

“THERMOSTATIC” MODELS

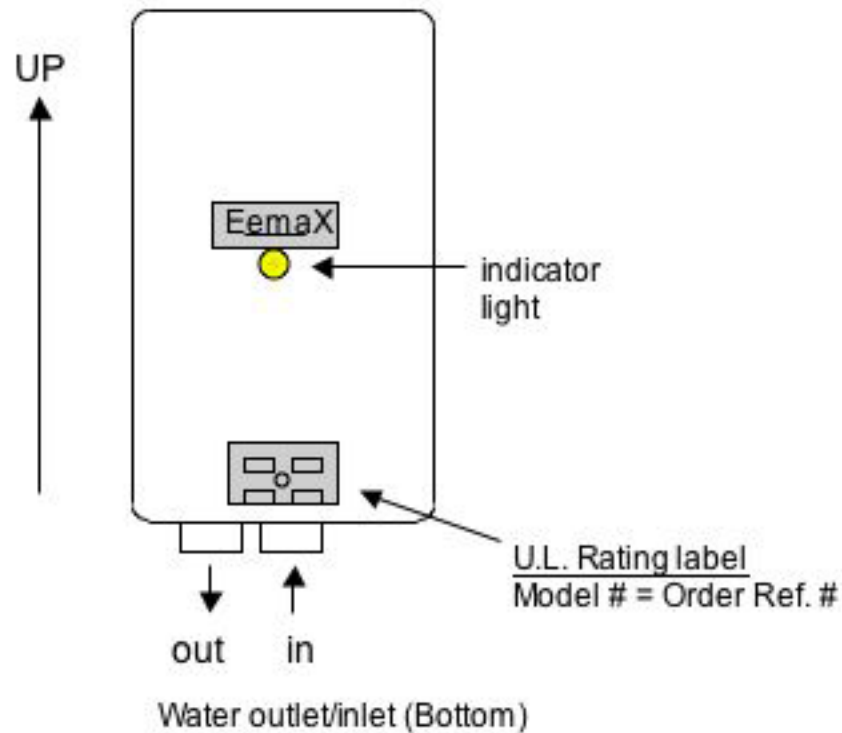
INSTRUCTIONS FOR TROUBLESHOOTING YOUR EEMAX WATER HEATER

Everything you need to know about troubleshooting your Eemax unit is contained in this fully illustrated guide. If you still have problems after reading and carrying out the instructions in this manual then please call the Eemax technical support department on the toll free number below and we will be happy to help.

PHONE TOLL FREE- 800/543-6163

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EX-T MODELS



This is how your Eemax "EX-T" model should look when mounted correctly on the wall.

Any other mounting configuration is wrong and the unit will not work!

Check to see if you have an "EX-T" model on the U.L. rating label on the front cover of your Eemax unit.

If the units are mounted correctly and still do not produce hot water then have a look to see if the indicator light comes on when the hot water faucet is fully opened.

If the light comes on turn to page 5

If the light does not come on turn to page 3

If the light flashes once very quickly as you turn the water on turn to page 7


PAGE THREE

The Indicator light does not come on (when the hot water faucet is opened):

STEP ONE:

Is the circuit breaker switched on at the breaker panel?

YES → Go to Step two

NO →  run water at the faucet for a couple of minutes before turning on the breaker. Turn on breaker.

STEP TWO:

The unit will not switch on unless enough water is flowing through the heater.

You will need a flow rate of at least 0.55 gallons per minute (over 1/2 gpm). Some models require a higher flow rate, see chart below for specific model flow rates. Measure the flow rate.



Take a 1 gallon "milk" container and using only water from the hot outlet time how long it takes to fill. To calculate your flow rate divide the number of gallons your container holds (in this case we have one gallon) by the time taken to fill the "milk" container.

e.g. If it takes 1 1/2 minutes to fill the container then the flow rate would be
1 divided by 1 1/2 = 0.66 GPM

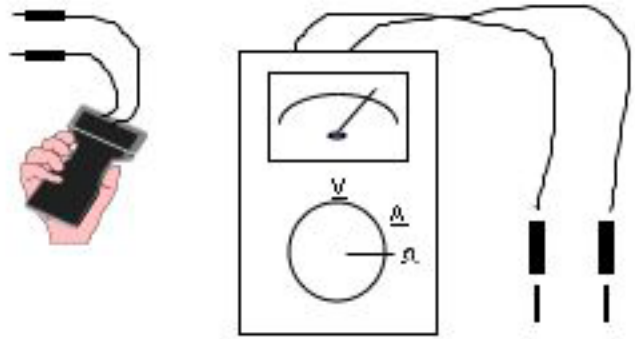
Open all water valves as much as possible. If the indicator light still does not come on then proceed to Step 3.

MODEL TYPE / ORDER REF#	SWITCH ON FLOW RATE
EX 55T, EX 60T, EX 65T	0.55 GPM
EX 75T, EX 80T	0.65 GPM
EX 95T, EX 90T, EX 100T	0.75 GPM

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STEP THREE:

You will require a multimeter / voltmeter to carry out the next tests.



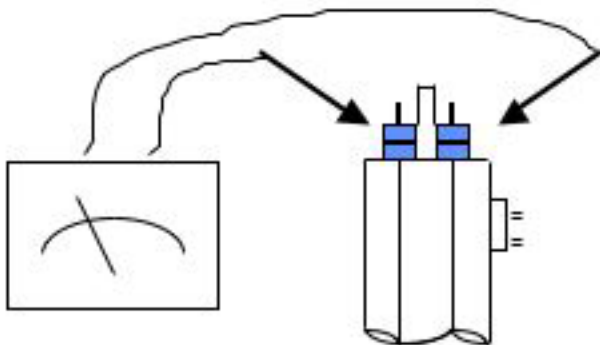
WARNING!
**TURN OFF THE BREAKER BEFORE PROCEEDING WITH
THE NEXT TESTS**

Set the meter to the single Ohms setting
Do not measure continuity this will not work.



The Ohm symbol
(The upside down horse shoe)

Remove the heater cover, at the end of the black heater body there are two threaded silver rods with brass nuts on them (where the wires go). Take a reading of the ohms value between these two rods.



If the reading is less than 20 ohms on the "Rx 1" scale or the "Rx 10" scale the element is good, if it is much greater e.g.... 10,000 ohms or if you get a reading on the "Rx 1K" scale then you must replace the element (contact Eemax).
Tel : 1-800-543-6163 for replacement elements. (Please note down the resistance value if you need to contact Eemax; This will be very useful to us.)

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The Indicator light comes "on" but there is no heat or the water temperature is low:

STEP ONE:

The water flow is too high. Reduce the water flow using the faucet, with experimentation you should notice an increase in temperature.

STEP TWO:

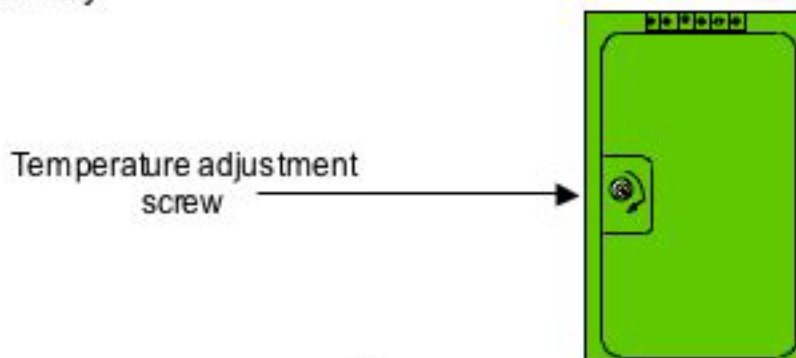
Make sure that the unit is connected to the voltage supply specified on the U.L. rating label on the front cover of the heater and no other.

STEP THREE:

Take a resistance reading of the element. To do this follow instructions on page four.

STEP FOUR:

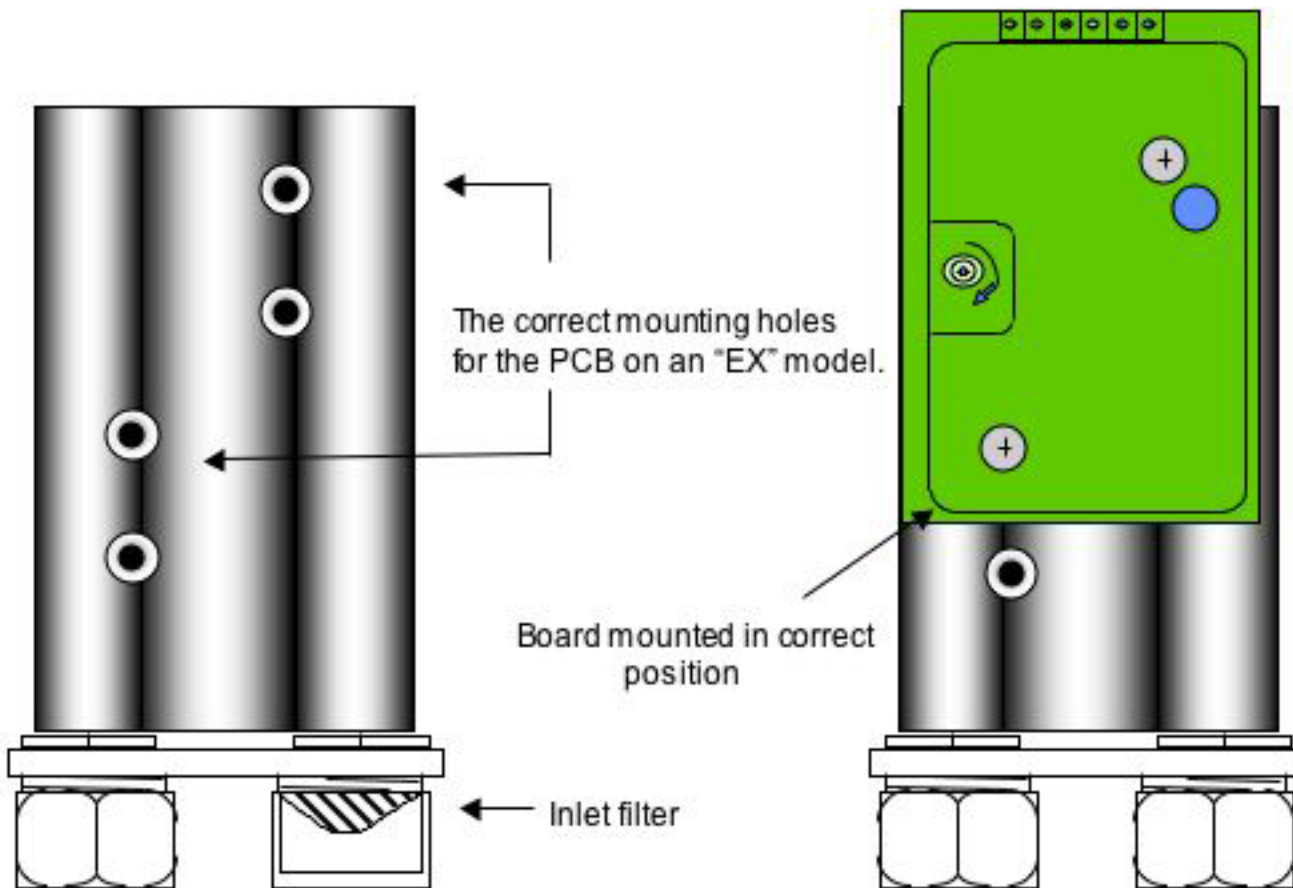
If the light is pulsing and the temperature is too low, try turning the temperature adjustment screw on the printed circuit board clockwise. Turn the screw very gently, the maximum position is approximately 5 O'clock. At this point the light should stop flashing and should be "on" continuously.



Other possible solutions:

STEP ONE:

Make sure the printed circuit board is mounted in the correct position. This is the top set of mounting holes (see diagram below). Failure to mount the board in the correct position will cause element burn out and may cause further damage to your heater. (This board may have been incorrectly moved when serviced previously.)



STEP TWO

Inspect the inlet filter (see diagram above for location). Make sure it is free from debris, pipe dope or anything else which may hinder water flow.

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WARNING!
**TURN OFF THE BREAKER BEFORE PROCEEDING WITH
THE NEXT TESTS**

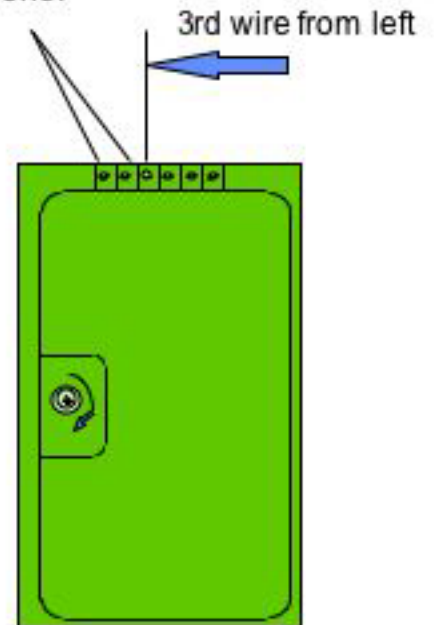
CHECKING THERMOSTATIC CIRCUIT BOARD

If the LED on the circuit board flashes just once, very quickly when the water is switched on then:

- 1) Turn off the power to all units which may feed hot water to this unit, e.g. other Eemax pre-heating units.
- 2) Ensure that this water heater is fed only with cold water. This unit must not be fed with pre-heated water when doing this test.
- 3) There are six thin leads that come off the printed circuit board. Remove the third wire from the left coming off the top of the PCB (as indicated below) and tape off the end with insulating tape.
- 4) Run water from hot water faucet for 30 secs and then switch power on to the heater once more.

With the water flowing:

If the light comes on steadily then call Eemax and we will replace the printed circuit board. (Part# EX 100)
If the light still does not come "on" call Eemax and review what you have done.



WARNING

Do not use this heater with any warmed water feed if the light has come on steadily having performed the above test. The heater in this state must only be fed with cold water.

IF HAVING CARRIED OUT ALL THE TESTS LISTED ABOVE YOUR HEATER
IS STILL NOT FUNCTIONING PLEASE CALL THE TECHNICAL SUPPORT LINE
AT EEMAX : 1-800-543-6163

PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE :

- 1) ORDER REF. NUMBER (on U.L. rating label on the front cover of unit.)
- 2) SERIAL NUMBER (inside unit on backplate)