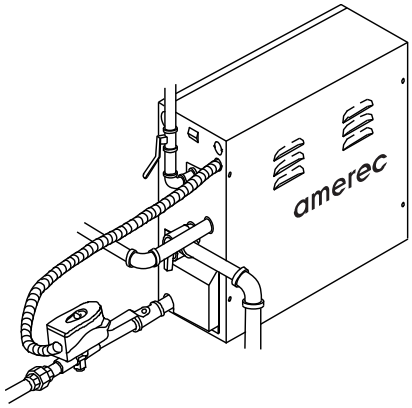
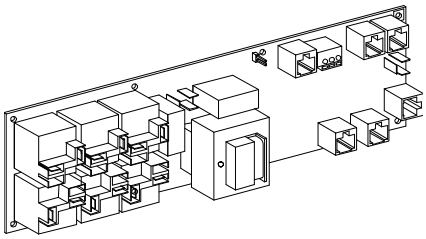
amerec AK Steam Generator PCA Replacement Instructions

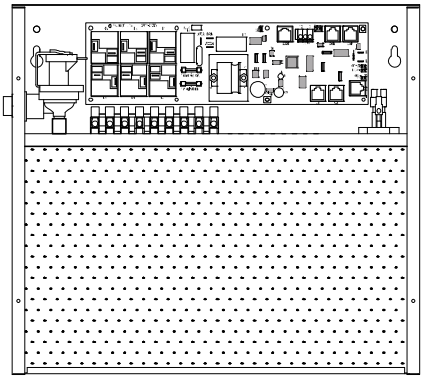
CAUTION, DANGEROUS VOLTAGE PRESENT!

Before proceeding shut off incoming power at the breaker, fuse box or power disconnect! Simply turning steamer off will not be safe.

These simple steps will help make replacing the Printed Circuit Assembly (PCA) a quick, safe and successful task.







Remove your Printed Circuit Board (PCA)**:**

Step One: Turn all steamer power off at breaker, fuse box or power disconnect.

Step Two: Remove the large outside cover from the steam generator.

Step Three: Remove all of the wires from the Printed Circuit Board (PCA). *Note where the wires were connected so they can be connected to the replacement board later*. Leave the black, white and blue wires connected to the level probe but disconnect them from the PCA.

Step four: Remove all temperature sensor and control cables from the PCA.

Step five: Carefully remove the 8 screws with lock washers which hold the board on the back of the enclosure. *Save the screws and lock washers for installing the new PCA*.

Install your new PCA

Step six: Hold your PCA in place while you start two screws with lock washers to hold the board in the enclosure. Install the rest of the screw (with lock washers) and tighten all screws until snug. Do not over tighten.

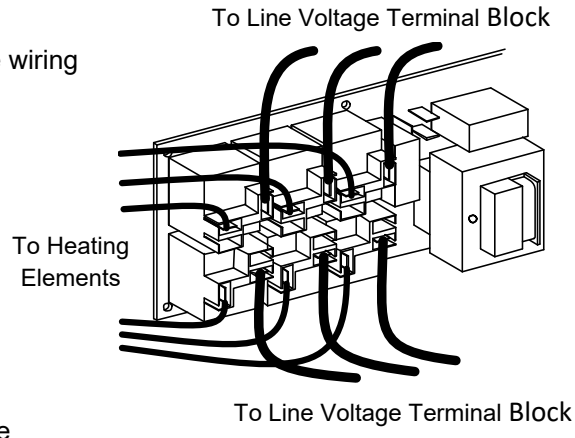
Step eight: Once the PCA is firmly mounted, follow your notes and the appropriate wiring diagram (provided) to reattach all wires and cables.

See the wire diagrams to check your water and drain valve connections refer to the notes on the next page for more connection details.

Step nine: Make sure the option jumpers at the right end of the PCA are set the same as on your old PCA.

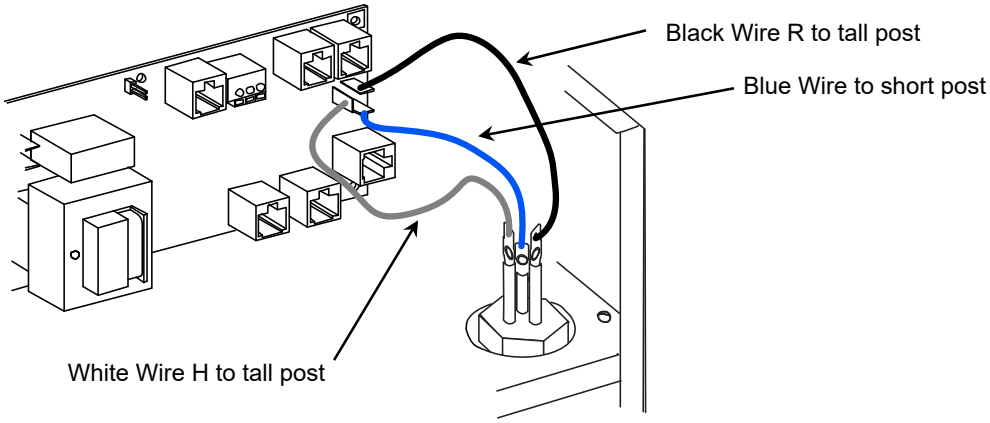
Once the PCA is firmly mounted, follow your notes and the appropriate wiring diagram (provided) to reattach all wires and cables.

IMPORTANT: MAKE SURE ALL WIRE CONNECTIONS TO THE RELAYS ARE TIGHT. LOOSE WIRES CAN OVERHEAT AND DAMAGE THE WIRING OR RELAYS!



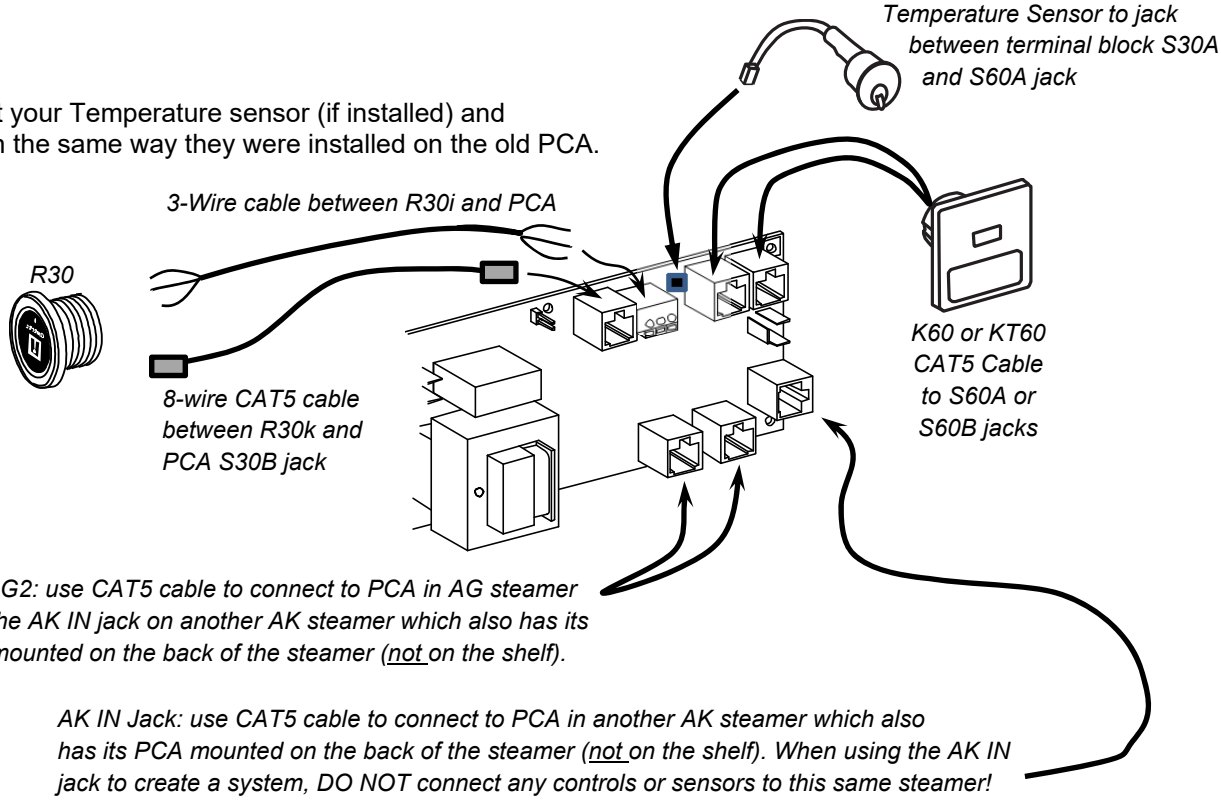
Water Level Probe

Connect the PCA to the level probe. NOTE: when replacing wires on the water level probe, the blue wire must go on the shortest of the three posts and the black and white wires attach to the two higher posts.



Controls

Reconnect your Temperature sensor (if installed) and controls) in the same way they were installed on the old PCA.

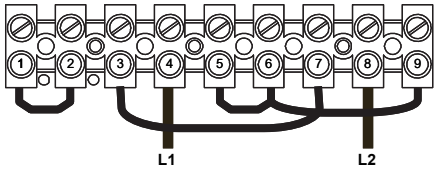


Model	WATTS 208V
AK4.5	4507
AK7.5	7511
AK11	11267
AK14	13576

Model	AMPS 1 PhZ 208V	
AK4.5	22	
AK7.5	36	
AK11	18 & 36	*See Note* (2)
AK14	24 & 42	*See Note* (2)

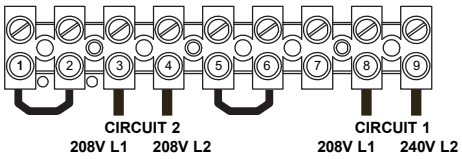
Model	AMPS 3 PhZ 208V
AK4.5	14
AK7.5	21
AK11	31
AK14	38

208V 1 phz
AK4.5, AK7.5, AK11
North America

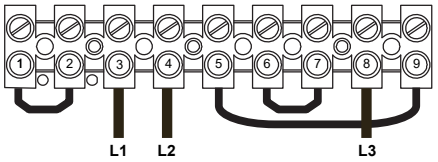


208V 1 phz
AK14 2-Circuit
North America

See Note **(2)**



208V 3 phz
AK4.5 - AK14
North America



Notes:

(1) Use only copper wire rated 75°C or better

(2) AK11 and AK14 single phase require two feed circuits.
Circuit 1 drives one element and the controls and is the lower amperage circuit.
Circuit 2 drives two elements and is the higher amperage circuit.

208V Models

AK STEAMER FIELD WIRING

Model	WATTS 208V	230/400V	240/415V
AK4.5	3380	4133	4500
AK7.5	5633	6888	7500
AK11	8262	10102	11000
AK14	10516	12858	14000

Model	AMPS 1 Phase 208V	230V~N	240V
AK4.5	16	18	19
AK7.5	27	30	31
AK11	40	44	46
AK14	18 & 33	20 & 36	21 & 38

See Note (2)

Model	AMPS 3 Phase North America 208V	240V	International (V~ 3N) 400V~N3	415V~N3
AK4.5	9	11	6	6
AK7.5	16	18	10	11
AK11	23	26	15	15
AK14	29	34	19	20

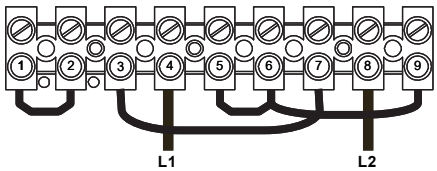
Notes:

(1) Use only copper wire rated 75°C or better

(2) AK14 single phase requires two feed circuits.
Circuit 1 drives one element and the controls and is the lower amp circuit.
Circuit 2 drives two elements and is the higher amp circuit.

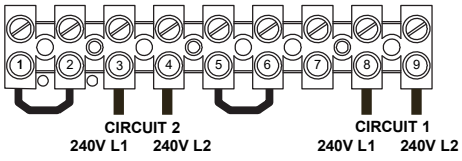
240V Models

208 to 240V 1 phz
AK4.5,AK7.5 & AK11
240V Models
North America

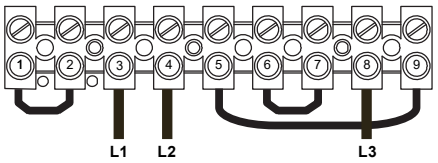


208 to 240V 1 phz
AK14 (*use 2-Circuits*)
240V Models
North America

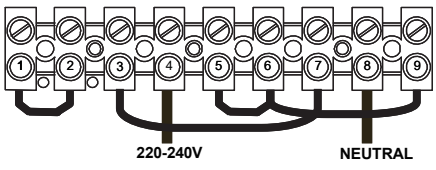
See Note **(2)**



208 to 240V 3 phz
AK4.5 to AK14
240V Models
North America

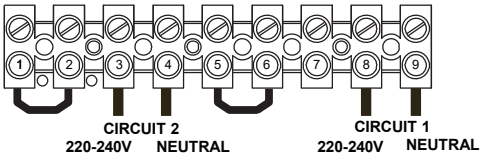


220 to 240V~N
AK4.5,AK7.5 & AK11
240V Models
International

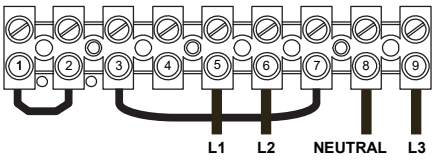


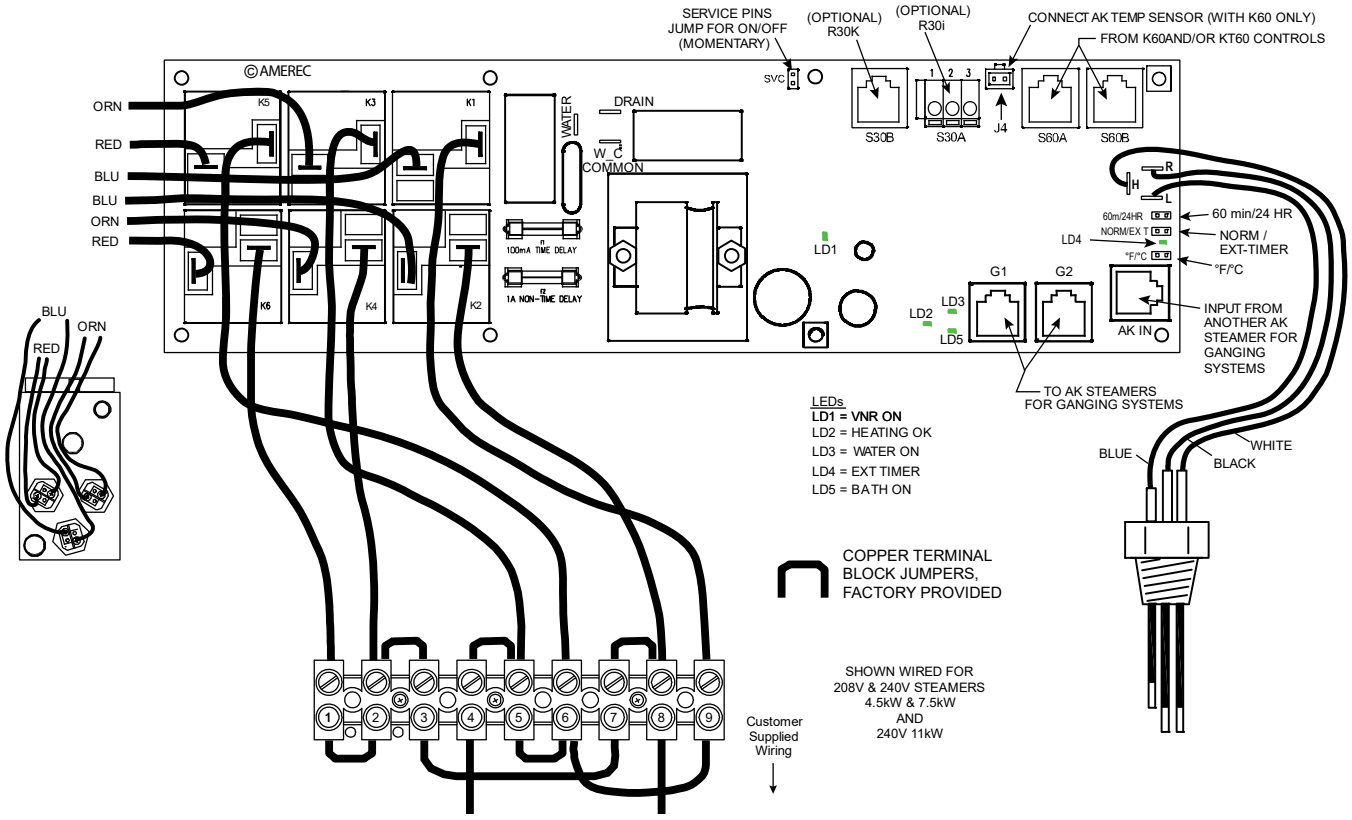
220 to 240V~N
AK14 (*use 2-Circuits*)
240V Models
International

See Note **(2)**



380 to 415V~3N
AK4.5 to AK14
240V Models
International





SEE FIELD WIRING DIAGRAMS