KESTON C40 C55

Users Instructions For C40, C40P, C55 and C55P Models

The Gas Safety (Installation And Use) Regulations: 1996 (as amended) impose certain statutory obligations on gas users. Further information regarding these regulations can be obtained from your Gas Supplier.

All gas appliances must be installed by competent persons by law in accordance with these regulations. Membership of CORGI is indication of such a competent person with regard to gas installation.

It is in your interests, and that of safety, to ensure that the appliance is installed correctly and that the law is complied with. Failure to do so could lead to a hazardous &/or potentially dangerous situation.

Introduction

These instructions should be carefully read to ensure safe and economical use of your boiler.
The Keston C40 and C55 are high efficiency central heating condensing boilers designed to provide central heating and indirect sanitary hot water supply. They are designed for use with fully pumped systems only. The C40 and C55 models are supplied for natural gas use only. The C40P and C55P models are supplied for LPG only.

Servicing

To ensure continual safe and efficient operation of the boiler it is recommended that the appliance be checked and serviced as necessary at regular intervals. Generally once per year will be sufficient. It is the law that any servicing must be carried out by a competent person.

NB: There are no user serviceable parts inside the boiler cabinet. The cabinet should only be removed by a qualified competent person.

Clearances

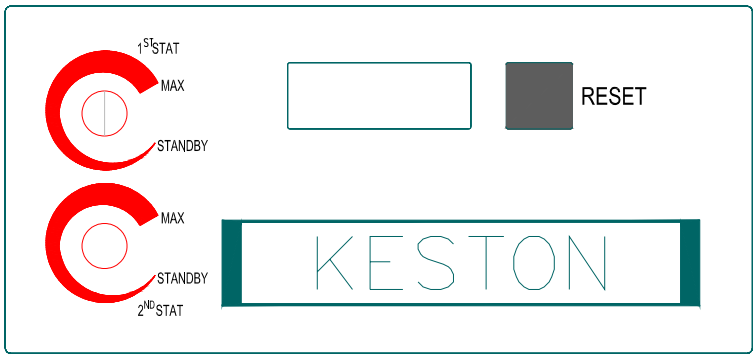
If fixtures are to positioned close to the boiler the following minimum clearances must be observed: Top : 150 mm, Bottom : 150 mm, Left : 25 mm, Right : 25 mm & Front : 305 mm. Extended clearance is required to the front to allow for access for servicing.

Cleaning

Normal casing cleaning only requires dusting with a dry cloth. To remove more stubborn marks wipe with a damp cloth and finish with a dry cloth.

Boiler Setup

1) Check that the gas supply from the gas meter is turned ON
2) Switch on the electric supply to the boiler and controls and set the heating controls to call for heat.



To Light The Boiler

The C40 and C55 boilers incorporate dual thermostats to allow two different zones to be connected to operate at two different temperatures. Generally the central heating zone is connected to zone 1 and the hot water cylinder to zone 2. You should ask your installer to advise whether your boiler serves one or two zones.

To set thermostat temperatures you must turn the relevant knob to the required position. As you turn the knob the display will change to either “c nn” or “d nn”, depending on the knob being turned. As the knob is turned the required temperature (the last two digits of the display) change. Set the knob to the position which gives the required temperature. When the knob is release the display, after a few seconds, will return to normal.

If the boiler detects whether zone requires heat the following sequence will occur:

1) The fan and pump will start inside the boiler and the display will indicate “1 nn” to show the boiler has started the first stage of the ignition sequence.
2) After 5 seconds the display will change to “2 nn” to indicate the spark ignition of the sequence has started.
3) After 3 seconds the display will change to “3 nn” for zone 1 and “4 nn” for zone 2, to show the boiler is now alight.
4) The boiler will adjust the output to best match the demands of the system. The last two digits of the display will continuously show the boiler temperature. The boiler control will allow the temperature to overshoot the setting by up to 5 degrees before shutting down. The standard display codes are as follows:

   0 nn Boiler in standby as no heat request from either zone 1 nn Boiler commencing ignition sequence

   2 nn Boiler generating spark ignition

3 nn	Boiler burning for zone 1
4 nn	Boiler burning for zone 2
5 nn	Temporary mode whilst boiler adjusts its internal settings
6 nn	Burner off because required temperature has been reached
7 nn	Boiler at end of heat request from zone 1
8 nn	Boiler at end of heat request from zone 2
A nn	Temporary mode whilst boiler adjusts its internal settings
9 nn	Boiler off due to unexpected problem. The boiler will attempt to re-fire from this mode. In this mode the display will alternately flash “9 nn” and “b xx” where the “xx” has the following meaning:

b 18	Boiler ran too hot, > 95^{O}C flow temperature
b 19	Boiler ran too hot, > 95^{O}C return temperature
b 24	Boiler circulating in reverse. Check external pump
b 25	Boiler rising in temperature too quickly. Check for system blockages
b 26	Low water pressure. Top up system pressure and check for leaks.
b 28	No signal from fan, possible stuck fan motor.
b 29	Fan running when not required.
b 30	Circulation too slow. Check system for blockages
b 65	Waiting for fan to start. Possibly stuck.

All of the above displays, up to “A nn” indicate normal boiler operation. Display “9 nn” indicates a delay in boiler operation but will not stop boiler operation.

Precautions

Care must be taken at all times to ensure that no blockage or obstruction is present in the condensate drainage line. In addition the air intake and flue exhaust terminals of the appliance must be free of obstruction at all times.

Frost Protection

The C40 and C55 have an integral frost protection thermostat. However, care should also be taken to ensure that any exposed pipework is adequately insulated to prevent freezing.

Error Codes

In the event of a fault causing a boiler shutdown the display will show an error message “E nn”.

Display	Description of fault
E 00	Flame detected when not expected. Check boiler earth and probe condition.
E 02	No ignition after restart. Check gas supply, gas valve operation and ignitor electrode spark generation
E 03	Gas valve faulty or not connected
E 04	Power has been reset whilst boiler was in lockout
E 11	Internal electronics error - rest or replace control box

E 18	Flow overheat - check water circulation
E 19	Maximum return temperature exceeded. Check circulation.
E 25	Flow temperature increased too quickly. Check water circulation.
E 30	Difference between flow and return temperatures too high. Check circulation.
E 31	Flow thermistor short circuit - check/replace connections/thermistor
E 32	Return thermistor short circuit - check/replace connections/thermistor
E 36	Flow thermistor open circuit - check/replace connections/thermistor
E 37	Return thermistor open circuit - check/replace connections/thermistor
E 44	Low water pressure

Gas Leak or Fault

If you suspect a gas leak turn off the appliance immediately, turn off the gas tap to the appliance and contact your local gas region without delay.
If you suspect a fault with the appliance it must not be used until the fault has been corrected by a competent person.

<u>In the unlikely event of a breakdown consult your Installer or Service Engineer and advise the fault display and description of fault.</u>

BENCHMARK INITIATIVE

As part of the industry wide “Benchmark” Initiative all C40 and C55 boilers now include a Benchmark Installation, Commissioning and Service Record Log Book. This log book should be completed by your installer at the end of the installation and commissioning process. The details of the Log Book will be required in the event of and warranty work being required. There is also a section to be completed after each regular service visit.

This log book should be kept in a safe place for the life of the boiler.

The boiler should be installed and serviced only by CORGI registered operatives. All CORGI registered Installers carry a CORGI ID card, and have a registration number. **Both should be recorded in your Benchmark Log Book.** You can check your installer by calling CORGI direct on 01256 372300.