



ECONOMAIRE RANGE OF WARM AIR HEATERS with MODULATING CONTROL



USER INSTRUCTIONS

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WARNING: THIS APPLIANCE MUST BE EARTHED

IMPORTANT: IT IS A STATUTORY REQUIREMENT THAT ALL GAS APPLIANCES BE INSTALLED BY COMPETENT PERSONS, (i.e. CORGI REGISTERED INSTALLERS) IN ACCORDANCE WITH THE GAS SAFETY (INSTALLATION AND USE) REGULATIONS (CURRENT EDITION). FAILURE TO COMPLY WITH THESE REGULATIONS MAY RESULT IN PROSECUTION.



**Complete Economaire range - from left to right:
Economaire 25; Economaire 31; Economaire 50; Economaire 90; Economaire 65 and Economaire 32**

MODULATING CONTROL - HOW IT WORKS

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

You select the comfort level by setting the temperature controller (called 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 this level.

Examples:

When full heat is needed (during very cold weather, or on initial warm up), the gas burner operates at full output and the fan runs at maximum speed until the room temperature, determined by the Thermista-stat setting is reached.

The gas burner will then operate in short firing cycles with the fan running at a reduced speed.

Johnson & Starley Ltd.

1. TO LIGHT YOUR HEATER

- 1.1 Ensure that the gas supply to the heater is turned on.
- 1.2 Set both the “AIR HEATER” and “WATER HEATER” (if fitted) switches on the time control to the “OFF” position.
- 1.3 Turn the Thermista-stat (room temperature control) to position “9” (see fig. 1).
- 1.4 Switch on the electrical supply to the heater.
- 1.5 Set the “AIR HEATER” switch on the time control to “CONT” After a period of 15-20 seconds the burner will ignite automatically, indicated by the green LED light marked ‘ON’ on the indicator panel (see Fig. 2). Shortly afterwards the air circulation fan will start.
- 1.6 Adjust the Thermista-stat to the desired setting (see Section 3).
- 1.7 The heater will now operate automatically under thermostatic control.
- 1.8 If the burner does not ignite the first time, the red LED light marked ‘LOCKOUT’ will light. If this should occur, check that the gas supply to the appliance is turned on, wait approximately 10 seconds and then press the button marked ‘RESET’ to re-initiate the ignition sequence.
- 1.9 If, after carrying out the above instructions several times, the green light fails to remain lit, contact your local service engineer.

2. TO STOP YOUR HEATER

- 2.1 **For short periods, e.g. weekends:**
Turn the “AIR HEATER” switch to the “OFF” position, or turn the thermista-stat anticlockwise to its minimum setting. This will cause the burner to extinguish and the heater fan to stop once the heat exchanger has cooled. When you require the heating on again, turn to “AIR HEATER” switch to the “ON” position, or reset the thermista-stat to the desired setting.

2.2 For longer periods, e.g. a week or summer shutdown:

Turn the “AIR HEATER” switch to the “OFF” position, set the Thermista-stat to its minimum setting, then turn off the electricity supply to the heater.

WARNING: Do not turn off the electrical supply when the main burner is lit, as this may cause damage to the heater.

- 2.3 **IMPORTANT:** If summer air circulation is required, the electrical supply to the heater must remain on.

3. TEMPERATURE CONTROL

- 3.1 The figures on the thermista-stat dial represent levels of warmth and when you select a dial number, the heater will operate automatically to maintain that level. You will soon find the setting at which you are most comfortable, but we recommend that you start at setting 5 and make adjustments up or down until a satisfactory level is reached.

It is worth noting that best economy is achieved at the lowest setting that you find acceptable.

4. CONTROL OF YOUR HEATING SYSTEM

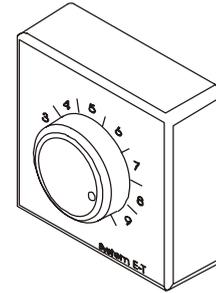


Fig. 1

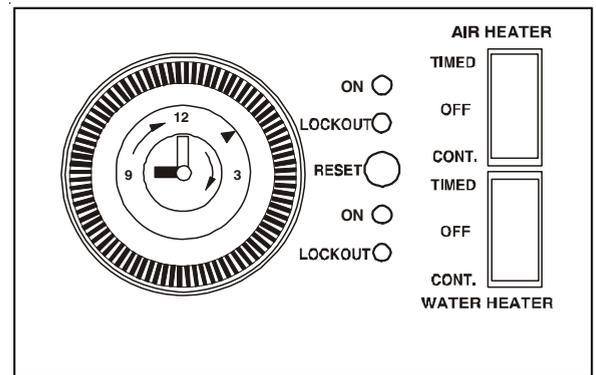


Fig.2

- 4.1 You can control the heat to each room by opening and closing the warm air outlets, but never close more than half of the outlets at any one time or the performance of the heating system will be affected. Warm air outlets in the room where the thermista-stat is sited should always be open to ensure that the heating system is controlled properly.
- 4.2 During the average winter weather, warm air outlets in rooms not having a thermista-stat should be opened only as much as is necessary to bring the room to a comfortable level.
- 4.3 Overnight in prolonged severe weather, it is better to set the heater time control to “CONT” and reduce the setting of the Thermista-stat to provide a general background heating (i.e. Setting 4). On rising, reset the Thermista-stat to the normal daily comfort setting and the room temperature will quickly rise.

4.4 SUMMER AIR CIRCULATION

During hot weather, unheated air can be circulated around the dwelling, (using the air circulation fan), by turning the Thermista-stat fully clockwise to the switched ‘SUMMER AIRFLOW’ position.

IMPORTANT: If at any time the heater fails to turn off when there is no demand for heat, switch off the gas and electrical supply to the heater and contact your local service engineer.

5. TIME CONTROL OPERATION

5.1 In addition to continuous operation, the Time Control will provide 24 hour timed operation of the air heater in 15 minutes increments (1 tappet). "On" periods are set by moving the required number of tappets in towards the centre of the dial. For example, a 4 hour "on" period will require 16 tappets set to the "on" position at the required time.

6. AIR FILTER

6.1 The air filter is located where the return air ducting connects to the air heater.

6.2 **IMPORTANT:** during periods where the heater is being used constantly, the air filter should be checked at regular intervals.

6.3 **TO CLEAN THE FILTER:** cleaning the filter will depend on the filter type. It will be either:

a) **Passive Filter:** withdraw the filter from the heater, clean with a soft brush or vacuum cleaner and refit.

b) **Electronic Filter:** withdraw the filter as above and remove surface dust with a soft brush. If the filter medium is soiled, replace as directed in the filter kit instructions. **DO NOT ATTEMPT TO CLEAN OR WASH THE FILTER MEDIUM!**

NOTE: if you allow the filter to become clogged the heater efficiency will be greatly reduced.

IN NEW DWELLINGS: clean the filter once a week for the first month or two to clear builder's dust.

7. MAINTENANCE

7.1 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 at the end of the guarantee period. Your local gas supplier will be able to provide details of arrangements for this service.

Note: This appliance SHOULD be checked and maintained periodically by a qualified professional or competent person.

8. POWER CUTS

8.1 If you experience an electrical power cut your air heater will cease to operate. When the electrical supply is restored, the heater will work normally but the Time Control WILL require resetting.

9. TROUBLE SHOOTING

9.1 Check that the Thermosta-stat and Time Control are set correctly to your requirements and that at least half of the warm air outlets are open, especially in the room where the Thermosta-stat is located.

9.2 Check that the air filter is not clogged, if so clean as detailed in Section 6.

9.3 If the **LOCKOUT** is lit, wait for approximately 10 seconds and then press the **RESET** button.

9.4 If the heater will still not operate correctly, contact your local service engineer.

Service arrangements:

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

b. local Authorities often have their own special arrangements.

c. if the above do not apply, contact your local service engineer, or the Service department at Johnson & Starley Ltd.

10. IF YOU SMELL GAS

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

TURN OFF the gas supply.

VENTILATE the area by opening doors and windows.

CALL OUT your local gas supplier.

11. CLEANING

11.1 If necessary, the heater cabinet may be cleaned using a mild soap solution. **DO NOT** use abrasive pads or scourers.

IMPORTANT

FOR YOUR HEATER TO WORK EFFICIENTLY AND FOR YOUR HEATING SYSTEM TO PERFORM SATISFACTORILY, IT IS ABSOLUTELY ESSENTIAL TO OBSERVE THE FOLLOWING:

1. **DO KEEP CLEAN, and make sure you DO NOT OBSTRUCT any grilles on the heater, in the heater compartment, or in any walls, windows or doors of the building.**
2. **DO CLEAN AND REFIT the air filter at least once per month.**
3. **DO NOT PLACE ANYTHING (clothing, linen etc.) in contact with the air heater or its flue pipe.**
4. **DO NOT USE the heater compartment for storage or airing.**
5. **DO NOT turn off the mains electricity supply to the air heater until the gas supply has been turned off.**

NOTE: If you are aware of, or suspect, a fault OF ANY KIND the heater MUST NOT be used. Turn off the gas and electrical supplies to the heater and contact your service engineer!

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

Johnson and Starley prides itself on its ability to supply spare parts quickly and efficiently. If your service engineer indicates a problem in obtaining a spare part, advise him to contact Johnson and Starley Spares Department at the address below.

Telephone: 01604 762881

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