

## AUTOMATIC DRAIN KIT MODEL ADK

FITS AMEREC AK/3K and AG/3G  
STEAMBATH GENERATORS

SAVE THESE INSTRUCTIONS

READ ALL INSTRUCTIONS CAREFULLY  
BEFORE INSTALLATION.

### WARNING

Electrical grounding is required on all Steambath Generators.

Do not remove or change the Generator's grounding unless specifically directed to do so by these instructions.

All electrical supplies to the Generator should be disconnected before and during the installation of this kit.

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 local and national codes.  
(an air gap or check valve may be required)



### SECTION 1: GENERAL INFORMATION

Amerec Steam Generators are listed by ETL. The ETL listing will remain valid so long as the ADK kit is installed per these instructions.

This ADK Kit upgrades a steamer to automatically flush and drain approximately 25 minutes after the bath ends. It will leave the tank empty after the flush and drain cycle. An additional ADK kit is required for each steamer in a ganged system.

The Amerec Autodrain is a motorized ball valve with 3/4" NPT female pipe fittings on both ends. It is not directional. The motor operates on the same 200 - 240VAC line voltage used by the steamer.

*Notes:*

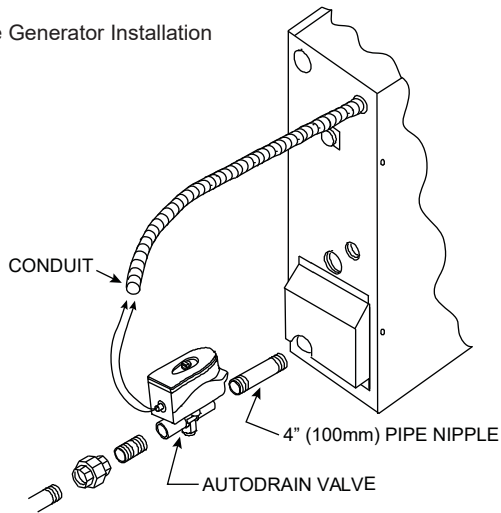
- Check your steamer drain outlet. If your steamer has a 1/2" outlet, add a 1/2-3/4 NPT reducer to the steamer's drain pipe to allow installing this drain.
- If you are replacing a defective Autodrain motor with a black body, you will have one of two motors. Either motor may be used on the ball valve body. Refer to the diagrams 7 and 8 for instructions on how to remove or mount the two types.
- The ADK valve is normally open: it closes during the steam bath and opens and closes during the drain/rinse cycle, then remains open until the next bath.

### SECTION 2: INSPECT EXISTING LOCATION

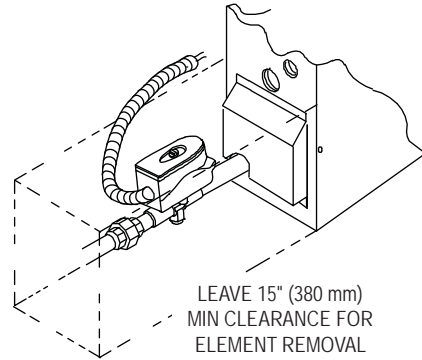
1. Count the total number of steamers at this site.
2. If there are multiple steamers this kit must be installed on all Generators.

### DIAGRAM 1

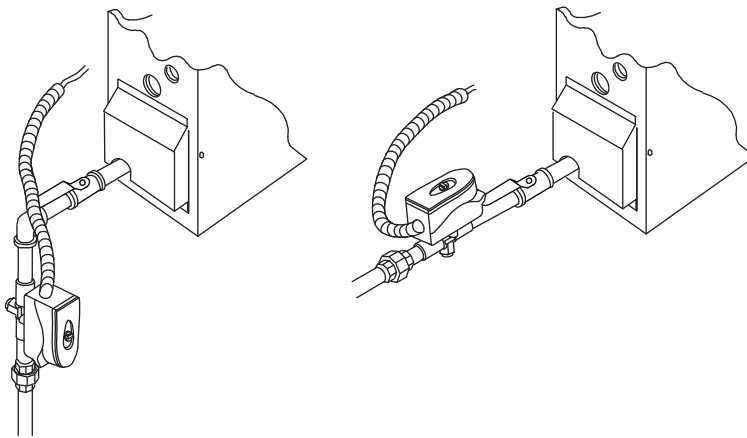
Single Generator Installation



### DIAGRAM 2

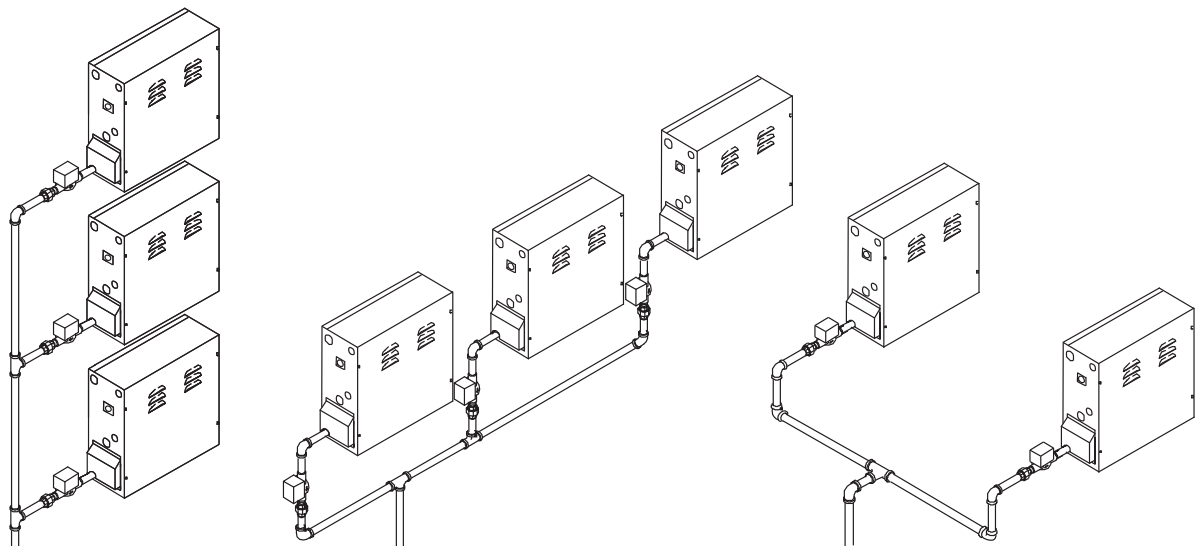


### DIAGRAM 3



*We recommend installing a manual ball valve between the steamer and the Autodrain valve to provide a shut-off while the drain valve or piping is disconnected for maintenance.*

### DIAGRAM 4: TYPICAL DRAIN INSTALLATIONS



## SECTION 3A: PLUMBING A SINGLE GENERATOR

### MATERIAL (Locally available)

- (or 3/4) inch copper pipe for the tank drain See note in Section 2.
- Fittings for drain as required
- Pipe thread compound or teflon tape

1. If the kit is being installed on an existing Generator, it will be necessary to remove enough drain plumbing to install the motorized drain valve. See Diagrams 1, 2 & 3.
2. If this is multiple steamer system, use one Autodrain on each steamer.

### IMPORTANT

Detailed drain connection information is in the Amerec 4211-1551 Installation Instructions packed with the AK Steam Generators. The instructions must be followed to assure proper drain operation.

### IMPORTANT

If additional drain valves or automatic drain valve kits are required, or if you have a steamer with a 1/2" drain outlet, contact Technical Support 1-800-363-0251 or 1-425-1120 or at Support@amerec.com

### IMPORTANT

All Generator plumbing must be installed so that the valve motor may be removed to clear the element service clearance area shown in diagram 2.

2. Install the 4" nipple to the tank. Attach the motorized drain valve to the nipple. The drain valve should be upright and level. See diagram 1. If installing a service shut-off ball valve (per diagram 3), mount it to the 4" nipple and add a nipple between the shut-off and the Autorain, leaving enough room to set the cut-off valve to fully open.

### IMPORTANT

The ball valve does not have directional flow. Do not tilt over 45 degrees.

3. Run a copper drain line from the motorized drain valve outlet to a gravity flow drain. **Do not run the drain uphill.** The drain must be connected in accordance with local and national codes. Seal all threaded fittings.

### IMPORTANT

All motorized drain valve outlets must be within 6 ft (1,8 m) and one 90° bend of the site gravity drain.

## SECTION 4: MOUNTING THE DRAIN VALVE'S MOTOR

The drain valve is designed so its motor may be easily removed to facilitate installation and service.

### Old style motor (diagram 5):

- Before removing or installing the motor, make sure the lever (used to manually close the valve for service) is not latched open.
  - To remove the motor, turn it carefully to the left until it stops then lift straight up.
  - To reinstall the motor, carefully set the motor onto the valve's shaft, set the motor down onto its mounting posts, then turn the motor to the right until it locks.
- If the motor is not properly secured in place, the valve may leak or fail to operate.***

### New style motor (diagram 6):

- To remove the motor, press the wire loop below the end of the motor to release it then lift straight up.
  - To reinstall the motor, carefully set the motor onto the valve's shaft, press the wire loop below the end of the motor, then set the motor down onto its mounting posts and release the loop. Check to be sure the motor is firmly locked to the valve.
- If the motor is not properly secured in place, the valve may leak or fail to operate.***

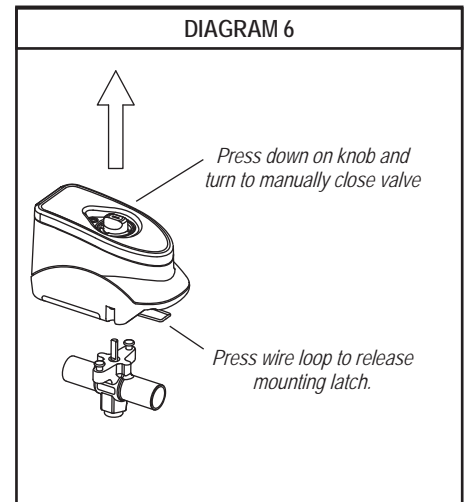
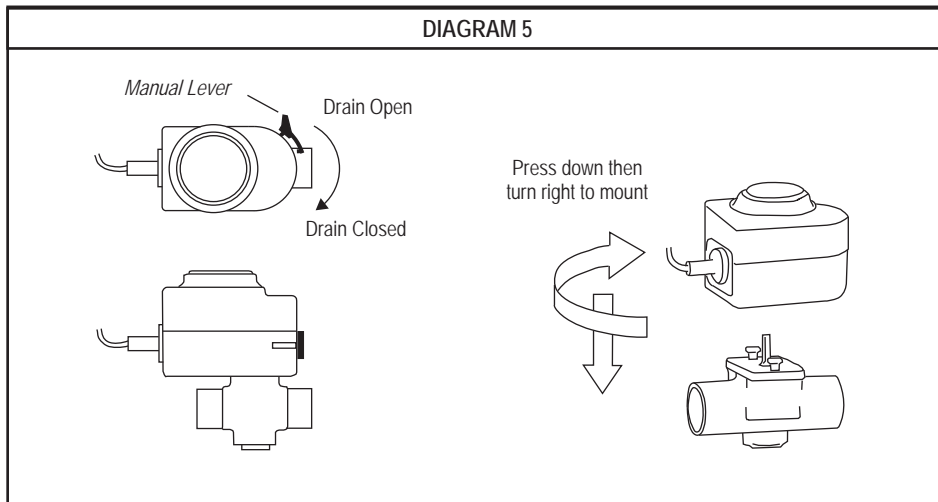
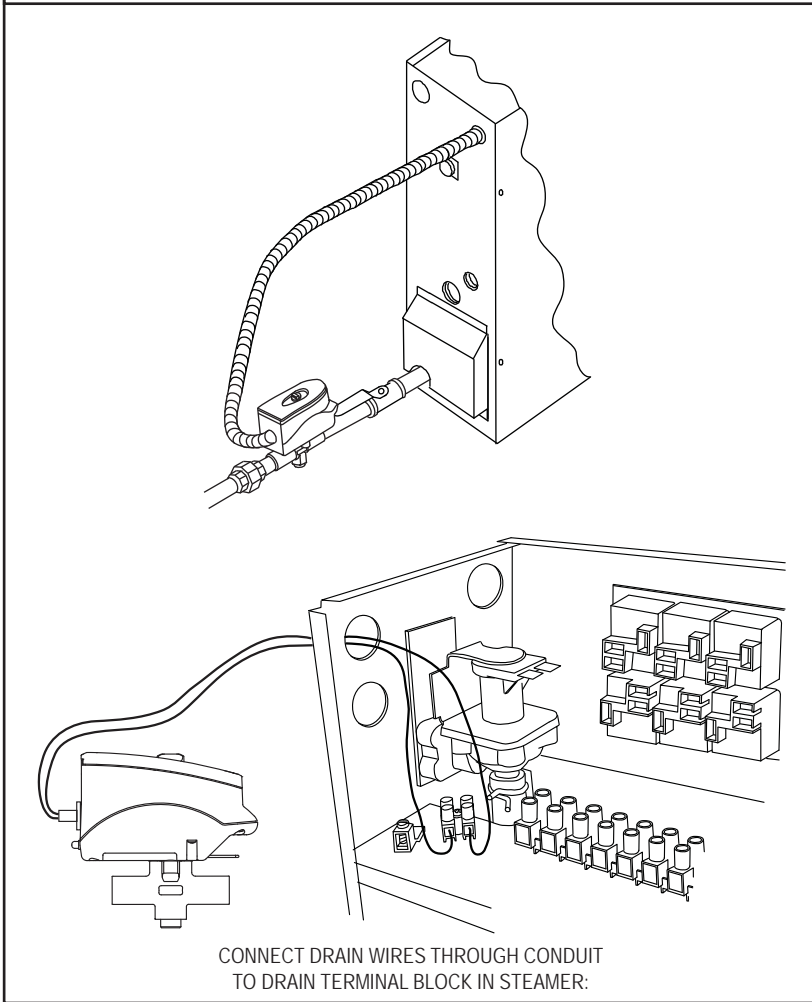


DIAGRAM 7



## WARNING

*All electrical supplies to the Steamer should be connected before and during installation of this kit.*

*User Shock Hazard! 208-240V wires attached to this Option must be routed per these instructions.*

*User Shock Hazard! If existing wiring is disturbed assure that the final installation conforms with the steamer wiring diagram.*

*Conduit must be used when installing drain valve to connect the valve to ground.*

## SECTION 5: WIRING

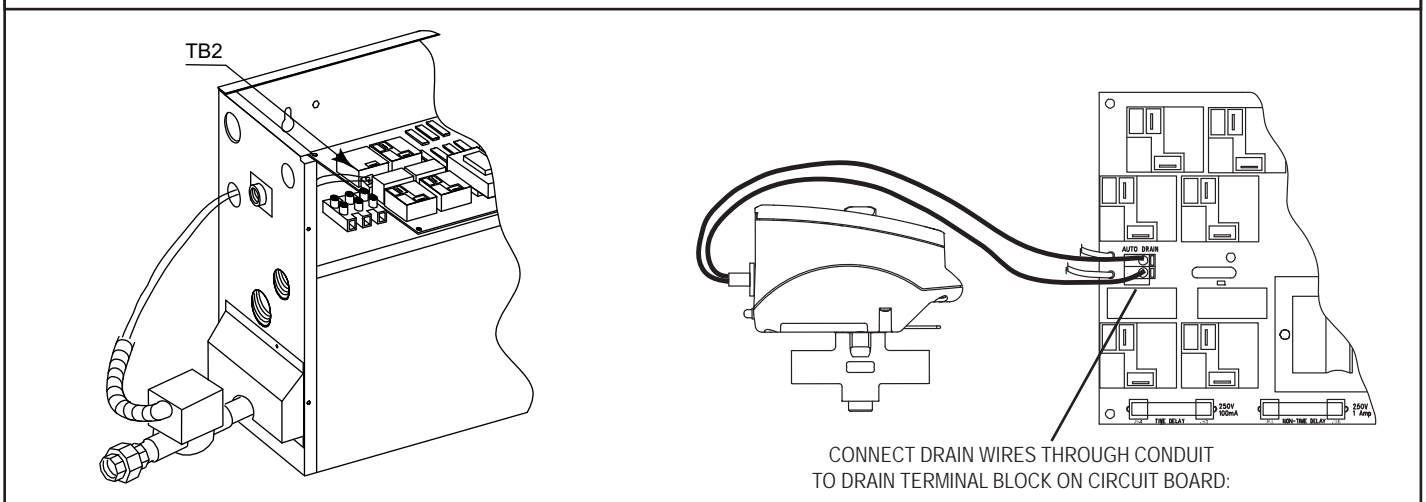
For New AK Steamers:

1. Route the drain valve wires through conduit to a knock out in the upper right corner of the steamer as shown in diagram 1.
2. Route the wires into the drain terminal block on the steamer shelf. See diagram 7

For earlier model AK/3K and AG/3G steamers:

1. Route the drain valve wires through conduit to a knock out in the upper right corner or a knockout just above the shelf on the left side of the pipe end of the steamer. See diagrams 7 & 8
2. Route the wires into the drain terminal block, TB2, on the steamer circuit board. See diagram 8

DIAGRAM 8



## SECTION 6: OPERATIONAL TEST

1. Assure power and water are on.
2. Turn on the Generator(s) using the owner's control. Allow the tank(s) to fill completely. Adjust the bath temperature to a point at least 10°F (6C) above the current steam room temperature to ensure the steamer begins heating the water.
3. Turn off the Generator(s) using the owner's control.
4. Approximately 25 minutes after the steam bath stops, the drain will open and close a few times and water will be added to the generator as needed to cool the water and drain the tank; this could take up to 15 minutes. Once the drain cycle is complete, the tank will remain empty until the next bath. No water should come out the steam head.

**The unit is now ready for operation.**

## SECTION 7: TROUBLESHOOTING GUIDE

There are no user serviceable parts in the Generator. All repair should be performed by a qualified service person. For additional assistance or the factory authorized service person nearest you call Technical Support at 1-800-363-0251. The Troubleshooting Guide below is meant as a general aid only. Follow ACTION TO BE TAKEN in order until the problem is resolved.

NOTE: *Make sure the motor is in the fully closed position and not sticking against an obstruction.*

SYMPTOMS	PROBABLE CAUSES	ACTION TO BE TAKEN
Drain Valve Leaks	Motor not secured to valve or Valve part way open or Debris in valve or Faulty PCA (Circuit Board)	Remount motor per section 4  Clean Valve  Check voltage to drain valve (check wire to wire). If no voltage is present, check 1A fuse on PCA If fuse is good, PCA may be faulty
Water does not run out the drain	Manual drain valve closed or Valve or drain piping plugged	Make sure any manual valves in the drain piping are open  Clean outlet, valves and piping .
Water runs out steam outlet during drain cycle	Faulty PCA	PCA or other steamer parts faulty.
Water runs out the drain while the steam bath is turned off	Water valve leaking or stuck open	<i>Contact Technical Support for assistance</i>

*for further assistance, contact us at*

**amerec**

PO Box 2258  
Woodinville, WA 98062

Phone: 1-800-363-0251  
1-425-951-1120  
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