

Leave these Instructions with the User or adjacent to the Gas Meter

### WARM AIR HEATERS

|                            | USER'S INSTRUCTIONS                    |  | October 1993               |                    |
|----------------------------|--|--|----------------------------|--------------------|
| Heater Models              |  |  |                            |                    |
| J15-22 Mk.3<br>J25-32 Mk.3 | J15-22R Mk.3<br>J25-32R Mk.3<br>J55-65 | JT19-25 Mk.2<br>JA33-43<br>J70-90 Mk.2 | JT/RS22-25 Mk.2<br>JB40-50 | JB25-30<br>JU40-55 |

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To identify the heater model, refer to the top right hand corner of the heater door, or to the black data plate inside the door.

#### **THESE APPLIANCES CONFORM TO BS800**

#### WARNING: THESE APPLIANCES MUST BE EARTHED

Note: The colours of the wires in the mains leads of these appliances may not correspond with the coloured markings identifying the terminals of your plug.

The green/yellow wire must be connected to the terminal marked E or by earth symbol shown  $\pm$  or coloured green or green/yellow.

The blue wire must be connected to the terminal marked N or coloured black.

The brown wire must be connected to the terminal marked L or coloured red.

GAS SAFETY (INSTALLATION AND USE) REGULATIONS (as amended): It is the law that all gas appliances are installed by a competent person in accordance with these regulations.

BEFORE USE, IDENTIFY YOUR HEATER TYPE (see list above): You will have either one fitted with MODAIRFLOW electronic controls or a non-MODAIRFLOW model.

#### MODAIRFLOW CONTROL - HOW IT WORKS

Modairflow Control automatically operates your heating system to maintain winter comfort efficiently and unobtrusively.

You select comfort level by setting the Thermista-stat.

The amount of heat needed depends upon the difference between the temperature outside the dwelling and your chosen comfort level. The system automatically adjusts its warm air output to achieve and maintain this level.

Examples:-

When full heat is needed (during very cold weather or initial warm-up), the gas burner operates continuously and the fan runs at high speed.

When moderate heat is needed, the gas burner operates at regular intervals and the fan runs continuously but at a lower speed.

When very little heat is needed, the gas burner operates for short periods and the fan runs on and off at low speed.

## Johnson & Starley Ltd





Fig. 1 Typical Air Heater

#### 1. TO LIGHT YOUR HEATER

WARNING: If the pilot light is extinguished, either intentionally or unintentionally, no attempt should be made to relight the gas until at least 3 minutes have elapsed.

- 1.1 Remove the front door of the air heater.
- 1.2 Identify the positions of the gas control START knob, the black LIGHTING button and the pilot burner from Fig.1 for your model.
- 1.3 Push the START knob in fully and hold (this allows gas supply to the pilot burner), then repeatedly push and release the LIGHTING button until the pilot burner lights. Hold the START knob in for a further 20 seconds, then release it; the pilot burner should remain alight. If it does not, turn the START knob clockwise in the direction of the arrow in Fig.1 and wait 3 minutes before repeating the procedure, holding the START knob in for a little longer than before.

If the pilot burner will still not stay alight, consult your heating installer or British Gas.

NOTE: It may be that your heater is not fitted with push button (PIEZO-ELECTRIC) ignition or that the igniter is faulty, in which case the heater can be lit manually by careful use of a lighted taper.

Locate the position of the pilot burner and repeat the procedure detailed in para. 1.3 by applying the lighted taper to the pilot burner instead of using push button ignition.

1.4 When the pilot burner is alight, replace the front door of the heater, then switch on the mains electrical supply to the heater, set the time control (if fitted) to an ON position (see Section 5, Fig.2) and adjust the Thermista-stat/room thermostat to the desired setting.

The heater will now operate automatically under thermostatic control.

#### 2. TO STOP YOUR HEATER

#### MODAIRFLOW Model

2.1 For short periods, such as a weekend:-

Set the Thermista-stat to the minimum setting. This stops the main burner from lighting (except under very cold conditions in order to provide frost protection), but will leave the pilot burner alight. When you want the heating on again, reset the Thermista-stat to the desired setting.

2.2 For longer periods, such as a week or for summer shutdown:-

Turn the gas control START knob clockwise (about <sup>1</sup>/<sub>4</sub> turn) in the direction of the arrow (see Fig.1) and turn OFF the electrical supply to the heater.

#### Non-MODAIRFLOW Model

#### 2.1 For short periods, such as a weekend:-

Set the room thermostat to the OFF position or minimum setting. This stops the main burner from lighting, but will leave the pilot burner alight. When you want the heating on again, reset the room thermostat to the desired setting.

2.2 For longer periods, such as a week or for summer shutdown:-

Turn the gas control START knob clockwise (about  $\frac{1}{4}$  turn) in the direction of the arrow (see Fig.1) and turn OFF the electrical supply to the heater.

#### WARNING: Do not turn off the electrical supply when the main burner is alight, or damage to the heater may result.

#### 2.3 IMPORTANT:-

If summer air circulation is required, the electrical supply to the appliance must remain ON.

If at any time the gas control START knob is turned and the pilot burner goes out, a built-in safety latch will prevent the pilot burner being relit until 1 minute has elapsed. If the pilot burner goes out, a flame failure device in the pilot and gas control shuts off the gas supply.

Carry out the lighting procedure as detailed in Section 1.

#### 3. TEMPERATURE CONTROL

#### MODAIRFLOW Model

The numbers on the Thermista-stat dial represent levels of warmth, and when you select a number, the heater will operate automatically to maintain that level. You will soon find the setting at which you are most comfortable; it is suggested that you start at mark 5 and make adjustments up or down until a satisfactory level is reached.

Best economy is achieved at the lowest setting that you find acceptable.

#### Non-MODAIRFLOW Model

The room thermostat lets you select the room temperature you require.

When the temperature of the air surrounding the thermostat reaches the selected temperature, the thermostat will switch the heater off. It will then automatically switch the heater on and off several times an hour to maintain room temperature.

Careful use of the room thermostat saves energy and therefore money.

#### 4. CONTROL OF YOUR HEATING SYSTEM

You can control the heat to each room by opening and closing the warm air outlets, but never close more than half of them at any one time or the performance of the heating system will be affected.

Warm air outlets in the room where the Thermistastat/room thermostat is sited should always be open to ensure that the heating system is controlled properly.

During average winter weather, warm air outlets in rooms not having a Thermista-stat/room thermostat should be opened only as much as is necessary to bring the room to a comfortable level.

In prolonged severe weather, it is better, overnight, to set the air heater time control (if fitted) to ON ALL TIME and reduce the setting of the Thermista-stat/room thermostat to provide general background heating.

Recommended settings of the temperature controls for background heating are:-

Thermista-stat: Mark 4 or

Room Thermostat: 13°C(55°F).

Resetting the controls on rising will quickly raise the room temperature.

#### Summer Air Circulation (if fitted)

During hot weather, unheated air can be circulated around the dwelling by turning off the heat requirement and setting the summer air circulation switch to operate the heater fan only, i.e. set the appropriate switch to position 1 (ON).

IMPORTANT: If at any time the main burner does not go out when there is no demand for heat, turn the gas control START knob clockwise in the direction of the arrow (see Fig.1) and contact your service company.



Fig. 2a CL2 Time Control



Fig. 3

If an integral time control is fitted it will be one of two types (see Figs.2a & 2b).

Type CL2 (Fig.2a) will provide continuous or timed operation of the air heater.

Type CL3 (Fig.2b) will provide continuous or timed operation of the air heater and water heater, either individually or both together.

- 5.1 To set the time of day, grip the perimeter of the dial and turn the dial CLOCKWISE DO NOT attempt to turn it anticlockwise.
- 5.2 The shortest time period that can be set is 15 minutes (this being a single tappet). The ON times are set by pushing the tappets IN towards the centre of the dial, the OFF times by pulling the tappets OUT.

To set ON and OFF periods for TIMED operation (see Fig.3):-

#### EXAMPLE:-

The ON times wanted are 07.30 to 09.00 in the morning and 16.30(4.30) to 23.15(11.15) in the evening.



Fig. 2b CL3 Time Control

i) PUSH IN all tappets between 7.30 and 9.00 and all tappets between 16.30 and 23.15 (OFF periods are represented by those tappets remaining OUT).

ii) Set the correct time of day by turning the dial CLOCKWISE until the actual time lines up with the pointer.

iii) Set the switch to TIMED.

iv) Set the Thermista-stat/room thermostat to the desired setting; the heater will now operate during the times required.

5.3 Other operating conditions:-

i) The heater(s) can be made to operate outside of the time control settings during any day (at weekends for example) by setting the appropriate switch to ON ALL TIME - the room and/or water temperatures will now be controlled automatically.

ii) To return to the usual ON and OFF times, or overnight, or during weekends, set the switch to TIMED.

iii) If heating is NOT wanted, set the switch to the central OFF position.

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#### 6. AIR FILTER (for position see Fig.1)

IMPORTANT: The air filter should be cleaned every two weeks during the heating season.

To clean the air filter, withdraw it from the heater, clean with a soft brush or vacuum cleaner, and replace.

#### 7. MAINTENANCE AND GAS TARIFF

It is recommended that a full maintenance check on your appliance be made at least once a year and that a service contract is taken out on completion of the guarantee period. DO NOT allow the filter to become clogged, or the heater output will become greatly reduced and fuel will be wasted. In NEW DWELLINGS, clean the filter once a week for the first month or two, to clear builders' dust etc.

Your local Gas Region will give you details of arrangements for this service and information on gas tariffs. N.B. Servicing should be carried out only by a properly qualified person.

#### 8. POWER CUTS

If you experience an electrical power cut, the gas control on your air heater, being electrically operated, will close. The main burner will go out, but the pilot burner will remain alight. When the electrical supply returns, the heater will work normally again.

If your heating system is controlled by an electrical time control, it may be necessary to reset it.

- 9. HEATER NOT GIVING THE SERVICE YOU NEED
- 9.1 Check that the Thermista-stat/room thermostat and time control (if fitted) are set correctly to your requirements, and that at least half of the warm air outlets are open, especially in the room where the temperature control is sited.
- 9.2 Check that the pilot burner is alight. If it is not, carry out the lighting procedure detailed in Section 1.
- 9.3 Check if the air filter is clogged. Clean as instructed in Section 6.
- 9.4 Ensure that the summer air circulation switch (if fitted) is in the OFF position if the fan will not slow down or stop at any time.

9.5 Service arrangements differ locally.

i) For new dwellings, servicing is usually supplied for a specific period under arrangements made by the building contractor.

ii) For their own dwellings, Local Authorities often have special arrangements.

iii) If the above do not apply, contact the Service Department of your local Gas Region.

When replacing the mains fuse to the appliance, the fuse rating MUST NOT EXCEED 3A.

#### IMPORTANT

# FOR YOUR APPLIANCE TO WORK EFFICIENTLY AND FOR YOUR HEATING SYSTEM TO PERFORM SATISFACTORILY IT IS ABSOLUTELY ESSENTIAL TO OBSERVE THE FOLLOWING:-

**1.This air heater** is installed in a ventilated area. DO SEEK ADVICE from your Gas Service Centre before making any alterations likely to reduce the supply of fresh air to the heater.

2.DO KEEP CLEAN and make sure you DO NOT OBSTRUCT any air grilles on the heater, in the heater compartment, or in any walls, windows or doors of the building.

**3.DO CLEAN and REPLACE CORRECTLY** the air filter at least once a month or to manufacturer's instructions.

4.DO NOT PLACE ANYTHING (clothing, linen etc.) in contact with the air heater or its flue pipe.

5.DO NOT USE the heater compartment for storage or airing.

6.DO NOT turn off the mains electricity supply to air heater until gas supply has been turned off.

#### 10. IF YOU SMELL GAS:-

10.1 DO NOT operate any electrical switches, or use a naked flame.

10.2 Turn off the gas.

10.3 Ventilate the area by opening doors and windows.

10.4 Call your local British Gas Region.

#### 11. CLEANING

If necessary, the heater cabinet may be cleaned with a mild soap solution.

#### DO NOT USE ABRASIVES OR STRONG ALKALIS

Johnson and Starley prides itself on its ability to supply spare parts quickly and efficiently. If your local Heating Engineer or Gas Region should indicate a problem in obtaining a spare part, please ask them to contact Johnson and Starley Spares Department at the address below.

> In the event of the appliance being sold or transferred to another user, THESE instructions must be supplied.

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