JULY, 1991
THESE INSTRUCTIONS APPLY IN THE U.K. ONLY

These instructions are to be left with the user or at the gas meter

OCEAN *Style* OF

WALL MOUNTED, GAS FIRED COMBINATION BOILER FOR USE WITH NATURAL GAS ONLY

OPERATING INSTRUCTIONS FOR THE USER

Gas Safety (Installation and use) Regulations 1984:– It is the law that all gas appliances are installed by a competent person, in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution. It is in your own interest, and that of safety, to ensure compliance with the law.

For Technical help or for Service call ...

ALPHA HELPLINE

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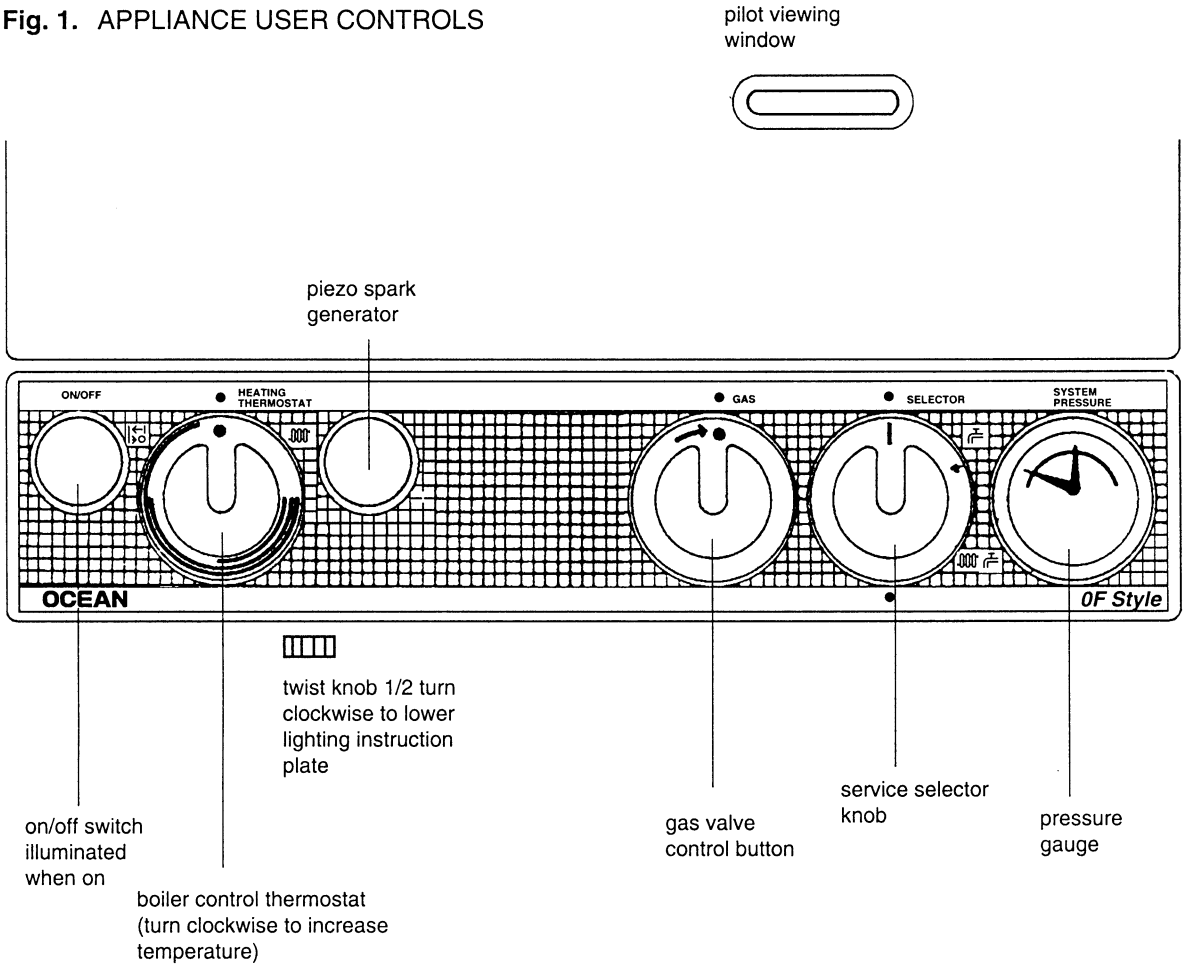
1. DESCRIPTION OF THE APPLIANCE

The Ocean 0F is a wall mounted gas fired combination boiler. It provides a domestic hot water and central heating service.
When the central heating service is not required the appliance can be set by the user to provide domestic hot water only up to a maximum output of 23.4 kW (80,000 Btu/h).
Hot water is made available almost instantaneously at the boiler but the final temperature and the time taken for hot water to reach a tap will depend upon the rate at which water is drawn off and the length of the service pipe between the appliance and a tap.
NOTE:- ADJUSTMENTS - SERVICING AND THE REPLACEMENT OF COMPONENT PARTS MUST BE CARRIED OUT BY A COMPETENT PERSON IN ACCORDANCE WITH THE GAS SAFETY (installation and use) REGULATIONS 1984.
Within the boiler, the services of central heating and domestic hot water operate independently; when there is a demand for domestic hot water this takes priority.
The services are controlled from a knob on the boiler control panel which may be set to domestic hot water only (summer condition) or domestic hot water and central heating (winter condition). Refer to Fig. 1

Fig. 1. APPLIANCE USER CONTROLS



2. APPLIANCE METHOD OF OPERATION

When there is no demand for either domestic hot water or central heating the pilot remains alight permanently unless switched off by the user as described in section 4 paragraph 6.
Any demand for domestic hot water will be sensed by detecting water flow through the boiler, provided the flow rate is above the minimum of 3 l/min (0.66 gpm).
The boiler will fire to its full output.
If the rate of draw off is near the maximum design flow rate of 9.6 l/m (2.1 gpm) the boiler will run continuously at full output until a tap is either turned off or the rate at which water is being drawn off is reduced.
If the user selects domestic hot water and central heating and if all domestic taps are off and the heating clock and controls are calling for heat (refer below to section 3) the boiler will ignite to provide the preset central heating output .
A control thermostat is provided to allow the user to regulate the boiler central heating water flow temperature. Adjustment is by means of a knob on the boiler control panel (Fig. 1).
Adjustment of the control thermostat knob does not affect domestic hot water temperature. The thermostat controlling domestic hot water temperature is not accessible to, or adjustable by, the user.

At intermediate draw off rates around 5 to 7 l/m (1.1 to 1.5 gpm) the boiler will usually cycle between its maximum output and whatever output has been set by the installer or run continuously at its low output until either a tap is turned off or the rate at which water is being drawn off is reduced.
At minimum draw off rate 3 l/m (0.66 gpm) the boiler will settle down to cycle ON/OFF.
Under these conditions water temperature at a tap would normally be around 40-45 °C at maximum rate (9.6 l/m - 2.1gpm) and 75-80 °C at minimum flow rate (3 l/m - 0.66 gpm) depending on particular circumstances.

3. HEATING CONTROLS

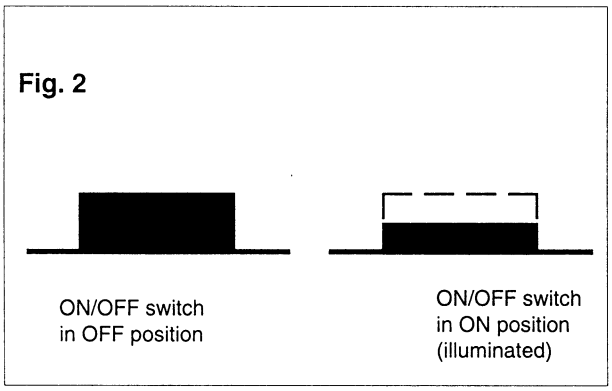
The boiler is not provided with a heating timer or controls, other than the boiler control thermostat, with which to control heat output from the radiators.

The Installation, Commissioning and Servicing Instructions provide the installer with full details of how a heating timer and/or heating controls should be fitted.

4. TO OPERATE THE APPLIANCE

Please ensure that the installer advises you on the correct operation of the appliance, system and any heating controls fitted.

1. Refer to Fig. 1. Switch off the mains electrical supply at the isolation switch or wall socket. Ensure any heating timer and/or heating controls, such as a room thermostat are in the OFF or MINIMUM position.
Make sure the ON/OFF switch at the boiler control panel is NOT ILLUMINATED and the switch is not depressed before proceeding (Fig. 2).
Ensure all water isolation valves are in the open position ie. slots in line with pipes.



2. Operate the boiler ONLY if it and the system has been fully charged to correct design pressure. Observe the pressure gauge. When cold this would read normally between 0.5 and 1.5 bar. If in doubt consult the installer as to the correct pressure when cold.

3. Turn the boiler control thermostat fully counterclockwise to the MINIMUM position. Grasp the gas valve ignition button and turn it clockwise a quarter of a turn against the spring pressure and release. Set the service selector knob to domestic hot water.

4. Turn ON a domestic hot water tap and ensure water flows freely. Turn OFF the tap.
At intermediate draw off rates around 5 to 7 l/m (1.1 to 1.5 gpm) the boiler will usually cycle between its maximum output and whatever output has been set by the installer or run continuously at its low output

5. Switch ON the mains electrical supply at the isolation switch or wall socket. Ensure any heating timer and / or heating controls are ON or calling for heat and adjusted to the desired settings.

6. Depress and release the ON/OFF switch at the control panel to switch ON the electrical supply at the appliance. The switch will illuminate when power is ON. Depress fully the gas valve control button for 18-20 seconds and at the same time press the piezo spark generator (Fig. 1) The pilot will ignite. Continue to keep the gas valve control button depressed for a further 30-40 seconds. When the button has been released the pilot should remain alight. Observe the pilot through the pilot viewing window.
If the pilot does not remain alight, twist the gas valve control button in the direction of the arrow and release.
If the pilot is extinguished at this, or any other time, wait at least 3 minutes before attempting to relight

7. When the pilot remains alight, turn on a domestic hot water tap. The main burner should ignite. Turn OFF the tap. The burner should extinguish.

8. Set the service selector knob to hot water and central heating. Turn the boiler control thermostat clockwise to MAXIMUM. The burners should ignite.
If any heating timer is set to the OFF position or any room thermostat turned down to minimum (PROVIDED HEATING CONTROLS ARE FITTED) the burners should extinguish. The burners should re-ignite when the external controls are reset. Set the boiler control thermostat to the desired setting.
NOTE:- Whenever the service selector knob is in the hot water and heating position the hot water service takes priority.
Hot water will not be provided unless the draw off rate is at least 3 l/m (0.66 gpm). A hot water draw off rate on excess of 9 l/min from a single tap, or the operation of a number of taps will result in a reduced hot water temperature. Refer to section 2.

5. DATA PLATE AND LIGHTING INSTRUCTION PLATE

A data plate is positioned under the border, fixed to the main controls support plate.

Information on how to operate the appliance is provided on a hinged lighting plate under the main controls support plate. Twist the knob (Fig. 1) a quarter turn clockwise to lower the panel.

6. TO TURN THE CENTRAL HEATING SERVICE OFF

1. To turn the heating service OFF set the service selector knob to hot water only. See Fig. 1. To turn on the central heating services ensure all domestic hot water taps are off and set the service selector knob to central heating and hot water.

2. TO TURN OFF THE APPLIANCE FOR SHORT PERIODS.
Set the service selector knob to hot water only. Ensure all domestic hot water taps are OFF.
DO NOT turn off the electrical supply to the appliance at the ON/OFF switch.

3. TO TURN OFF THE APPLIANCE FOR LONG PERIODS.
Depress and release the ON/OFF switch.
Turn the gas valve ignition button in the direction of the arrow and release: the pilot should go out.
Isolate the electrical supply to the system and boiler by turning OFF the power supply at the wall socket or isolation switch.
When relighting follow the full operating procedure in Section 4.
Consult the installer as to the need for protection against frost by means of a frost thermostat or night set back room thermostat.

7. SERVICING THE APPLIANCE

If the appliance is to maintain its efficiency and continue to operate with maximum safety, over a period of many years, routine annual servicing is essential.

For advice on servicing contact either the sole UK Agents, Argos Building and Heating Supplies Ltd or the local Gas Region.

8. GENERAL INFORMATION

1. Should a fault occur with the boiler control system, the appliance is fitted with an overheat thermostat which will shut down the supply of gas to the burners - including the pilot - independent of the normal control system.
If this fault occurs when the main burner is firing or if the pilot flame continually requires relighting after following the procedure under Section 4 contact whosoever is routinely servicing the appliance.
2. In the event of the failure of the electrical supply to the appliance the pilot should remain alight.
Note: Depending on the conditions prevailing when power is interrupted it may be necessary to reset the gas controls and relight the pilot when power is restored. (Section A).
Normally the boiler will reignite automatically when power is restored if any heating timer or heating controls fitted are ON and calling for heat. Remember to reset any heating timer fitted whenever there has been either a power supply failure or the electrical supply to the appliance has been interrupted at the isolation switch or wall socket.
3. If the mains water supply fails or is turned off for any reason there can be no hot water service from the appliance until the supply is restored. The boiler may be operated to provide a central heating service. If supply pressure varies or is low - minimum 0.5 bar. (7.3 psi) - it may not be possible to turn on all hot water taps simultaneously and achieve a reasonable flow rate.
4. If the temporary hardness of the water supply to the appliance is in excess of 150 parts per million the fitting of an "in line" scale inhibitor is recommended. The local Water Undertaking will usually provide information and give advice in these matters.
5. The appliance functions as a natural open flue unit. Under no circumstances should the flue discharge terminal be obstructed. If damaged turn off the appliance and contact the installer / Gas Region.
6. Minimum clearances around the appliance must be maintained if the appliance is to operate safely and routine servicing is to be undertaken.

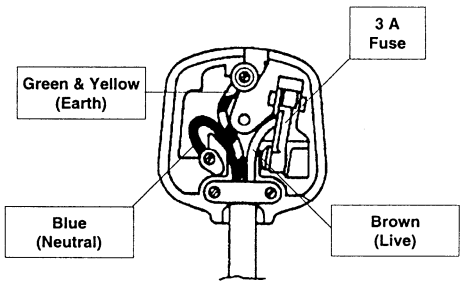
POSITION	MINIMUM CLEARANCE REQUIRED
Above	270 mm (10.6 in)
Below	270 mm (10.6 in)
L.H. side	30 mm (1.2 in)
R.H. side	30 mm (1.2 in)
In front	450 mm (18 in)

7. If the appliance has been installed within a cupboard or compartment high and low level ventilators will have been provided by the installer in accordance with the Installation, Commissioning and Servicing booklet included with the appliance. The ventilators MUST BE KEPT FREE FROM OBSTRUCTION AT ALL TIMES. The cupboard or compartment containing the boiler MUST NOT BE USED FOR THE STORAGE OF OTHER ARTICLES.
8. Ancillary equipment for use with the appliance such as mixing valves, showers, bidets etc. MUST be designed to operate at mains water pressure. General advice is given to the installer, relating to the installation and use of the above equipment, in the appliance Installation, Commissioning and Servicing Instructions. However, the local Water Undertaking should be contacted for specific information and requirements before fitting.
9. Use only a damp cloth and mild detergent to clean the appliance outer casing. DO NOT use abrasive cleaners.

9. ELECTRICAL SUPPLY

If a mains plug connection is used, it MUST be a 3 -pin type, wired as shown in Fig. 3, and fused at 3 Amp.
The appliance MUST be efficiently earthed.
As the colour of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: -
The wire which is coloured GREEN and YELLOW must be connected to the terminal in the plug whith the letter E or by the earth symbol ⏚ or coloured GREEN or GREEN and YELLOW.
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

FIG 3. THREE-PIN PLUG (TO BS.1363)



Supply: 240 V, 50 Hz fused at 3 amps

WARNING

IF A GAS LEAK IS SUSPECTED OR EXISTS TURN OFF THE GAS SUPPLY TO THE APPLIANCE AT THE GAS SERVICE COCK. DO NOT TOUCH ANY ELECTRICAL SWITCHES TO TURN THEM EITHER ON OR OFF. DO NOT OPERATE ANY ELECTRICAL APPLIANCE. OPEN ALL WINDOWS AND DOORS. DO NOT SMOKE. EXTINGUISH ALL NAKED LIGHTS. CONTACT THE LOCAL GAS REGION IMMEDIATELY.

Alpha BOILERS

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