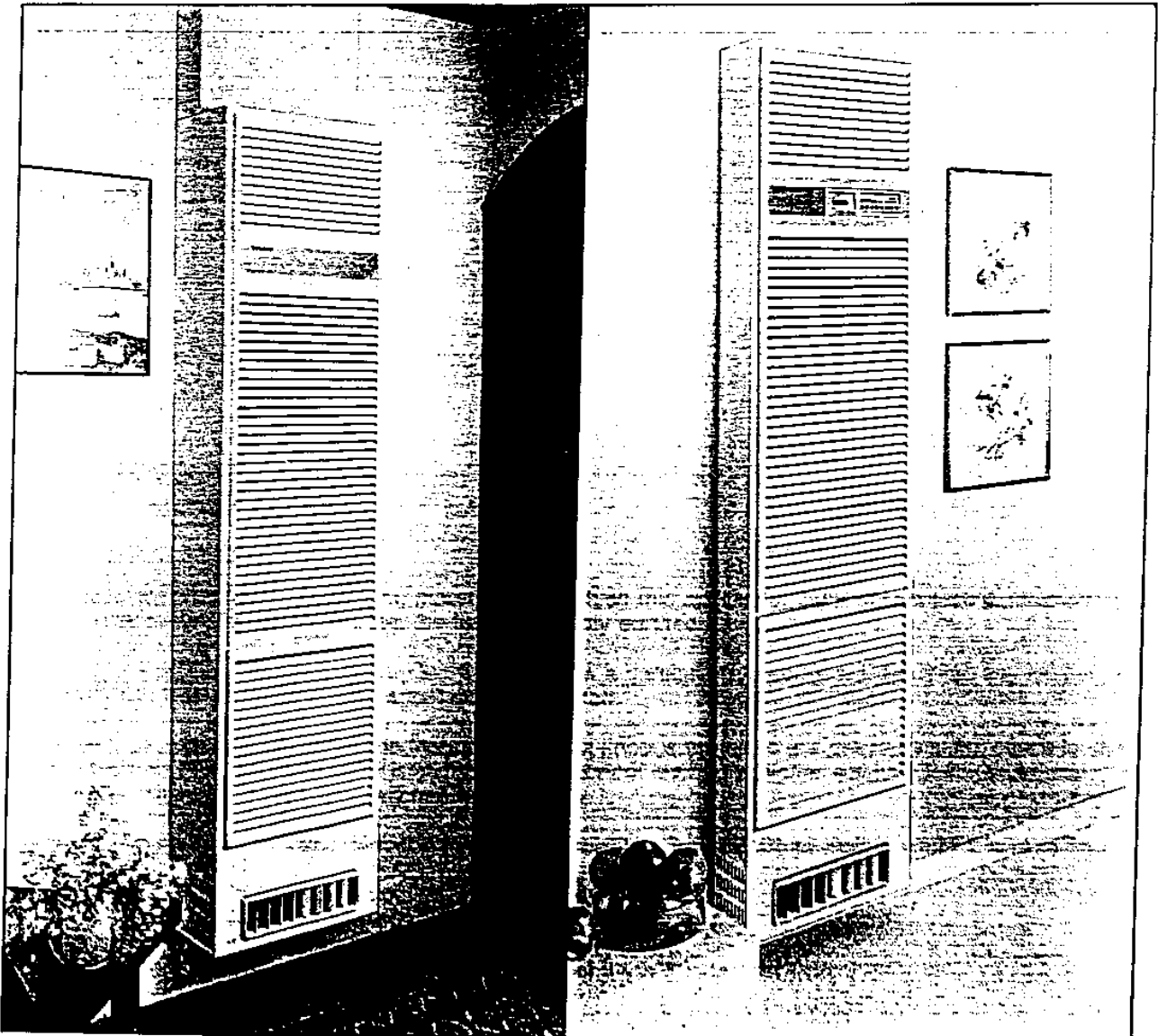


OPERATING INSTRUCTIONS FOR HIGH EFFICIENCY QUASAR GAS WALL FURNACES FITTED WITH ELECTRONIC CLOCK CONTROL

The Australian designed and manufactured Vulcan Gas Heater has been thoroughly life tested and carries the approval of the A.G.A. and S.E.C.

Thank you for purchasing this Vulcan product. It has been designed to give you excellent service. Now it is installed, you are no doubt anxious to light it and enjoy the far-reaching warmth. Before you do, take a few minutes to read through this instruction and discover how to get the very best from your heater. After you have read it, we suggest you store it in a safe place for future reference. If you have any questions or problems relating to your new heater do not hesitate to get in touch with your installer, or your nearest Vulcan office.



CONSOLE MODEL

INBUILT MODEL



VULCAN
So advanced...it's simple

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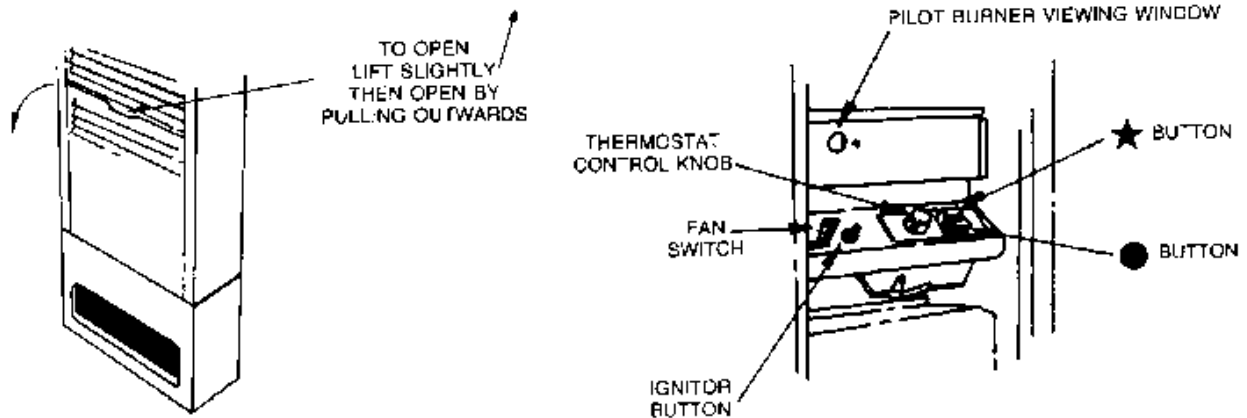
SAFE OPERATION

1. It is essential to have any existing power point to which this appliance might be connected, checked by a qualified electrician to ensure that the unit is correctly earthed.
2. Each Vulcan Gas Heater is factory set to operate on a particular type of gas. Do not use any type of gas other than that specified on the application and carton.
3. If the heater fails to light after the thermostat control knob is turned to the desired setting, check to see if the pilot is operating. If the pilot is alight, turn the control knob to a higher setting. Check that timer control, if fitted, is "ON" and switched to "MANUAL".
4. **Never drape clothing etc., over the heater or place them on a clothes horse within 2 metres.**
5. Do not place any articles in fan outlet.
Do not place any articles on or against this appliance.
Do not store flammable material near this application.
Do not spray aerosols in the vicinity of this appliance while it is in operation.

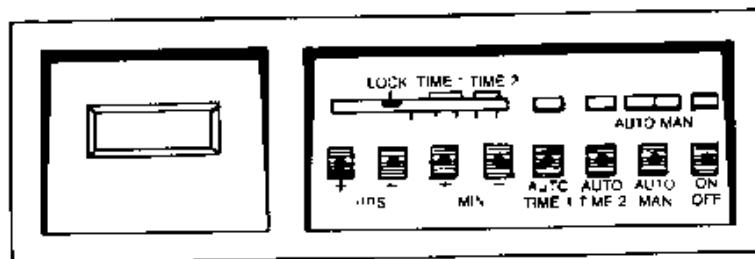
THE HEATER CONTROLS

The Gas and Fan controls are located behind the access door on the lower front of the heater.

To open access door, lift upwards slightly to release and pull outwards towards you.

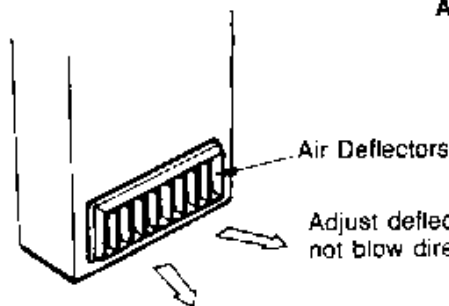


The Electronic Timer control is mounted on the front panel of the heater.

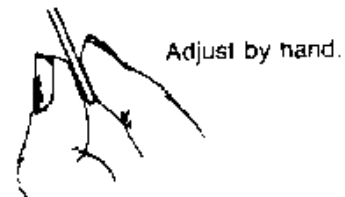


AIR DEFLECTORS

Air discharged from the heater is directed by two banks of connected louvres.



Adjust deflectors so that air does not blow directly into sitting areas.



THERMOSTAT

The heater is automatically controlled by a built in thermostat which regulates the gas supplied to the burner to maintain the temperature of the room at the selected level. The temperature at which this thermostat operates is set by the rotation of the Thermostat control knob to any position between the figures 1 and 7. The higher the number, the higher the temperature at which the room will be maintained.

The numbers are for guidance only when you adjust the control knob or when you turn the heater on after it has been turned off.

When increasing (higher number) or decreasing (lower number) the room temperature, turn control knob in small steps (say a quarter of a numbered graduation at a time) allowing at least 15 minutes for thermostat to adjust and room temperature to stabilise before making further adjustments.

THE PILOT BURNER

The pilot flame may be seen through the viewing window, located behind the access door and above the fan switch on the left hand side of the heater.

The pilot is the means by which the main burner is ignited and is also a safety device which ensures that gas will only flow to the main burner and pilot burner while the pilot is aight. It is normally left continuously aight until summer shut down.

POWER SUPPLY INTERRUPTION

The heater will not operate if electric power is interrupted (due to supply failure or switching off at power point). The pilot will remain alight.

When power is restored, 12 a.m. will appear on the clock face. This indicates that automatic programmes and time of day must be re-set.

If the heater is operating on "Manual" control when power is interrupted, it will be necessary to re-set the Auto/Manual button to manual when power is restored, to recommence heater operation.

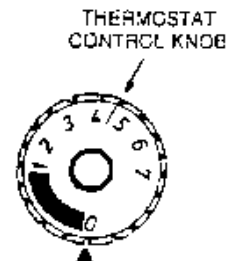
The heater will **not** automatically restart on restoration of power.

Note: In the period that the fan is off, dust may settle on the heat exchanger causing an odour. This is no cause for alarm and will cease when the fan resumes operation.

TO LIGHT PILOT

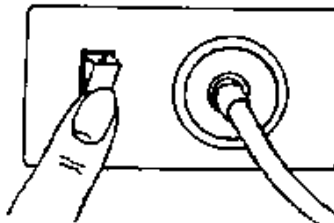
- Turn thermostat control knob to setting "0".
- Press button ★ down fully to limit of travel to supply gas to pilot. Take care not to depress button ● at this will activate a safety mechanism within the valve which will prevent Main Burner ignition. Continue to hold ★ button down fully and push ignition button one or more times until pilot lights.
- Hold ★ button down for at least fifteen seconds after pilot lights then release slowly.

If pilot flame extinguishes, repeat step (b) but hold ★ button down for a longer period after pilot lights. Remove screw at the right hand side of the pilot viewing window.



SETTING TIME OF DAY

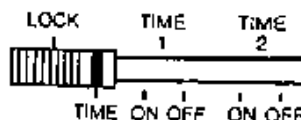
- Ensure power lead is plugged into power point. Switch on power.



- The digital clock will show 12:00 a.m.

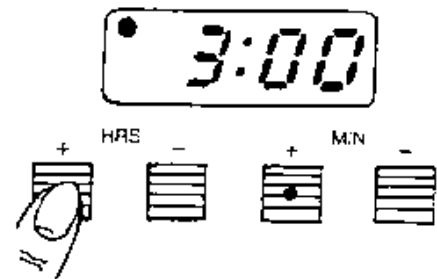


- Slide the program selector from "LOCK" to "TIME"

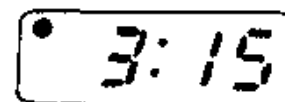


- Select the correct "hour" by pressing either the "+" or "-" button. Check that AM or PM is correct.

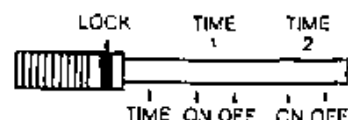
Note: "P.M." indicated by red dot in top left hand corner of display.



- Set the correct "minutes" in the same manner.



- Slide the program selector back to "LOCK". The correct time is now programmed.



MANUAL OPERATION OF HEATER

To Ignite Main Burner

Pilot Burner must be alight (refer to Page 3)

(a) Press "ON/OFF" button on Auto control panel 'On' (Light on).



(b) Press to "MANUAL" (Light on).



(c) Turn thermostat control knob to about 4. The burner will light automatically from the pilot flame provided that the room temperature is below the set thermostat temperature. Otherwise a higher setting will be necessary.

When heater has operated for half an hour or so, you may wish to adjust the thermostat higher or low to raise or lower the room temperature. Turn the knob only a quarter of a numbered graduation at a time. Allow at least a further 15 minutes for the room temperature to stabilize.

FAILURE OF THE BURNER TO LIGHT

- If pilot is alight, both ★ and ● buttons may have been inadvertently depressed together, causing a safety mechanism within the valve to prevent gas from flowing to the main burner. If this occurs press ● button fully and release and wait until a click is heard (approximately two minutes). Repeat lighting procedure.
- If the pilot has gone out, turn control knob to '0' setting, wait approximately three minutes for any unburnt gas to escape and re-light pilot.
- Check that timer is 'On' and switched to manual.
- If the pilot is alight, turn the thermostat control knob to a higher setting to ensure that it is set higher than the room temperature, otherwise the thermostat will not allow burner ignition.

When heater is operating, close access door by pushing towards heater, lift slightly to close fully then allow to drop into catch.

Do not allow heater to operate with access door open for longer than is necessary to light burner or adjust controls.

TO TURN THE BURNER OFF

Turn control knob to setting '0'.

TO TURN PILOT OFF

Turn Control Knob to setting '0' and depress ● button fully.

IF SPARK IGNITION FAILS

(The spark can normally be seen through the pilot viewing window when ignitor button is pressed).

The pilot burner may be lit with a match.

Remove screw at the right hand side of the pilot viewing window.

Slide the glass to the right and repeat lighting procedure using a lighted match instead of the ignitor button.

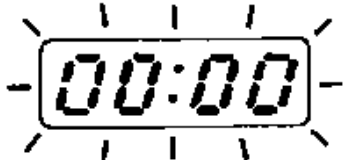
Reposition window glass and replace screw.

AUTOMATIC OPERATION OF HEATER

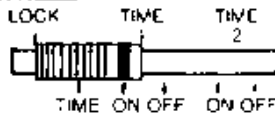
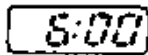
SETTING THE AUTOMATIC HEATING PERIODS

You can program the unit to come on and go off either once or twice in any 24 hour period — say for "wake-up" warmth and "come home" warmth.

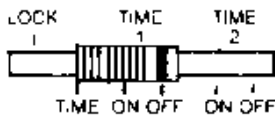
- (a) Set the correct time of day.
(Refer to Page 3)



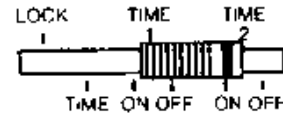
- (b) "Wake-up" warmth.
Slide the program selector to "TIME 1-ON". Now using the "+" or "-" buttons, set the clock for the time you want the unit to come on.
(Example 6:00 a.m.)



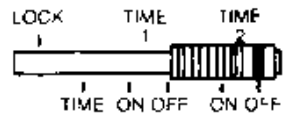
- (c) Next, slide the program selector to "TIME 1-OFF" and set the clock for the time you want the unit to go off.
(Example 9:00 a.m.)



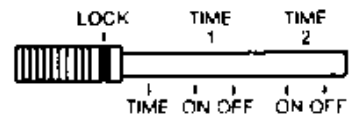
- (d) "Come-home" warmth.
Slide the program selector to "TIME 2-ON" and set the clock accordingly.
(Example 4:00 p.m.)



- (e) Finally, slide the program selector "TIME 2-OFF" and set the desired time. (Example 11:00 p.m.)



- (f) Return the program selector to "LOCK". (The clock will now display Time of Day).
(To check the 'On' and 'Off' times you have programmed, slide the selector across the various on-off positions).



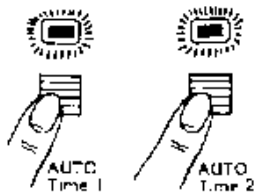
OPERATING WITH AUTOMATIC PRESET HEATING PERIODS

Pilot Burner must be alight. (Refer to Page 3).

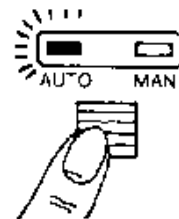
- (a) Set the automatic heating periods as above.
Press "On/Off" button to "ON".
(Light On).



- (b) Press on one or both "AUTO TIME" buttons. (Lights On)
Depending on whether one or two heating periods are required.



- (c) Press to "AUTO" (Light On).



- (d) Turn thermostal control knob to the desired temperature.
Between 4 and 5 is normal.

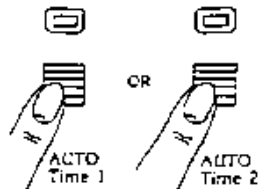


If the heater is operating on 'manual' when you set the automatic heating periods, the burner will extinguish when you switch the electronic control from 'manual' to 'auto' and recommence operation when the next selected on time is reached, provided that the heat setting is above the room temperature.

OVERRIDING YOUR AUTOMATIC TIME SETTINGS

(a) Cancelling the balance of a current heating period

Press the appropriate "Auto Time" button to "Off".



Remember to press the cancelled "Auto Time" button to "On" when you require resumption of the programme.

(b) Temporary cancellation of future heating periods

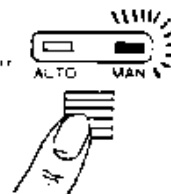
Turn the Thermostat Control Knob to the "0" position.



When you require resumption of the auto programme, return Thermostat Control Knob to required he setting.

(c) To operate heater manually

Press to "MANUAL"



You can now turn the heater on and off as desired using the Thermostat Control Knob.

(d) To change the automatic heating periods

Re-program following instructions (Page 5) and setting new times.

(a) To turn Heater off from automatic operation leaving pilot alight and Auto programme set

Turn Thermostat Control to "0"



(b) To turn Heater and Pilot off leaving auto programme set

Turn Thermostat Control knob to '0' and press ● button fully.



USEFUL INFORMATION

SERVICE

- In Australia — Contact your nearest Vulcan Office.
 - Outside Australia — Contact your nearest Gas Supply Company or Retailer.
- If heater cannot be made to function at all, contact installer or Gas Utility.

CLEANING THE HEATER

Clean the sides and front panels of the heater with a soft damp cloth. Do not use abrasives or chemical cleaners. Beware of sharp edges.

THERMOSTAT OPERATION

You will soon establish the best setting for your personal comfort level. For most economical performance, always operate your heater at the setting which just gives your desired comfort level.

Turning the thermostat knob to a very high setting for a 'quick warm up', then turning down to a low setting when the room is hot will not result in any faster warm up but rather uncomfortable room temperature, uneconomical operation and a "cold and drafty" feeling after the thermostat control knob is turned back to its normal setting.

FAN OPERATION

The fan On/Off mode is automatic. The fan switches on a few minutes after the burner ignites to ensure that discharged air is warm enough for comfort. It switches off a few minutes after the burner extinguishes in order to utilise the heat remaining within the unit.

The three speed fan increases air circulation and efficiency. Switch fan to low, normal or boost as desired. The positions are marked on the control panel.

"Boost" is available to bring the area to be heated up to even temperature in the shortest possible time.

"Normal" or "Low" settings are generally used once the area is up to desired temperature and the heater is maintaining that temperature.

Do not sit up close to the air outlet. This is a **Space Heater** not a personal heater.

Avoid directing air onto room occupants — use air deflectors to direct discharged air and use minimum fan speed that will provide necessary comfort.

AIR CONTROL

If a Rear Register is fitted, this control allows you to vary the amount of warm air distributed to each room.

PROBLEM SOLVER

We have prepared this problem solver in case you have any difficulties with your heater. Check the chart first before you phone for service so you won't be paying for an unnecessary service call.

PROBLEM	CHECK	REMEDY
Pilot will not light.	That gas is available to the heater.	Repeat lighting procedure; hold ★ button down for a longer period.
Burner will not light.	That power is turned "ON".	If "OFF", turn on. If "ON", check further.
	That pilot is alight.	If "OFF", relight. If "ON", check further.
	That the thermostat is not set on a low setting.	If it is, turn to a higher setting until burner lights. If it is on the highest setting, check further.
	That ★ and ● buttons may have been pressed together causing safety mechanism within valve to prevent gas flow to main burner.	Press ● button to extinguish the pilot, wait until a click is heard (approx. 2 mins) before relighting pilot, taking care not to depress ● button. Turn thermostat knob up if necessary, check further.
Burner flame decreases and may even go off.		Thermostat has automatically regulated burner flame to maintain temperature setting as selected on the gas control knob. Burner will relight when temperature falls.
Burner flame on full fire after lighting.		Room temperature is lower than the gas control knob setting. Thermostat will automatically reduce burner flame as room temperature rises.
Room Temperature too low.		Check Rear Register (if fitted) setting. Unwanted heat may be discharging to second room. Turn gas control knob to a higher setting. (Approx. quarter of a numbered graduation at a time. This will increase room temperature.
Smoke or smell.		This may occur only during initial firing.
Ignition button fails to operate.		Refer manual lighting instructions on valve control panel or in these instructions.
Fan fails to come on when burner turned on.		The fan is operated by a thermostat and will come on after a few minutes when the heater is warm. On low fire the fan may not come on for a short period. This prevents cold air from being circulated around the room.
Fan continues to operate after burner turns off.		Fan will operate after the burner goes off until the heater cools down. Fan will then switch off.
Fan blowing cool air.	Fan setting and thermostat setting.	Boost fan and low heat could cause cool air. Set fan to lower speed.
	Air deflecting from adjacent furniture onto thermostat.	Reset air deflectors
	Air blowing direct onto legs.	Reset air deflectors.
Clock showing 12 a.m.		Power interruption has occurred. Reset time of day and automatic programmes.