un fil de cuivre uniquement, 75 °C ou mieux.

Câbler le contrôle très exactement comme indiqué. Ne connectez aucun câblage supplémentaire ou blocs d'alimentation pour les commandes ou leurs terminaux dans le générateur.

Service uniquement par le personnel autorisé!

Toute la tuyauterie doit être installé par un plombier sous licence conformément à tous les codes locaux et nationaux applicables.

Installer à l'intérieur uniquement. Protéger du gel. Générateur doit être mise à niveau latérale et l'extrémité à l'autre.

La valve de limitation de pression et purge du générateur doit être installé de telle façon que le risque de brûlure est réduit à un minimum. Vidange de ces prises dans la salle de vapeur peut présenter un risque de brûlure et peut endommager les matériaux utilisés pour construire la salle.



Danger Pour réduire les risques d'explosion, ne pas connecter les conduites de vapeur t!!

Attention La sortie vapeur transporte vapeur chaude ! Une conduite de vapeur distincte est requise pour chaque sortie vapeur. Ne connectez pas une valve ou l'arrêter dans la conduite de vapeur! Éviter les pièges et les vallées dans la conduite de vapeur où l'eau pourrait recueillir et provoquer un blocage de vapeur. La vapeur chaude ligne doit être isolée par rapport au contact de l'utilisateur.

Ne pas installer la tête de vapeur près d'un banc ou où la vapeur peut pulvériser ou où la condensation s'égoutter sur l'utilisateur comme cela présentera un risque de brûlure.

Etre certain que le bain de vapeur boîtiers sont étanches afin d'éviter les dégâts d'eau de s'échapper la vapeur. Il est recommandé que 100% mastic au silicone utilisée pour obturer tous les raccords et tuyaux. La vapeur doit être empêché de s'échapper dans la cavité du mur. Centrage du tube à vapeur est critique dans les chambres faites de plastique, de l'acrylique, résine, la fibre de verre ou des matériaux similaires. Permettant le tube à vapeur pour toucher les matériaux non coté 115°C ou plus aura pour effet d'endommager ces matériaux.

POST "WARNING LABEL OUTSIDE STEAMBATH FOR SAFETY WARNINGS



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.

CAUTION!

Do not contact steam head. Stay at least 12" away from hot steam escaping from the steam outlet.

REDUCE THE RISK OF SLIPPING AND FALL INJURY

Use care when entering or exiting the steam room, floor may be slippery.

05-21-07
4110-79NOTE: For additional safety instructions, see owner's manual.

Étiquette d'avertissement "Extérieur poste bain de vapeur pour les avertissements relatifs à la sécurité



AVERTISSEMENT

Réduire le risque de surchauffe et de brûlures

Quitter immédiatement si mal à l'aise, étourdi ou somnolent. De rester trop longtemps dans une zone chauffée est capable de causer une surchauffe. Supervisez les enfants en tout temps.

Vérifier avec un médecin avant d'utiliser en cas de grossesse, diabétique, en mauvaise santé ou nécessitent des soins médicaux.

Respirer de l'air chaud en conjonction avec la consommation d'alcool, de drogues ou de médicaments peuvent causer la perte de conscience.

PRUDENCE!

Ne contactez pas tête de vapeur. Séjour d'au moins 305 mm de vapeur s'échappant de la tête de vapeur.

Réduire le risque de dérapage et de chute

Utiliser les soins en entrant ou en sortant de la salle de vapeur, le sol peut être glissant.

05-03-16
4110-791Remarque : Pour d'autres consignes de sécurité, voir le manuel du propriétaire.

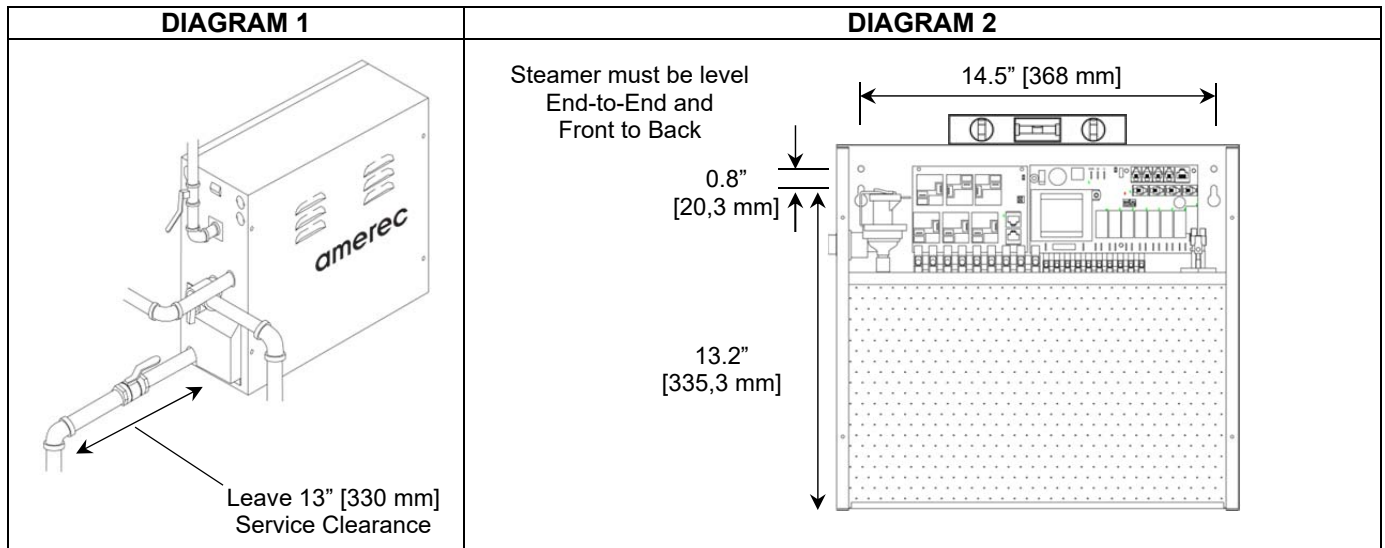
IMPORTANT USER SAFETY INSTRUCTIONS

1. **READ AND FOLLOW ALL INSTRUCTIONS.—SAVE THESE INSTRUCTIONS!**
2. The steam bath is not intended for use by anyone (including children) with reduced physical, sensory or mental capabilities or who lack experience or knowledge, unless they have supervision or training on the use of the steam bath by a person responsible for their safety.
3. **WARNING** - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times. Ensure they do not play in the steam bath.
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 to 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. Pregnant 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 steam bath.
 - f. Persons using medication should consult a physician before using a steam bath since some medication may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.
5. **WARNING** - Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 37°C. 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 steam bath:
 - c. Unawareness of impending risk:
 - d. Fetal damage in pregnant women:
 - e. Physical inability to exit the steam bath: and
 - f. Unconsciousness.
6. **WARNING** - The use of alcohol, drugs or medication can greatly increase the risk of hyperthermia

-
1. **Lire et suivre toutes les instructions. -- Conservez ces instructions !**
 2. Le bain de vapeur n'est pas destiné à être utilisé par toute personne (y compris les enfants) avec toutes leurs capacités physiques, sensorielles ou mentales ou qui manquent d'expérience ou de connaissances, à moins qu'ils aient la supervision ou de la formation sur l'utilisation du bain de vapeur par une personne responsable de leur sécurité.
 3. **Avertissement** : Pour réduire les risques de blessures, ne pas permettre aux enfants d'utiliser ce produit, sauf s'ils sont étroitement surveillés en tout temps. S'assurer qu'ils ne jouent pas dans le bain de vapeur.
 4. **Avertissement** : pour limiter les risques de blessure :
 - a. Les surfaces mouillées de boîtiers de vapeur peut être glissant. Soyez prudent lorsque vous entrant ou sortant.
 - b. La tête de vapeur est chaud. Ne pas toucher la tête de vapeur et éviter la vapeur près de la tête de vapeur.
 - c. Une utilisation prolongée de la chaudière à vapeur peut augmenter excessivement la température du corps humain et d interne nuisent à la capacité du corps de régler sa température interne (hyperthermie). Limitez votre consommation de vapeur pour 10 à 15 minutes jusqu'à ce que vous soyez certain de la réaction de votre corps.
 - d. Des températures excessives ont un haut potentiel de causer de dommages foetaux pendant les premiers mois de la grossesse. Enceinte ou peut-être les femmes enceintes devraient consulter un médecin au sujet de l'exposition correcte.
 - e. Les personnes obèses et les personnes ayant des antécédents de maladie du coeur, tension artérielle basse ou élevée, des problèmes du système circulatoire ou de diabète devraient consulter un médecin avant d'utiliser un bain de vapeur.
 - f. Les personnes qui utilisent ces médicaments devraient consulter un médecin avant d'utiliser un bain à vapeur depuis quelques médicaments peut induire une somnolence tandis que d'autres médicaments peuvent affecter la fréquence cardiaque, la tension artérielle et de la circulation.
 5. **Avertissement** - L'hyperthermie survient lorsque la température interne du corps atteint un niveau à plusieurs degrés au-dessus de la normale de la température corporelle de 37 °C. Les symptômes de l'hyperthermie comprennent une augmentation de la température interne du corps, sensation vertigineuse, léthargie, somnolence et d'évanouissement. Les effets de l'hyperthermie comprennent :
 - a. L'incapacité de percevoir la chaleur
 - b. L'incapacité à reconnaître la nécessité de quitter le bain de vapeur :
 - c. La méconnaissance de l'imminence d'un risque :
 - d. Dommages au fœtus chez les femmes enceintes :
 - e. Incapacité physique pour quitter le bain de vapeur : et
 - f. L'inconscience.
 6. **Avertissement** - La consommation d'alcool, de drogues ou de médicaments peut augmenter considérablement le risque d'une hyperthermie

amerec AX INSTALLATION AND SERVICE INSTRUCTIONS

SECTION 1: MOUNTING THE STEAM GENERATOR



The AMEREC steam generator can be hung on a wall or sit on its base. The best mounting location will satisfy all or most of the following:

WARNING: The generator will not operate properly, unless it is mounted level with the arrows pointed up

1. **The generator should be installed in a dry, well ventilated area.** Suggested locations are under a vanity, in a closet, attic, crawl space or basement. **Do not mount outdoors.**
2. If the generator will be in an area difficult to access, the water supply should be equipped with easily access water shut-off valve in case of emergency.
3. If the steam line is in an area where the temperature will be below 39°F (4°C) best results can be obtained by insulating the steam pipe. **Do Not mount the generator in an area subject to freezing.**
4. The generator must be mounted in a minimum 7 cubic feet (0,2 cubic meter) space.
5. **The location must allow access for service!** Provide clearance for plumbing and electrical service and for element removal. See Diagram 1.
6. The steam line should slope to allow condensation to drain. The mounting location should minimize the number of bends and elbows in the steam line
7. The mounting location should allow for a drain hook up.
8. The steam line should be less than 20 ft (6 m) long; 3 ft (1 m) is preferred. Steam lines over 20ft (6 m) long should be insulated.

WARNING

- There must be no dips or valleys in the steam line.
- Install the steam head so as to avoid potential user direct contact with the steam or where condensation may drip on the user as this may present a scald hazard.
- **Do Not** install any valves or other shut-off devices in the steam line!
- **Do Not** interconnect steam lines! A separate steam line is required for each generator!
- **Do Not** connect the drain line to the steam line or allow the drain empty into the steam room!
- **Do Not** connect the pressure relief valve into the steam line or vent it where someone nearby could be scalded! Do Not allow the relief valve to vent into the steam room!

amerec AX INSTALLATION AND SERVICE INSTRUCTIONS

SECTION 1: MOUNTING THE STEAM GENERATOR (continued)

1. WALL MOUNTING: Remove the side cover. Note the location of the mounting holes on the back of the generator. The screws must set directly into studs or equivalent supports. Drill pilot holes on 14-1/2" (368 mm) centers and install the two #10 1½" screws, provided. See Diagram 2.

- a) Carefully hang the generator on the two screws. Tighten the screws.
- b) The generator may be further secured with two screws mounted on the same 14-1/2" (368 mm) centers as shown; see Diagram 2.
- c) Replace the front cover with its four screws.

2. FLOOR MOUNTING:

- a) 1. In general, the width of the unit allows it to sit on a shelf, across the ceiling joists or on a floor. The generator must be restrained from moving. Normally, the piping will provide adequate support. If not, additional support must be provided.
- b) 2. All floor installed generators must provide for routine draining of the tank and for draining the safety valve's outlet.

SECTION 2: WATER QUALITY REQUIREMENTS

The nature of a boiler or steam bath generator requires testing of the feedwater to avoid potential high concentrations of impurities which can cause a deposit or scale to form on the internal surfaces. This deposit or scale can interfere with the equipment's proper operation and even cause premature boiler or generator failure. Concentration of impurities is generally controlled by treating the feedwater and or "blowing down" the generator or boiler when it is not heating. The "blow down" process involves removing a portion of the tank water with high solid concentration and replacing it with makeup water.

This is particularly important in areas with high calcium levels and other water quality problems. Calcium build-up can cause poor steamer performance and damage the heating elements!

Be especially careful to prevent foaming in the steamer's water! Foaming water will affect the water level measuring systems in steamers and boilers, causing operation problems and possibly leading to early element failures!

To insure proper operation, the water supply should be tested prior to operating the equipment. There are several treatment processes which can be used if you have a problem with hard water. A local reliable water treatment company can recommend the appropriate treatment if required. The recommended feedwater quality is listed on the next page.

Recommended Feedwater Quality

Hardness	10 – 30 ppm - (0.5 - 1.75 gpg)
T-Alkalinity	150 – 700 ppm - (8.75 - 40.8 gpg)
Silica Range	15 – 25 ppm - (1.28 - 1.45 gpg)
PH (strength of alkalinity)	10.5 -- 11.5

IMPORTANT!

Regular maintenance will help your steamer work properly for a long time. Check for leaks, loose or damaged wires, signs of corrosion and calcium build up in the tank on the level probe.

SECTION 3: PLUMBING INSTRUCTIONS

All plumbing shall be installed by a licensed plumber and conform with local & national codes.

Materials Needed:

- 3/8NPT, 1/2NPT and 3/4NPT unions: recommended to allow easy disconnect of steamer for servicing
- 3/8" copper pipe and 3/8" male NPT adapter for the water supply to the generator.
- 3/8" water supply shut-off valve.
- 3/8" supply valve housing and filter (optional depending on local water conditions).
- 1/2" copper pipe and (2) 1/2" male NPT adapters for the steam line between the generator and the steam room outlet.
- 3/4" copper pipe and 3/4" male NPT adapter for the tank drain.
- 3/4" copper pipe, fittings, and a union for the Pressure Relief Safety Valve drain.
- Tube 100% silicone caulk.
- Pipe compound suitable for drinking water use at more than 212°F (100°C).

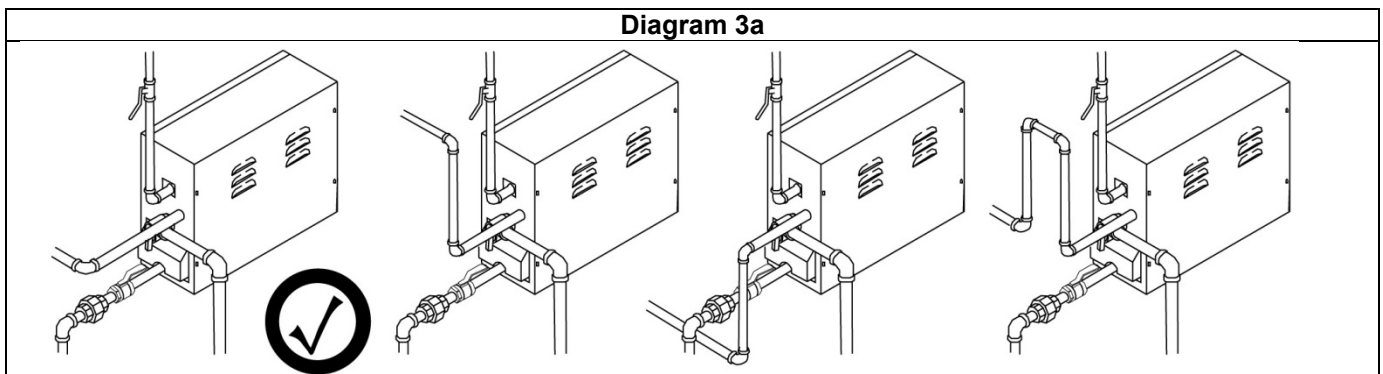
1. INSTALL WATER LINE Connect a cold water line to the generators water valve. The valve input is 3/8" NPT. A shut-off valve should be placed in the line for each generator to allow easier servicing later, if needed, and for emergency shut-off. Make sure the shut-off is open, providing water to the generator before first turning the on.

IMPORTANT

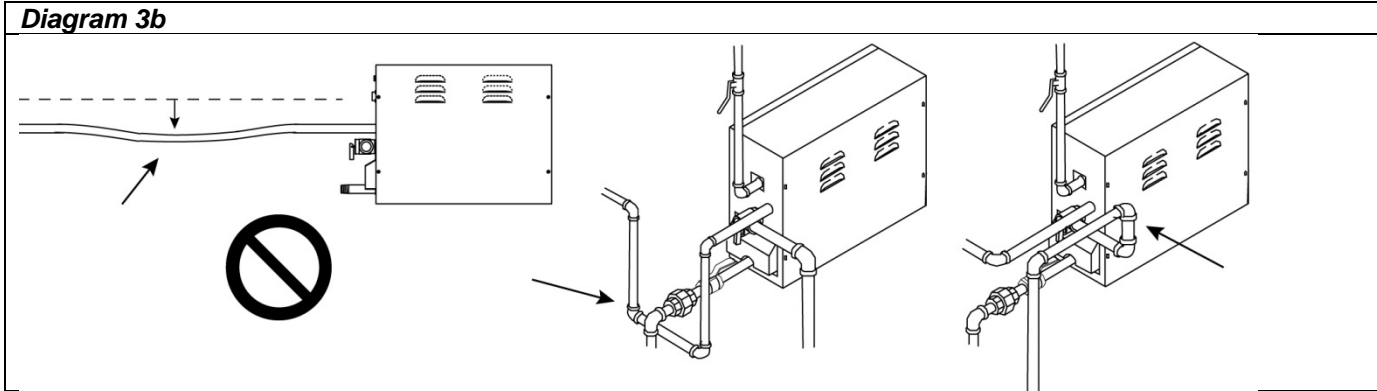
- Water pressure required: 20-100 psi (138-690 kPa)
- If the generator is mounted in a place difficult for the home owner to access, the water supply shut-off valve should be located where it can be quickly accessed in an emergency.
- Do not use a saddle valve or saddle fitting for the water shut-off valve.
- Flush water supply line before final hookup.

2. INSTALL STEAM LINE

- At the generator:** Install a 1/2" male NPT sweat adapter directly into the tank. Install a 1/2" union in the steam line to allow easy disconnection for later servicing. **Note:** *There must be no valves, shut offs or restrictions in the steam line!*
- Run the 1/2" copper steam line from the generator to the steam room. Refer to SECTION 2: MOUNTING THE STEAM GENERATOR and Diagrams 3a and 3b (below).
 - The steam line must slope to allow condensation to drain into the tank or room.
 - There must be no dips in the steam line. Low areas may collect condensation and cause faulty operation or cause hot water to spit into the room.
- The steam line should enter the steam room 18" (460 mm) above the floor or at least 12" (305 mm) above a tub rim or ledge. The steam line outlet should be at least 6" (150 mm) from other steam heads to either side and 12" (305 mm) from walls or other surfaces to either side. See Diagrams 4, 5 and 6.



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SECTION 3: PLUMBING INSTRUCTIONS (continued)

Note: See Diagram 6 for a typical installation. Additional steam heads may be added to any installation to reduce steam noise or to provide more steam dispersion around a large room. *For large AX14 steamers, we recommend using 2 steam heads to reduce the noise level while steaming.*

Note: *if steam vents too close to other surfaces, the steam may be cooled and the surfaces could be damaged.*

- d) **At the steam room:** Drill/prepare a 1-3/8" (35 mm) hole for the steam line entry. Center the 1/2" copper steam pipe in the hole. See Diagram 4.
- Terminate the steam line with a 1/2" NPT male adapter.
 - Stub the line out into the room 3/8" (9,5 mm) from the finished surface.
 - Secure the steam line to a structural member.

3. INSTALL STEAM HEAD INSULATOR: Fill in gap (using 100% Silicone caulk between steam pipe and finished wall surface at point of entry (see Diagram 4). Apply silicone caulk to the finished wall side of the steam head insulator (see Diagram 5) and screw on hand tight until it is flush with the wall with the opening pointing down. If a hand tight fit does not align with the opening pointing down, use Teflon tape on the steam line threads to adjust the fit.

4. INSTALL STEAM HEAD: Slide the steam head on until it rests firmly against the finished wall. Tighten the hex head screw underneath the steam head to secure it in place with the Allen wrench provided. The steam head should be level with its fragrance reservoir at the top. See Diagrams 4 and 6.

IMPORTANT
All fixture holes must be sealed with 100% silicon caulk to avoid moisture damage within walls. Check all of the standard fixtures in the steam room.

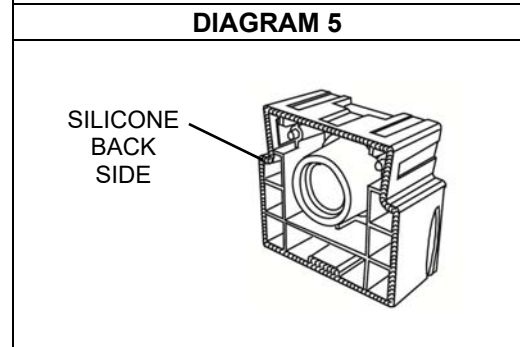
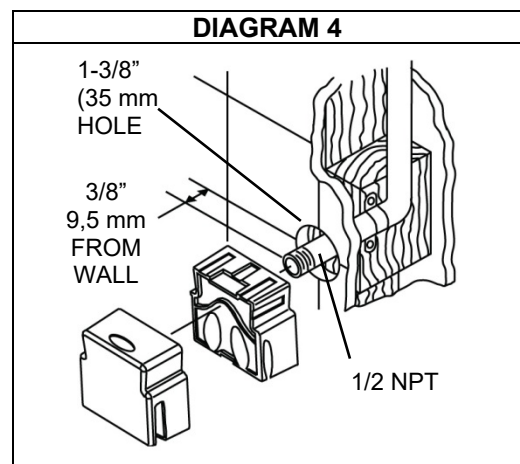
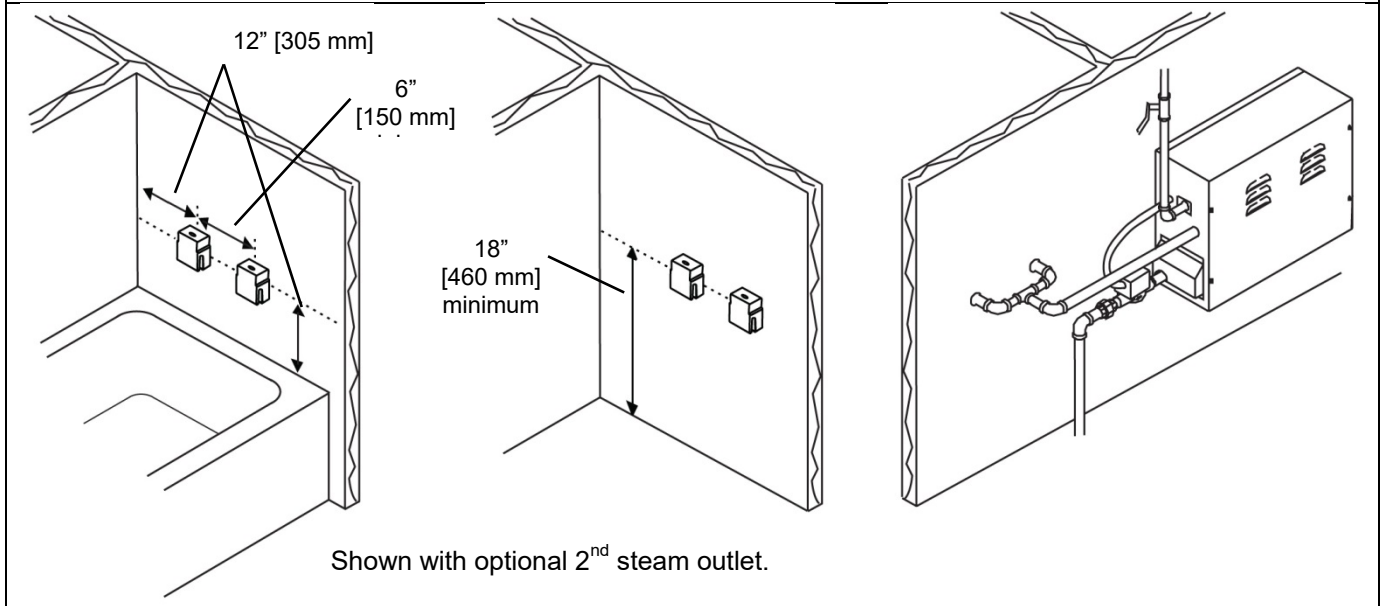


DIAGRAM 6



SECTION 3: PLUMBING INSTRUCTIONS *(continued)*

5. INSTALL PRESSURE RELIEF SAFETY VALVE: Install the pressure relief valve into its port on the generator. Install the safety valve within 6" [150] mm of the generator. Run a 3/4" copper line from the valve to a gravity flow drain. The pressure relief valve outlet must drain in accordance with local and national codes.

6. INSTALL DRAIN VALVE: Install 3/4" NPT pipe nipple directly into the tank as shown in Diagram 7. Install a 3/4" ball valve or an Autodrain on the nipple then add another nipple to the outlet of the valve. Add a union to the outlet nipple to allow easy disconnection during servicing. Run a 3/4" copper line from the union to a gravity flow drain. The drain must be connected in accordance with local and national codes.

IMPORTANT

All drain lines must run downhill, away from the steam generator!

- Do not run the drain uphill.
- Do not drain the safety valve into the steam line!
- Do not drain the safety valve into the steam room! Draining the tank into the steam room may present a scald hazard or damage the materials used to construct the steam room.
- Do not drain into the steam room!

Also see Diagram 3

DIAGRAM 7

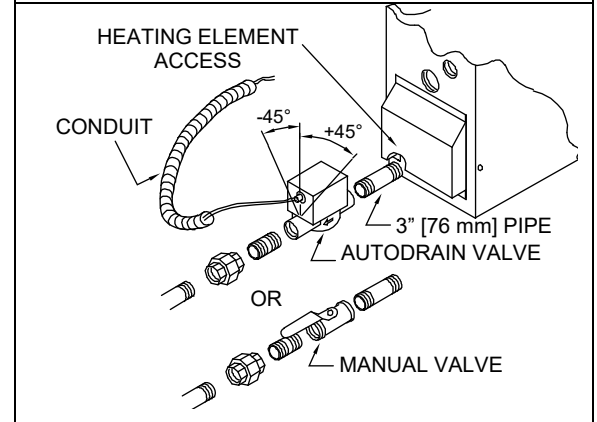
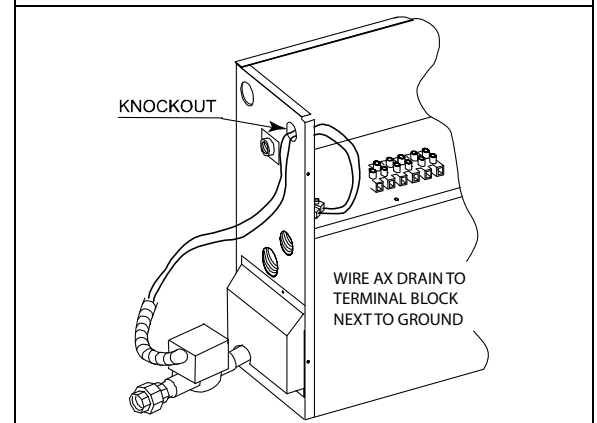


DIAGRAM 8



SECTION 4: WIRING INSTRUCTIONS

ALSO SEE ELECTRICAL INFORMATION CHART AND WIRING DIAGRAMS

1. ELECTRICAL ROUGH-IN: Size wire for the generator as required by local or national codes. See the electrical information on pages 9-10 for further information. Use copper wire only. Leave 4 ft (1,2 m) of slack wire at generator location for finish hookup. Connect the generator to a dedicated circuit breaker. A GFI device is usually not required by safety agencies. One may be installed if required by local codes or the owner. *A GFI device will tend to nuisance trip due to heater element aging.*

- Route the copper supply wire with appropriate strain relief through the hole marked POWER ENTRY.
- Connect the supply wires to the power terminal block as indicated on the wire diagram for your voltage and phase. This may require moving factory installed jumper. *Do not change the steamer's internal jumpers or wiring. Only the supply wiring side of the terminal blocks require configuration by the installer.*
- Connect the Earth wire to the copper ground lug.
- Cover the supply wires inside the steamer with a protective mesh or similar material to protect them from water valve heating.

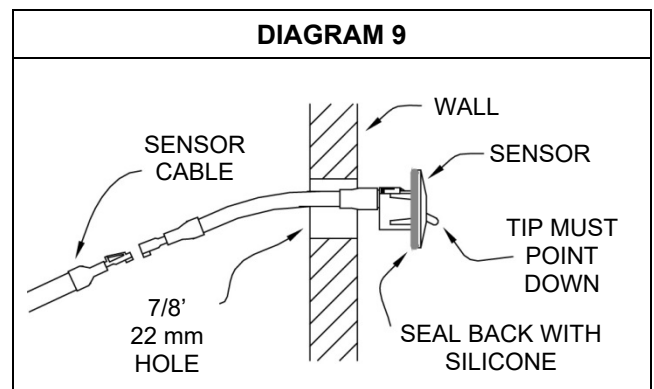
2. ELECTRICAL INFORMATION The AX steamers are available in 2 basic versions, one for 208V (intended for 208VAC single and three phase for North American use) and 240V (intended for all other installations). The 240V models are rated at 240VAC and may be used on 208 to 240V single phase Line-to-Line or 208 to 240V~N (Line-to-Neutral) or 208V to 240V three phase without Neutral or for 380 to 415V~N3.

All Units are factory wired for single phase installation. The installer may change the input to three phase or three phase with Neutral during initial installation (see the wiring diagrams on page 18).

The National Electrical Code (NEC) limits a steamer's current to 48 Amps so in some cases, two separate power supplies are required: AX11 & AX14 208V single phase and AX14 single phase.

3. TEMPERATURE SENSOR CABLE ROUGH-IN (low voltage) It is required that the sensor be mounted in the steam room, but not directly over the steam dispersion head or near the door. The sensor should be located in a wall 6" (150 mm) below the ceiling but no more than 7 ft (2,1M) above the floor. String the sensor cable from the sensor location through 1/2" (12 mm) holes in the wall studs or ceiling joists to the generator location. Drill a clean 7/8" (22 mm) hole through the steam room wall at the sensor location. Leave 12" (305 mm) of slack at the sensor location. See Diagram 9.

Note: *Do not staple through or damage cable. Use factory supplied cables only.*



4. CONTROL CABLE ROUGH-IN (low voltage) A 50 ft (15,2 m) 4 wire CAT5 cable is provided for connecting the A3 or A6 control to the steamer. The A3 and A6 controls may be mounted inside or outside the steam room. String the control cable from the control location through 1/2" (13 mm) holes in the wall studs or ceiling joists to the generator. Note: *Do not staple through or damage cable. Use factory supplied cables only.* Run the cable end through a 1" (25,4 mm) hole in the wall at the control mounting location. One A3 or A6 control is required; a second may also be connected. **See control mounting section for more information.**

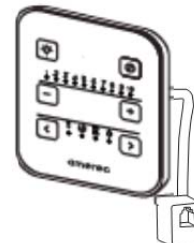
SECTION 5. BATH CONTROLS INSTALLATION

1. INSTALL THE TEMPERATURE SENSOR ASSEMBLY inside the steam room (also see section 5, step 3 and Diagram 9). A 7/8" (22 mm) hole should already be in the steam room wall with the cable ready.

Make sure the sensor is not directly over the steam outlet head or near the door. The sensor should be located in a wall 6" (150 mm) below the ceiling but no more than 7 ft (2,1M) above the floor. Carefully connect the sensor cable to the sensor. The cable end should slide into place and lock.

Run a light bead of silicone around the back surface of the sensor and slide it into the wall with the metal sensor tube pointed down. Tape the sensor to the wall until the silicone has set-up.

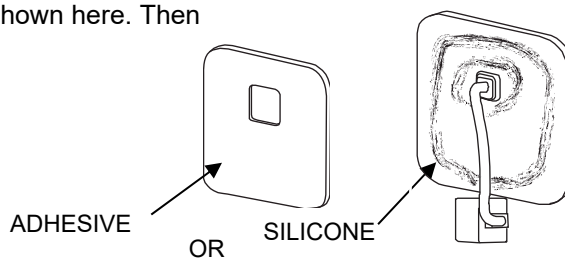
Connect the steam generator end of the cable to the sensor jack located in the Right end of the generator. (see Diagram 10)



2. INSTALL THE A3 CONTROL inside or outside the steam room using the control cable installed in section 5, step 4. If mounting to a smooth, flat wall, the adhesive pad provided will work well to mount the control and seal the cable hole. *The adhesive will stick to the wall quickly so be sure to accurately place and level the control before attaching it to the wall!*

If the surface is uneven or has grout lines, we recommend using a small amount of silicone to mount the A3 control. If using silicone, run a bead around the control's cable end and another bead around the back of the control as shown here. Then tape in place on the wall until the silicone has set up.

Be sure to carefully level the control while mounting!



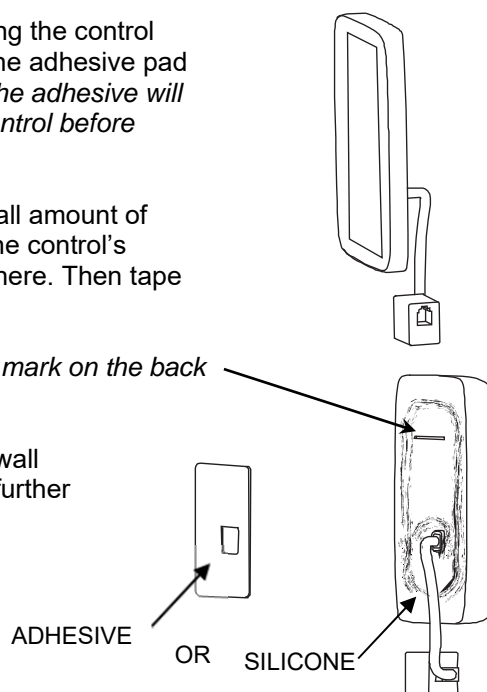
3. INSTALL THE A6 CONTROL inside or outside the steam room using the control cable installed in section 5, step 4. If mounting to a smooth, flat wall, the adhesive pad provided will work well to mount the control and seal the cable hole. *The adhesive will stick to the wall quickly so be sure to accurately place and level the control before attaching it to the wall!*

If the surface is uneven or has grout lines, we recommend using a small amount of silicone to mount the A6 control. If using silicone, run a bead around the control's cable end and another bead around the back of the control as shown here. Then tape in place on the wall until the silicone has set up.

Note: *The control's cable end is at the bottom of the control and a cut mark on the back indicates the top of the control!*

Optional: the A6 has a recessed mounting box which mounts into the wall so the control screen is nearly flush to the wall. Refer to Appendix for further instructions and a mounting template.

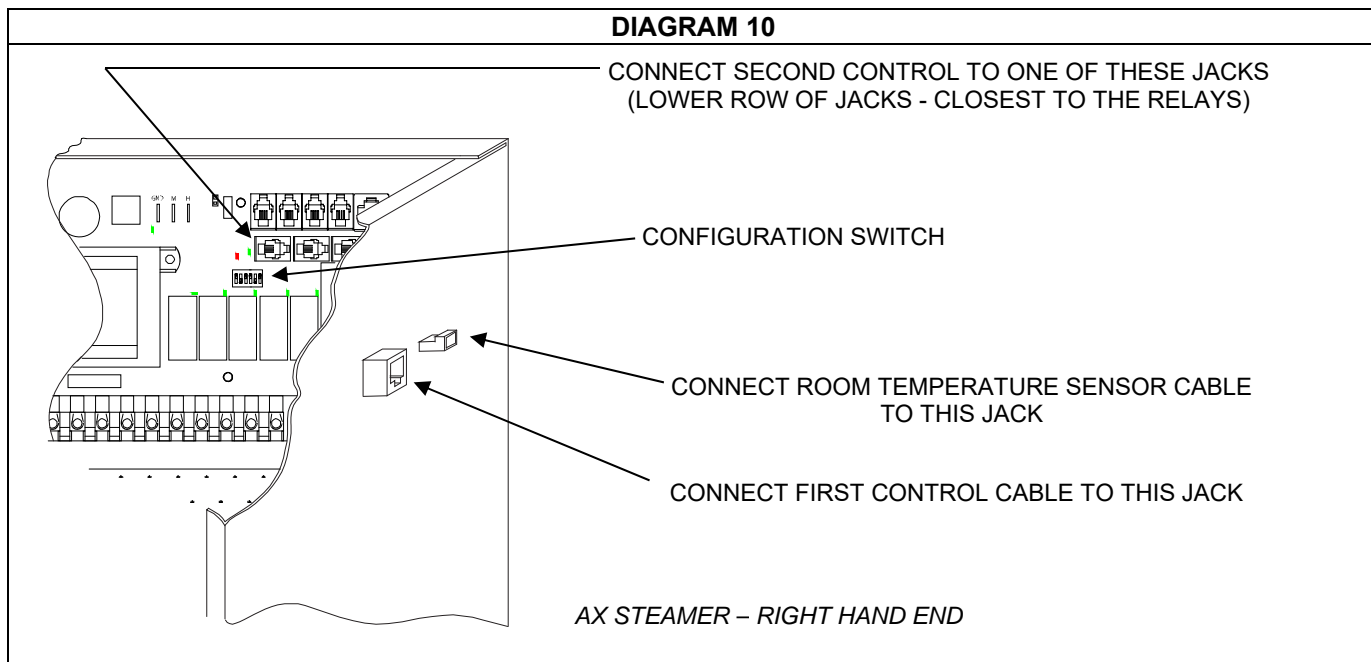
Be sure to carefully level the control while mounting!



amerec AX INSTALLATION AND SERVICE INSTRUCTIONS

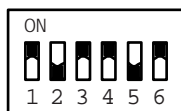
SECTION 5. BATH CONTROLS INSTALLATION *(continued)*

4. **CONNECT THE CONTROL CABLE TO THE STEAMER** with the Mains voltage turned off. The control cable should be plugged into the jack on the outside of the steamer's right end.



SECTION 7. INITIAL START

1. Before turning on power to the generator, make sure the configuration switch is set correctly (see Diagram 10).




a) **If the generator has an electronic AutoDrain installed:** If the generator will use an electronic AutoDrain, verify the switch in the middle of the right hand circuit board is set as shown at left (#2 and #5 down, all other up).





b) **If the generator has only a manual drain installed:** If the generator will not use an electronic AutoDrain, verify the switch in the middle of the right hand circuit board is set as shown at left (#2, #4 and #6 down, all other up).

2. Make sure the water is turned on, the drain valve is closed and the control(s) and temperature sensor are plugged in, then turn on the line voltage to power the generator.

- Green LEDs will light on the generator's circuit boards right away then one more will light a few seconds later.
- **If the A3 is connected:** 4 LEDs across the top of the control will begin blinking.
- **If the A6 is connected:** About 30 seconds after turning on power, the A6 screen will light and the amerec logo will show at the bottom of the screen. A few seconds later, the A6 screen will change to a slowly spinning circle while it loads its program.
- A few seconds after the A6 stops showing amerec, the A3 control's LEDs will start blinking and changing until it stops with the thermometer symbol lit (lower left corner) and one of the 1 – 10 LEDs will be lit. 
 - If an A6 is not connected, go to step 3a at this point.
 - *If other LEDs are lit or blinking, refer to the A3 User's guide and contact Technical Support if needed.*
- The A6 spinning wheel continues for about 1:30 minutes then begins normal operation. During this time, a red LED will light on the steamer board showing that the control and circuit board are "talking" to each other.
 - Go to step 3b

SECTION 7. INITIAL START *(continued)*


3a. **If only an A3 is connected:** If the A3 has started properly, press the on/off key  and the bath on LED  will light and one of the 1 – 10 LEDs will light indicating the current temperature. The generator will fill with water and start heating the room. Press the on/off key again and the generator will stop heating.

3b **If an A6 is connected:** If the A6 has started properly and if it has not been used before, it should guide you through the initial set-up: select the language to use, set region to North America, set the current time and time format and set the current date and date format. Then you will return to the starting menu screen. Next, go to the Tools menu and





a) Choose **Units** and set to display temperature in Celsius or Fahrenheit

b) Choose **Bath Temperature** to set the maximum bath temp. allowed

c) Choose **Facility Type** and set it to **Private** for normal home use. This allows a bath time of up to  hour. For spas and other installations where the steam room needs to be kept hot for longer periods, set the facility to **Public** for up to a 24 hour maximum bath time.



d) Next go to the home screen and the display should show the current temperature Press the  key (in the upper right corner) and the key should turn green. The generator will fill with water and start heating the room. Press the  key (in the top left corner) and the key should turn red and the generator will stop heating.

e) **If the generator has an electronic AutoDrain installed:** The generator will go through a drain cycle one hour after the bath has been turned off.

For assistance, contact

amerec

P.O. Box 2258, Woodinville, WA 98072

Phone 1-800-363-0251

1-425-951-1120

Fax 1-425-951-1130

eMail Support@amerec.com

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SECTION 5: WIRING INSTRUCTIONS (continued)

Model	Nominal VAC	Room Size cu ft		Room Size cu m	
		min	Max	min	Max
AX4.5	208	60	90	1.7	2.5
	240				
AX7.5	208	80	200	2.3	5.7
	240				
AX11	208	175	375	5.0	10.6
	240				
AX14	208	350	550	9.9	15.6
	240				

Notes:
 * Use only copper wire rated 600V~ and 75°C minimum
 * All models require Earth ground
 * All line voltage must be more than 195V~ while the steamer is heating
 * Steamers must be connected to a means for disconnecting all supply voltages
 * All AK14 and 208V AX11 single phase require two Mains supplies

Model	Nominal VAC	Watts at operating VAC				
		208	230	240	400	415
AX4.5	208	4507				
	240	3380	4133	4500	4133	4500
AX7.5	208	7511				
	240	5633	6888	7500	6888	7500
AX11	208	11267				
	240	8262	10102	11000	10102	11000
AX14	208	13576				
	240	10516	12858	14000	12858	14000

Model	Nominal VAC	Amps 1 phz			Recommended Breaker		
		208	230	240	208	230	240
AX4.5	208	22			30		
	240	16	18	19	20	30	30
AX7.5	208	36			50		
	240	27	30	31	40	40	40
AX11	208	18 & 36			30 & 50		
	240	40	44	46	50	60	60
AX14	208	24 & 42			30 & 60		
	240	18 & 33	20 & 36	21 & 38	30 & 50	30 & 50	30 & 50

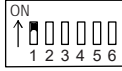
Model	Nominal VAC	Amps at operating VAC, 3 phz					Recommended Breaker				
		208	230	240	400	415	208	230	240	400	415
AX4.5	208	14					20				
	240	9	10.0	10.9	6.0	6.3	15	15	15	15	15
AX7.5	208	21					30				
	240	16	17.3	18.1	10.0	10.5	20	30	30	15	15
AX11	208	31					40				
	240	23	25.4	26.6	14.6	15.4	30	40	40	20	20
AX14	208	38					50				
	240	29	32.3	33.8	18.6	19.6	40	40	50	30	30

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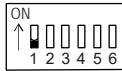
SYSTEM CONFIGURATION

Before turning on line voltage to the steamer, make sure the steamer's circuit board's switch is set correctly for the installation.

Switch 1: Is this a single steamer installation or 2 or 3 steamers ganged together?

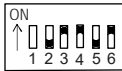


Primary unit in ganged system

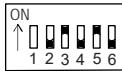


Secondary unit in ganged system

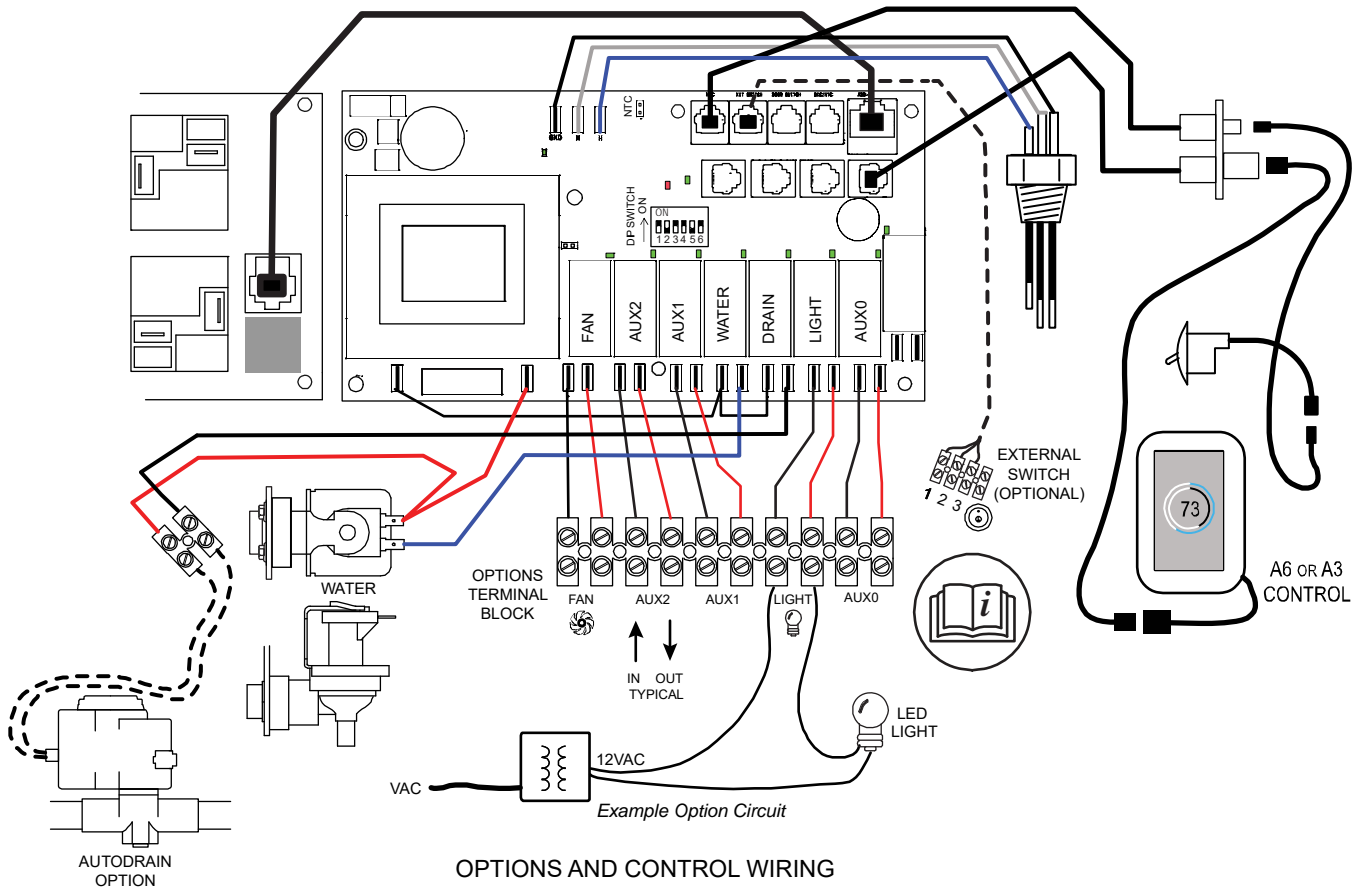
Switches 2-6: Is there an electronic Autodrain valve installed?



Autodrain is installed



Autodrain is **not** installed
(Requires manually draining and cleaning the tank periodically.)



amerec AX INSTALLATION AND SERVICE INSTRUCTIONS

AX STEAMER FIELD WIRING

WATTS	
Model	208V
AX4.5	4507
AX7.5	7511
AX11	11267
AX14	13576

AMPS 3 PhZ	
Model	208V
AX4.5	22
AX7.5	36
AX11	18 & 36
AX14	24 & 42

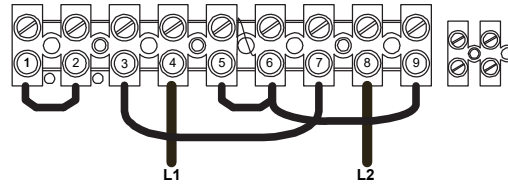
See Note (2)
See Note (2)

AMPS 3 PhZ	
Model	208V
AX4.5	14
AX7.5	21
AX11	31
AX14	38

Notes:

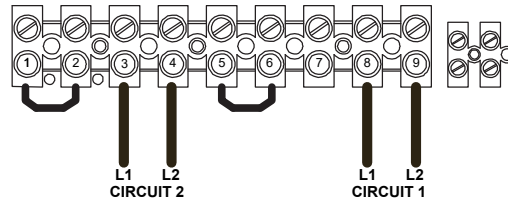
- (1) Use only copper wire rated 75°C or better
- (2) AX11 and AX14 single phase require two feed circuits.
Circuit 1 drives one element and the controls,
Circuit 2 drives two elements.

208V 1 phz
AX4.5, AX7.5

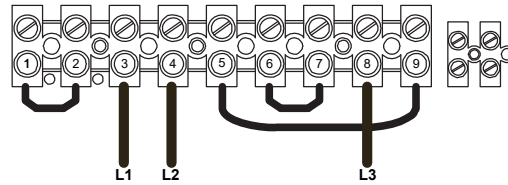


208V 1 phz
AC11, AX14 2-Circuit

See Note (2)



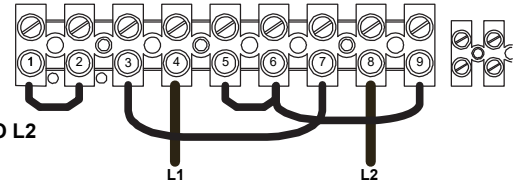
208V 3 phz
AX4.5 - AX14



Model	WATTS		
	208V	230/400V	240/415V
AX4.5	3380	4133	4500
AX7.5	6888	6888	7500
AX11	8262	10102	11000
AX14	10516	12858	14000

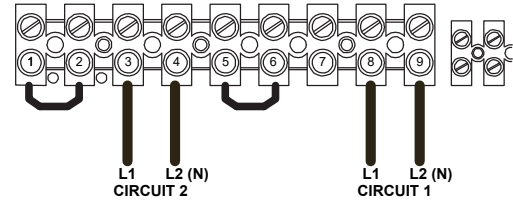
208/230/240V 1 phz
AX4.5, AX7.5, AX11

For 230/240V~N
CONNECT NEUTRAL TO L2

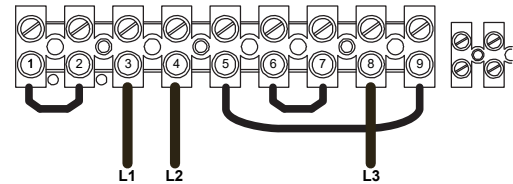


208/230/240V 1 phz
AX14 2-Circuit

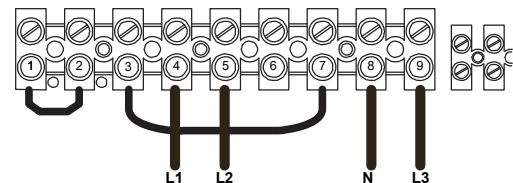
See Note (2)



208/240V 3 phz
AX4.5 - AX14



400-415V~3N
AX4.5 - AX14



Notes:

- (1) Use only copper wire rated 75°C or better
- (2) AX14 single phase requires two feed circuits.
Circuit 1 drives one element and the controls,
Circuit 2 drives two elements.

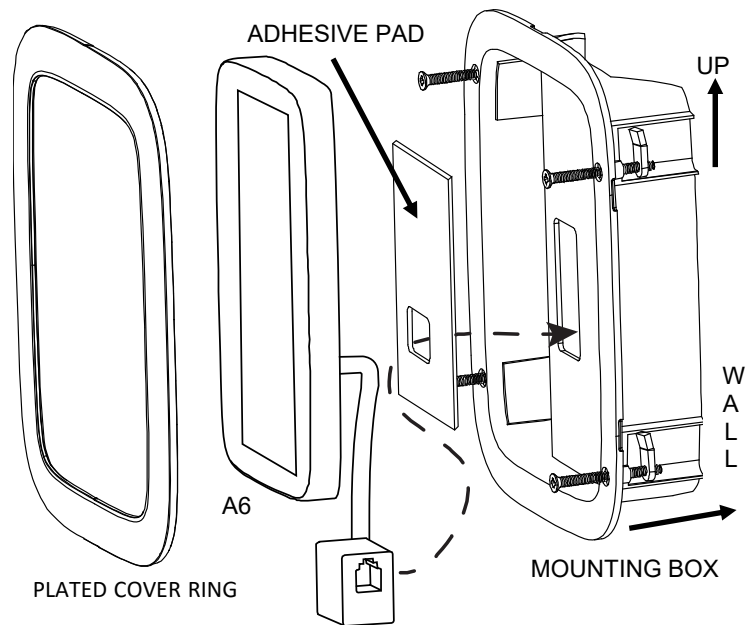
Recessed Mounting For the A6

The recessed mounting box allows the A6 to mount with its surface almost even to the wall surface.

You'll need to cut a hole in the wall to match the back of the mounting box and run the control cable out of the wall through the hole in the mounting box. Make sure the hole is just big enough to mount the box – *you need room to add silicone to seal the box to the wall.*

Next run a bead of silicone around the back of the box's front lip, then press the box into the hole and turn the mounting screws to pull the tab tight against the inside of the wall. *Make sure the box is level and the correct end is UP (there is an arrow on the wall side of the box pointing up).*

When the box is ready, run the A6's cable end through the cut-out in the adhesive and attach the adhesive pad to the back of the A6. Be careful – *the adhesive will stick quickly.*

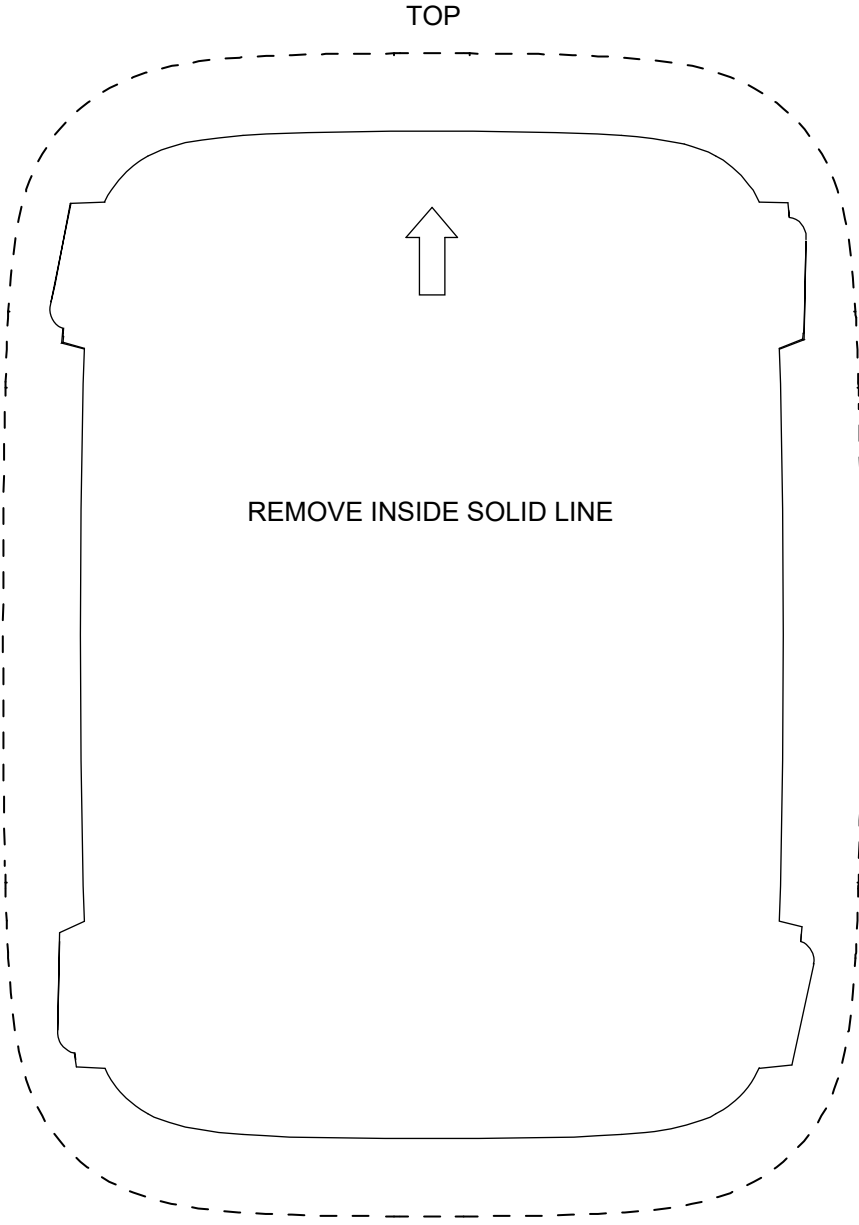


Now connect the A6 cable end to the control cable then feed the cables and connector through the hole in the box and into the wall. *Now test the A6 before mounting it into the wall! Once mounted, the A6 will be hard to remove!*

When ready, peel the cover off the back of the adhesive and carefully push the control into the box and hold in place for about 30 seconds to finish mounting the control. Press the trim ring on to the front of the box and control. Snap it in place, top and bottom and along both sides.

Recessed Mounting Box Template

Print this page full size. Do not scale to fit page!



DASHED LINE IS OUTLINE OF HOUSING LIP FROM ROOM SIDE – SHOWN FOR REFERENCE ONLY!