ECOSMART TROUBLE SHOOTING GUIDE MODELS ECO POU 3.5 - 6



THIS STEP BY STEP TROUBLE SHOOTING GUIDE IS DESIGNED FOR THE INSTALLER IF ANY ISSUES ARISE WITH TANKLESS WATER HEATER.



Step by Step Trouble Shooting Guide

This Guide is for Use by Qualified Electrical Professional

This Trouble Shooting Guide will take you through simple steps to determine any problems or issues with unit. This Guide takes you through a sequence of steps that MUST be followed. Skipping around might not determine the exact problem, therefore you MUST follow the sequence.

All Ecosmart units have a simple design and are very easy to check with the use of a MULTI CLAMP METER able to measure both Voltage and Amperage.

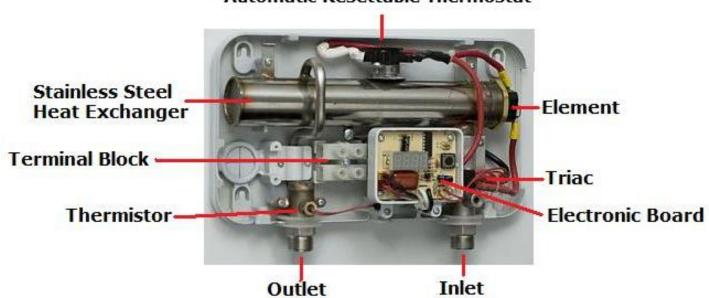
Below is a picture of an open view of an ECO POU 3.5-6 ECOSMART TANKLESS WATER HEATER.

Follow the steps as described and write down the readings /results on the back pages so when contacting Technical Support you have the information in hand.



ECO POU 3.5@110V ECO POU 6.0@208V

Automatic Resettable Thermostat



You can contact our Technical Support at 877-474-6473 Mon-Fri 8:00 am-5:00 pm. EST

DISCONNECT ALL POWER TO UNIT BEFORE REMOVING COVER.

ELECTRICAL CONNECTION

POU ARE SUPPLIED WITH A 2 PRONE TERMINAL BLOCK AND ATTACHED CABLES.

SUPPLIED CABLES MUST BE CONNECTED TO AN INDEPENDENT SINGLE OR DOUBLE POLE BREAKER DEPENDING ON THE MODEL.

IN ORDER TO MAKE SURE THE WIRING IS CONNECTED CORRECTLY PERFORM THE FOLLOWING TEST.

ONCE THE CABLES HAVE BEEN SECURELY ATTACHED TO BREAKER TURN POWER ON TO UNIT. MEASURE THE VOLTAGE GOING TO TERMINAL BLOCK.

IF POWER GOING TO THE UNIT IS NOT CORRECT, THE UNIT WILL NOT OPERATE CORRECTLY, SO IT IS IMPORTANT TO PERFORM THIS TEST FIRST, BEFORE PROCEEDING.

IF NO VOLTAGE THE PROBLEM IS NOT AT THE UNIT, BUT AT YOUR ELECTRICAL PANEL, OR BREAKERS.

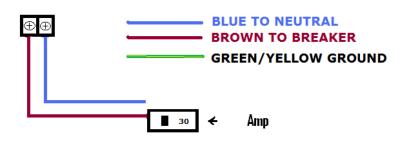
NOW THAT WE HAVE VERIFIED THAT THE ELECTRICAL CONNECTIONS ARE CORRECT, LETS CONTINUE.







POU ELECTRICAL 3.5 @ 120V



POU ELECTRICAL 6KW @ 208v





VERIFYING SAFETY THERMOSTATS

THE FOLLOWING STEP WILL VERIFY POWER IS GOING THROUGH THE SAFETY THERMOSTATS.

IF THE THERMOSTAT IS DAMAGED THE HEATING ELEMENT WILL NOT FUNCTION OR HEAT UP.

TO VERIFY THE THERMOSTAT YOU NEED TO HAVE THE BREAKER TURNED ON. YOU WILL PERFORM THIS TEST WITH YOUR VOLT METER.



THIS TEST WILL VERIFY THAT ELECTRICAL POWER IS GOING TO THE BOTTOM AND ACROSS THE THER-MOSTAT.

USING YOUR VOLT METER YOU NEED TO PLACE ONE PROBE AT THE BOTTOM METAL PART OF THE THER-MOSTAT AND THE OTHER PROBE NEEDS TO BE GROUNDED.

THEN PERFORM THE SAME TEST ON THE TOP PART OF THE THERMOSTAT.

ALL READING ON THIS TEST SHOULD BE IN THE 110-115V RANGE.

AGAIN, YOU MEASURE CURRENT GOING INTO BOTTOM OF THERMOSTAT TO GROUND AND THEN THE TOP PART OF THERMOSTAT TO GROUND TO ENSURE THE THERMOSTAT IS IN GOOD WORKING CONDITION.

VERIFYING HEATING ELEMENTS

THE FOLLOWING STEP WILL VERIFY THE HEATING ELEMENTS ARE WORKING CORRECTLY.

THE HEATING ELEMENTS WILL ONLY DRAW VOLTAGE WHEN HOT WATER IS BEING USED . WHEN HOT WATER IS DEMANDED THE ELEMENTS WILL INSTANTLY DRAW VOLTAGE.

THERE ARE TWO RED WIRES CONNECTED TO THE TOP OF THE ELEMENT. IN ORDER TO CHECK IF THE ELEMENT IS WORKING YOU MUST TURN ON A HOT WATER TAP. THIS WAY THE ELEMENTS WILL DRAW VOLTAGE AND CAN BE CHECKED.

ONCE YOU HAVE WATER RUNNING THROUGH THE UNIT THE LED DISPLAY WILL LIGHT UP AND DISPLAY THE TEMPERATURE SETTING ON THE UNIT. USING YOUR VOLT METER-PLACE ONE PROBE ON ONE SCREW AND THE OTHER PROBE ON THE OTHER SCREW LOCATED ON THE TOP OF THE ELEMENT. CHECK WHAT VOLTAGE YOU ARE DRAWING.

WHEN MEASURING VOLTAGE ACROSSS THE TOP OF THE ELEMENTS YOU WILL GET A VOLTAGE READING.



REMEMBER- YOU MUST HAVE WATER RUNNING IN ORDER FOR THE ELEMENTS TO ACTIVATE AND DRAW POWER.

IF YOUR LED DISPLAY IS LID AND YOU HAVE WATER RUNNING THROUGH THE UNIT AND HAVE 0 VOLTAGE READING WHEN MEASURING WITH PROBES ON EACH SCREW -PERFORM THE SAME TEST, BUT THIS TIME PLACING ONE PROBE ON ONE SCREW AND THE OTHER PROBE TO GROUND. DO THE SAME ON THE OTHER SCREW. IF YOU ARE GETTING VOLTAGE READINGS WHEN TESTING ON ONE SCREW TO GROUND BUT NO VOLTAGE WHEN MEASURING FROM SCREW TO SCREW YOUR ELEMENT MIGHT BE BAD AND MUST BE REPLACED.

AMPERAGE DRAW

THIS TEST IS TO MEASURE AMPERAGE DRAW ON ELEMENT. THIS IS DONE BY USING THE CLAMP PORTION OF THE METER AND CLAMPING AROUND THE RED WIRE THAT GOES TO HEATING ELEMENT.

WHILE WATER IS RUNNING GET THE AMPERAGE DRAW FOR ELEMENT.

IT IS IMPORTANT TO FOLLOW THESE STEPS AND WRITE DOWN THE READINGS/RESULTS.

THESE STEPS WILL ASSIST IN A QUICK RESOLUTION TO ANY ISSUES YOU MIGHT HAVE WHEN CONTACTING OUR TECHNICAL SUPPORT DEPARTMENT.

THE LAST PAGE IS DESIGNED TO DOCUMENT ALL READINGS

SHOULD YOU HAVE ANY QUESTIONS BEFORE , DURING OR AFTER INSTALLATION YOU CAN CONTACT OUR TECHNICAL SUPPORT DEPARTMENT TOLL FREE AT 877-474-6473

Email: info@ecosmartus.com

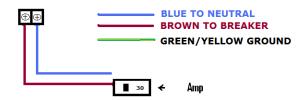
Or visit our web site at

www.ecosmartus.com



VOLTAGE AT TERMINAL BLOCK L1 L1

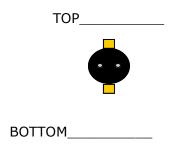
POU ELECTRICAL 3.5 @ 120V



POU ELECTRICAL 6KW @ 208v



VOLTAGE AT THERMOSTATS



VOLTAGE AND AMPERAGE AT HEATING ELEMENTS

SCREW/SCREW

AMPS _____