

# *Operating Instructions*

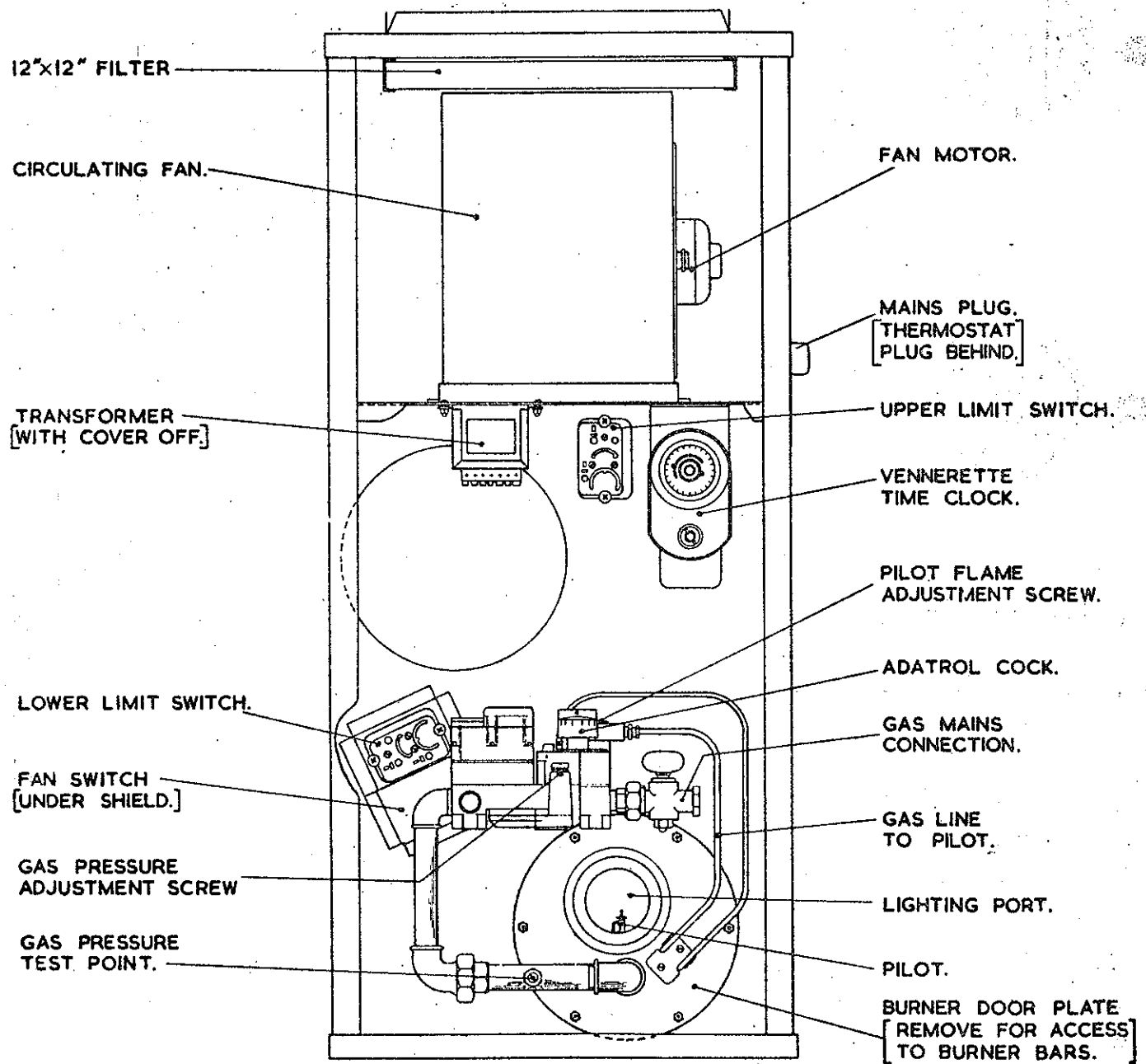


## SELECTIVE WARM AIR HEATING SYSTEMS JG25 DOWNFLOW GAS FIRED HEATER

JOHNSON AND STARLEY LTD  
BEDFORD ROAD · NORTHAMPTON

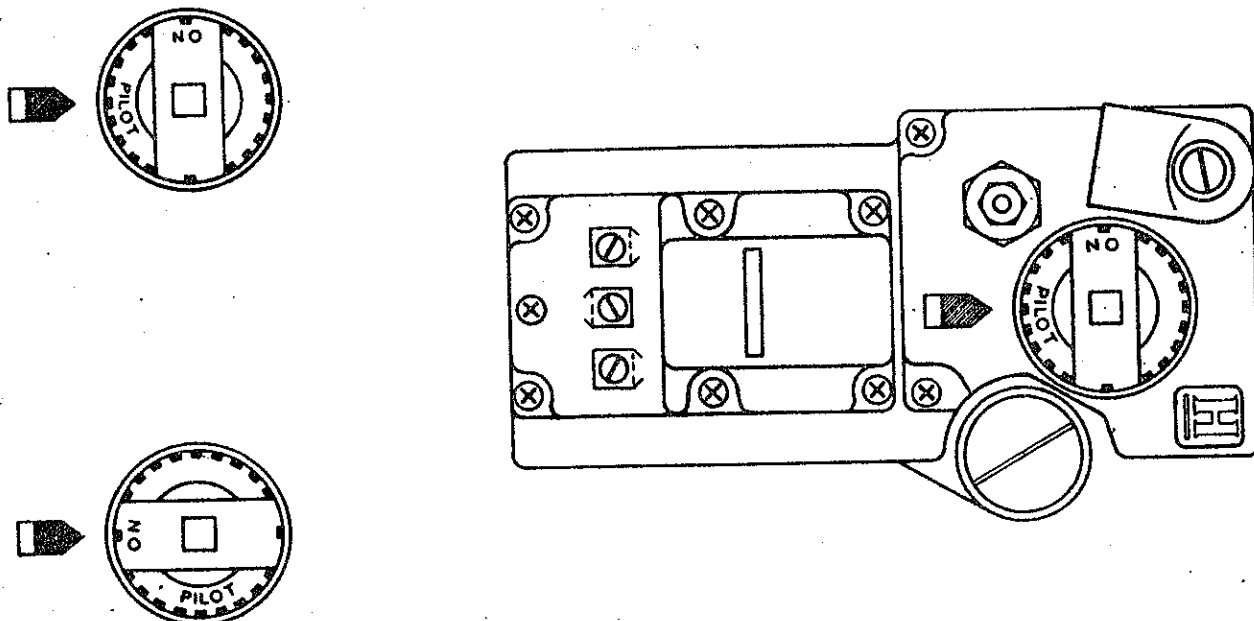
TELEPHONE 35216/7

# JG25 HEATER



## GENERAL LAYOUT

JG 25 DOWNFLOW OPERATING INSTRUCTIONS.



ADATROL

TO SET HEATER OPERATING.

1. Check that the warm air registers are open and that the thermostat is set low (say 50° F.).
2. Make sure that gas cocks in the gas pipes leading to the heater are ON and that the mains electricity is connected to the unit and is also ON. The thermostat connection plug beside the mains plug can be checked at the same time.
3. Unscrew and remove lighting port cover.
4. Turn the main gas cock on the incoming gas feed pipe to ON.
5. Turn the Adatrol cock to PILOT, push the cock down and hold it down.
6. Light the PILOT with a match or taper. N.B. DO NOT ATTEMPT TO LIGHT PILOT UNLESS UNIT HAS BEEN OUT FOR AT LEAST 5 MINUTES.
7. After about half a minute, release the Adatrol cock and let it spring up. Pilot should stay alight. If it does not, push down Adatrol cock again and relight pilot. Allow another half minute then release Adatrol cock to spring upwards again.

8. Replace lighting port cover.
9. Assuming the pilot stays alight when the Adatrol cock is released, turn the cock to the ON position. The burner will now operate according to the room thermostat demand.
10. Set room thermostat to temperature required and enjoy your automatically controlled heat.
11. Replace the door on the heater.

#### TO STOP THE HEATER OPERATING.

- A. For short periods, such as a weekend: Turn the thermostat to the OFF position at the low end of the scale (if your thermostat is not provided with an "OFF" position - pull out the white thermostat plug on the heater). This will prevent the main burner from lighting but will leave the pilot alight. When the thermostat is again set at a temperature, the heater will operate automatically in response to the thermostat's demands.
- B. For longer periods, such as a week, or for the Summer shutdown, turn the cock on the Adatrol to PILOT, turn the main gas cock next to the Adatrol to OFF and turn the mains electricity supply to the heater OFF.

NOTE: The flame failure device embodied in the pilot and the Adatrol shuts off the gas supply to the main burner if the pilot flame goes out. If this happens, turn Adatrol cock to PILOT and WAIT 5 MINUTES before carrying out the lighting routine given at the beginning of these instructions.

#### TIME SWITCH (CLOCK).

The Time Switch can be set to give two automatic periods of heating each day. Instructions for setting the Time Switch levers to the selected times of heater operation are given below.

#### TO SET TIME SWITCH

Remove the plastic cover by gripping top and bottom and pulling gently.

Push the two RED levers until the edges indicated by the arrows are in line with the times on the dial when the heating is required ON.

Push the two BLACK levers until the edges indicated by the arrows are in line with the times on the dial when the heating is to be OFF.

Set the clock to correct time by turning complete dial anti-clockwise to pointer. Replace the cover.

NOTE: The period of darkness (night) is indicated by a thick black line extending from 6 p.m. to 6 a.m..

#### MANUAL CONTROL.

To switch 'ON' or 'OFF' at times other than those set on the dial, a manual over-ride switch is provided. As marked, this should be turned to the right and released to switch the heater 'OFF', or turned to the left and released to switch the heater 'ON'. The Time Switch will revert to automatic control at the next switching operation.

NOTE: A manual OFF switching is not possible within 30 minutes after the automatic ON operation and  $1\frac{1}{2}$  hours before the automatic OFF operation.

#### POWER FAILURE.

A power failure will stop the lock, therefore reset to correct time when power supply is restored.

#### MAINTENANCE.

It is recommended that a full maintenance check is made at least annually, usually during the Summer. Your local Gas Board will give you details of how arrangements can be made to check the gas controls.

#### FILTER.

This is of the washable type and should be washed about every month during the heating season. To wash the filter, withdraw the filter and its frame from the heater: pull the filter element from its frame while holding it over a sheet of newspaper: wash the filter element in warm water with detergent: rinse and shake out to remove most of the water: refit element to filter frame: replace filter and frame in heater the correct way round, i.e. with the arrow towards the heater.

#### SETTING THE ROOM THERMOSTAT.

The Room Thermostat enables you to select the temperature you require. When the temperature of the air surrounding the thermostat reaches the setting temperature, the heater is regulated to turn on and off several times an hour so that the amount of heat supplied to the house is equal to the amount leaving it by leakage.

Obviously, the higher the temperature setting on the thermostat the higher will be the running cost of the heating system. It is found that the difference between the running cost of a system with the thermostat set at 65°F. and with it set at 70°F. is approximately 20%. For most people, 65°F. is a pleasant living temperature.

#### PROCEDURE TO BE FOLLOWED IF HEATER STOPS.

1. Check the thermostat is set at a temperature higher than that of the air around it and that registers are open.
2. Check Pilot is alight and that Adatrol knob is in the ON position. If not, follow lighting instructions.

3. Check that filter is not excessively clogged causing the safety limit switch to operate. If the filter is clogged, wash it as indicated under "Filter".
4. Check electric power is reaching the heater and that the clock is showing an 'ON' period.

If none of these checks reveals the reason for stopping, call your local Gas Board. DO NOT dismantle any part of the heater yourself.

#### HEAT CONTROL TO INDIVIDUAL ROOMS.

- A. By adjusting the appropriate registers the large volume of warm air produced by the Johnson & Starley Selective Heater may be directed into one or more rooms to heat them according to your requirements.
- B. During average winter weather, automatic time switch control (clock) will generally be suitable using the over-riding manual control as desired. Before retiring, adjust the registers to give the heat distribution you will require in the morning when the heater is switched on by the time clock.
- C. In prolonged severe weather it is desirable to adjust the time switch and thermostat to maintain a reasonable background temperature during the night rather than turning the heater off.
- D. For obvious reasons the register in the room containing the thermostat should be left open.
- E. At least one register must be fully open when the heater is on.
- F. The heater will operate at maximum output for 3 hours on one therm of gas. (Consumption of gas will be less than maximum when the heater is being turned on and off by the automatic thermostat control.)

IMPORTANT: Do not use the heater compartment for storage purposes.

In some instances the Return Air Duct provided by the builder will not be directly connected to the top of the heater, therefore do not place articles on the top of the return air opening to the heater.