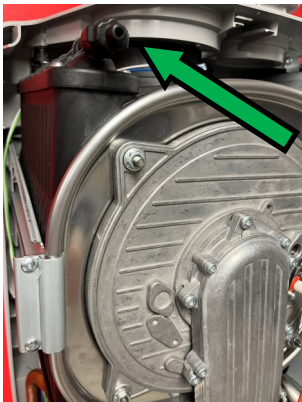
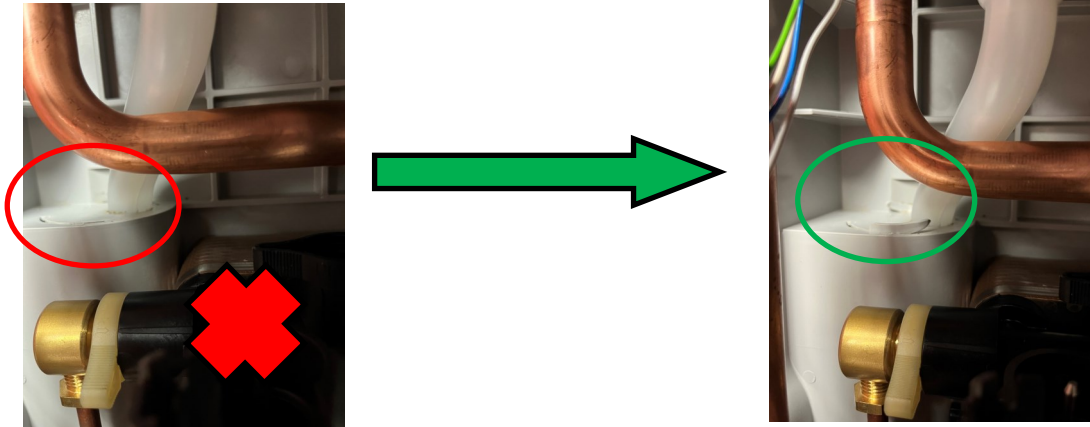


Eco King Boiler Start up guide



Fill the condensate cup- The boiler will automatically fill the condensate cup while running as it begins to product condensate, but it is good practice to fill it before starting the boiler.

Install the condensate cup- Ensure that the condensate cup is fully installed, and the tabs are locked into place. Make sure the white pipe from the bottom of the heat exchanger to the condensate cup goes beside the drain hole in the cup, not into it.

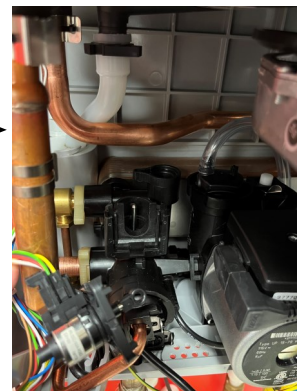


Open the auto fill- Fill the boiler system to 20 PSI and set the auto fill to 20 PSI also. Once the system is filled, plug in the boiler.

De-Aerate- there will be a 5 Min count down on the screen when the boiler is plugged in. This is for de-aeration. Purge the air from the top of the heat exchanger during the 5 min countdown. Ensure to not get the PCB wet. Use a bucket under the air vent or a hose to a drain while purging. Manual air vent location shown in picture to the left.

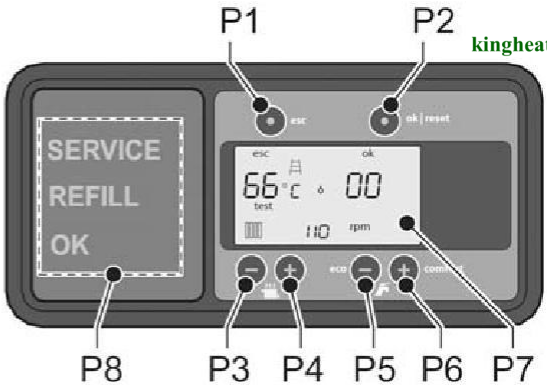
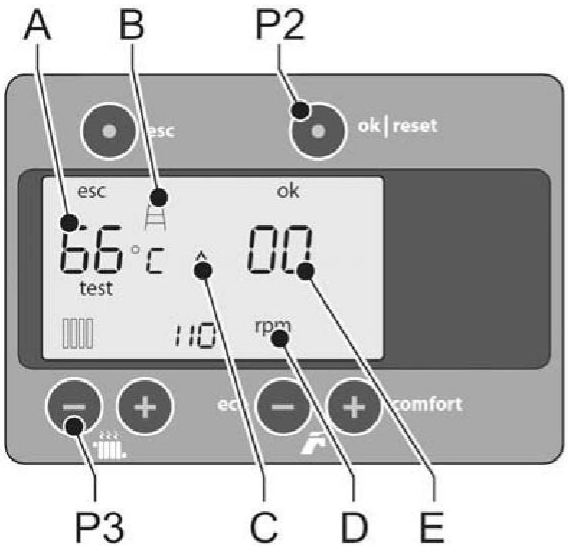
Check Gas-Check the gas pressure on the bottom right port of the gas valve. Static pressure should be between 4-13 in.WC.(7in.WC is typical). Call for hot water and check gas pressure with a manometer to see that there is a maximum 1.5in WC drop from static to working. If pressure drops more then 1.5", the unit has in sufficient gas.

Calibration-ensure a heat and hot water demand is on. Remove the 3 way valve motor and put the cover on the boiler. See picture below for reference to 3 way valve removal.





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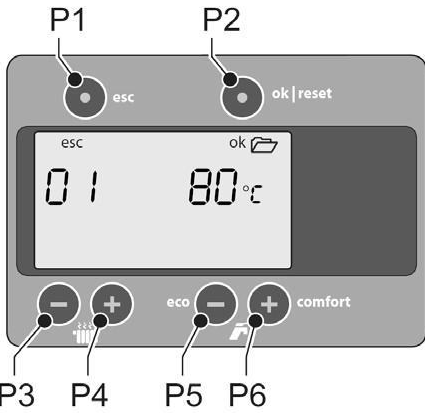


To perform automatic calibration (hold top left (P1) and bottom left button (P3) at same time until you see “test”). Let go and boiler performs auto **calibration (this step is essential)**. Boiler will stop calibration automatically when it is done. You will know it is finished when approximately 15 minutes after beginning, “test” will leave the screen by itself. You do not have to touch any buttons.

Once Test leaves the screen, Press and Hold P4 and P4 until the service menu appears. Scroll using P3 to parameter 32. CAL should appear and you can press P1 to get back to the main screen. *If - - - Appears then the boiler did not complete the calibration and the process will need to be repeated.

Changing Parameters-

1. Go to the installer level:
 - a. Simultaneously press [P1] and [P2] for 5 seconds.
 - b. Put the number on the left side of the display to '08' with [P3] or [P4].
 - c. Press [P2] to confirm. You have accessed the installer level. A folder icon on top right of the screen indicates you are in installer level.
2. Press [P3] or [P4] to select the required parameter (index number). The index number is shown on the left side in the display (see the list below). The set value is shown on the right side in the display.
3. Press [P5] and [P6] to adjust the value.
4. Press [P2] to confirm. (moving to the next parameter without confirmation will not store the change made)



Adjust Parameter 00 (Central Heating Temperature) and Parameter 12 (DHW Temperature)

- *Central heating setpoint temp (setting 00) will be based on the output needed for the heating system. Recommend 120°F for in floor heat, 160°F for radiators and air handlers, 175°F for baseboard heaters
- *DHW temp should be set at a minimum of 10 degrees higher then the mixing valve setting (Ex. Mixing valve set to 120f, boiler DHWE temp set to 130f+)

Take the front cover off and re install the three way valve motor. Once complete put the cover back on the boiler.

Test that DHW works by opening a faucet.

Test that the thermostat calls on the boiler. There is an internal 3 min delay between a dhw demand and a call for heating before the boiler fires.