

USER INSTRUCTIONS - 4000 SPACE HEATER RANGE

PLEASE READ THESE CAUTIONS BEFORE USING THE HEATER.

THIS HEATER MUST BE SWITCHED OFF WHEN THE VEHICLE IS BEING REFUELLED. IN THE EVENT OF A GAS LEAK, IMMEDIATELY TURN OFF ALL APPLIANCES AND THE GAS SUPPLY AT THE CYLINDER. CONTACT YOUR NEAREST APPROVED SERVICE AGENT WITHOUT DELAY. THE APPLIANCE IS SUITABLE FOR USE WHILST THE MOTOR VEHICLE IS IN MOTION, SUBJECT TO LOCAL REGULATIONS IN FORCE.

The heater **MUST NOT** be operated while refuelling or when the vehicle is in a confined space such as a garage. The heater **MUST NOT** be used if the flue has been damaged.

The products of combustion pass through the flue ducting to the roof cowl, therefore any damage to the flue could affect your safety.

Make sure the outlet from the cowl on the roof is not obstructed in anyway, such as snow or articles blown against it.

DO NOT place objects that are likely to damage the flue against it. Avoid hanging wet clothes etc, against the flue ducting.

Aerosols and highly inflammable materials **MUST NOT** be stored in compartments behind or adjacent to the heater.

The symbol (fig. 27) appears on the front case of the heater and means do not cover.

When the appliance is in use, the flue becomes hot. No plastics, fabrics or aerosols must be placed near the ducting.

There **MUST NOT** be a mantelpiece or shelving sited above the heater.

Curtains **MUST NOT** hang within 150mm of the sides of the heater, or within 300mm above the top of the appliance.

DO NOT place furniture or upholstery closer than 5mm to the sides of the heater.

Always wait three minutes before attempting to relight the heater after switching off or the heater going to fail safe shut down.

DO NOT obstruct the gap at the bottom of the heater or the outlet grille slots.

A suitable guard fitted around the heater is recommended where children, the elderly or the infirm are present.

This heater does not contain any asbestos or asbestos related products.

When the heater is first used, it is recommended that you open a window or door and turn the temperature setting to maximum for one hour. This will allow any odours when first using the appliance to escape. NOTE: If odours persist, contact your local dealer.

1 TO LIGHT AND ADJUST THE HEATER (fig. 28).

- 1 OFF
- 2 IGNITION POSITION
- 3 INDICATOR LIGHT
- 4 GAS CONTROL KNOB
- 5 HIGH
- 6 LOW
- 7 "f"

BEFORE LIGHTING THE HEATER

Ensure the gas is turned on at the cylinder.

LIGHTING THE HEATER (fig. 28).

- 1.1 For the 4000A/Fanmaster press the control knob down and rotate to the "f" position, maintaining downwards pressure. The igniter will be heard to operate with a continuous "ticking" noise. On ignition the control knob indicator will illuminate to show that a flame is present. After the burner has lit, continue to hold down the control knob for a further ten seconds. Release the control knob and the indicator should remain illuminated to show that the burner has remained alight.
- 1.2 For the 4000P press the control knob down and rotate to the "f" position, maintaining downwards pressure. Press the ignition button. Check through the viewing window on the front case that the pilot burner is alight, if so continue to hold the control knob down for ten seconds. Release the control knob and the pilot burner should remain alight. It may require several operations of the igniter to light the burner.

- 1.3 To operate the main burner, turn the control knob further anticlockwise and set it at the desired comfort level, between "▲" (high) and "△" (low) positions.

The main burner will "cycle" automatically as required by the thermostat to maintain the set temperature, but the pilot light will always remain alight.

TURNING OFF THE HEATER

Turning the control knob fully clockwise to the "●" position.

2 FANMASTER

2.1 GENERAL DESCRIPTION

The Fanmaster is an electric heating and blown air system controlled by the slider switches on the front case of the heater (fig. 29).

The automatically controlled fan distributes warm air around the caravan. The air is heated either by the Fanmaster's own electric element or by the Carver gas fired heater.

The built in elements are automatically or manually switchable between 0, 1kw, and 2kw and require a 230v AC mains supply drawing a maximum of 8 amps at 2kw. The fan requires a 12v DC supply and will take 1.5A at maximum speed.

When using electric heating the caravan temperature is regulated by the sensor mounted on the gas thermostat at the bottom centre of the heater but when using the gas heating the temperature is controlled by the gas heater thermostat. The night setting is a 1kw convector heater setting. In the summer the fan may be operated with out any heat input to distribute cool air. The duct outlets are generally of the butterfly type and may be opened or closed by twisting the disc in it's housing. The direction of flow can also be achieved in this way.

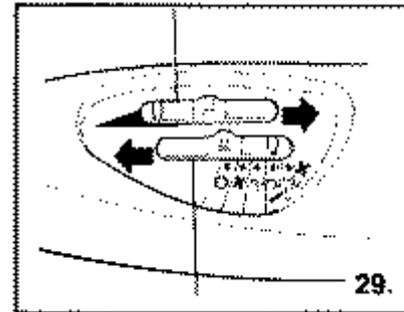
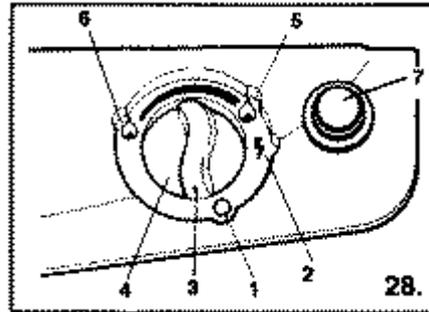
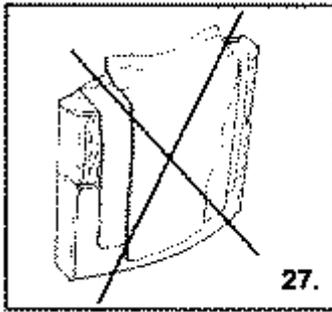
One outlet on each leg of the duct layout must be kept open.

2.2 SLIDE CONTROLLER OPERATIONS

POSITION	OPERATION (without gas)	OPERATION (with gas)
○	Off	Gas convector
	Manual fan speed - Temperature slider governs the fan speed. For cool air distribution.	Blown hot air distribution.
⊕	1kw electric convector heating, no fan. Temperature slider selects desired room temperature.	Electric and Gas convection, but a high gas heater output will inhibit the electric heating to maintain safe operating temperatures
⊕ ⊕	1kw electric fan heating, fan remains slow. Temperature slider selects desired room temperature.	Electric and Gas blown distribution. Fan speed adjusts automatically based on outlet temperature.
⊕ ⊕ ⊕	2kw electric fan heating. Fan automatically adjusts speed to suit. Temperature slider selects desired room temperature.	Electric and Gas blown distribution. Fan speed adjusts automatically.

2.3 FAN 12V CONTROLS

POSITION	OPERATION	OPERATION (with gas)
○	Off	Gas Convection
⊕	Variable Manual Speed Using Top Slider	Blown Hot Air Distribution
⊕ A	Starts Slow But Rising In Speed With Temperature Increase	Blown Hot Air Distribution



NOTE:

Mains hook-up is needed for position 2 & 3, the maximum current consumption will be approximately 4 amps.
 Mains hook-up is needed for position 4, the maximum current consumption will be approximately 8 amps.

If you suspect that your mains hook-up is inadequate to supply the 8 amps required for position 4 in addition to your existing mains load, then for initial warm-up, use the Carver gas heater on a high setting and the Fanmaster on the position 1 setting. When comfortable change to either positions 2, 3 & 4 and turn the gas heater off.

Typical mains current consumption is:

Carver Cascade 2 GE Water Heater	3.6A approx.
Travelling kettle	3.2A approx.
Battery charger	1.0A approx.
Portable colour television	0.3A approx.
60w light bulb	0.3A approx.
Fanmaster on position 4	8.3A approx.
Fanmaster on position 3	4.2A approx.

The normal mains supply to UK sites are rated at 16A but some sites have only a 10A capacity.

4 SERVICING

In order to ensure that your heater continues to operate effectively, you will need to arrange for it to be serviced at least once a year by a competent and trained service engineer. By law no one is permitted to deal with the installation and servicing of gas appliances unless they have proven competence. Contact your nearest caravan dealer if service or repair is required.

4 SAFETY

- 4.1 To prevent over heating of the electric elements at least one warm air outlet must be open at all times. It is recommended that one outlet should be of the non-closeable type and not a butterfly.
- 4.2 If all the outlets are closed the self-hold thermal trip will switch off the power to the elements. If this happens, open the outlets, switch the power off heater and wait till the unit has cooled down, the unit will then reset itself.
- 4.3 Make sure that clothing etc., is kept clear of the back of the heater.

5 WARRANTY CONDITIONS

The unit is covered by a two-year guarantee from the date of purchase of the appliance or the registration date of the vehicle of which it is installed.

The guarantee is liable for all manufacturing faults and defective components.

We strongly advise that all repairs on the unit are carried out by our authorised Service Centres.

5 IMPORTANT

The guarantee does not cover installation errors, tampering or damage caused by frost.

This publication is the property of Arc Systems of Nottingham, it is free to download for personal use only, it is not for sale, resale or redistribution from or by any other means.

For all Carver spares please contact Arc Systems, www.arcsystems.biz
 Telephone 0115 9213175 or email info@arcsystems.biz