



GN Espace OceanChef
4 Burner - Model G1005
4 Burner MDG - Model G1006
3 Burner - Model G1009
3 Burner MDG - Model G1010

LPG Marine Cooker
User and Installation Instructions

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Introduction

Thank you for choosing to buy a GN Espace marine cooker.

Please spend the time to read this instruction booklet thoroughly. It will help you get the most from the many features that this cooker has to offer. When installed and used correctly we are confident that you will benefit from many years of trouble-free use from this cooker.

Tip: Keep this instruction booklet in a safe place so that anyone using the appliance can read it. Write the name, model and serial number, which are shown on the back of the appliance, into the instruction booklet. This will help if you need to contact us about your cooker in the future.

Warning. LP gas is heavier than air and any leakage will collect in low level unventilated areas. Gas bottles shall be sited in a well ventilated store.

Warning: If a gas leak is suspected due to the smell of gas, switch off the gas cylinder IMMEDIATELY. Extinguish all naked lights including cigarettes. Do not operate electrical switches. Open all doors and windows. Propane and butane gases are heavier than air and will therefore collect at a low level. Check for leaks using a leak detector spray or a soap and water solution. Never check for leaks with a naked flame.

General Description

The GN Espace marine cooker is a single cavity gas oven with grill and a hob. Each burner has an individual gas safety thermocouple. It is designed to operate using an external LPG, Propane or Butane gas supply (subject to appropriate injectors and gas pressure) petroleum gas (LPG) systems.

The cooker is manufactured using stainless steel and other technical materials which are designed for long life in a rugged marine environment.

The cooker is designed for gimbaled or fixed installation. A fixed position harbour lock is fitted.

This cooker is also suitable for a fixed installation on boats and recreational vehicles and caravans.

The oven and hob are designed around the dimensions of the Gastronorm professional catering equipment (EN631). This allows an extensive range of interchangeable Gastronorm cookware to be used with the cooker, as well as standard overware.

This appliance shall be installed in accordance with the regulations in force and in a well ventilated area. Failure to install the appliance correctly could invalidate any warranty or liability claims and lead to prosecution.

Read these instructions before installing and using the appliance.

IMPORTANT : This cooker is suitable for use with both propane and butane gas with the appropriate regulator fitted. Please note that the two gasses have different burning characteristics and are affected by the ambient temperature. There will be a performance variation for the cooker depending on the gas type used and ambient temperature ie. Butane is not recommended for use in colder climates.

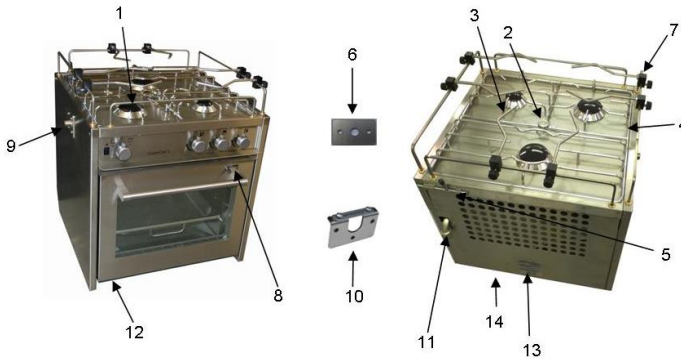
Camping Gaz (Butane) – The restricted orifice size on a CampingGaz container (R907, R904) limits the gas flow reaching the cooker (especially in cold weather) resulting in longer heat-up and cooking times.

Gas types

The appliance is suitable for use with LPG. Both propane and butane. No other gas must be used. The following gas details and pressures must be applied:

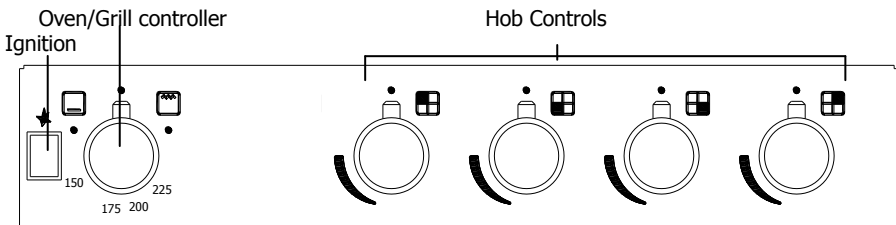
CAT I3+ (28-30/37)	CAT I3B/P
Butane (G30) 28-30mbar	Butane (G30) 30mbar
Propane (G31) 37mbar	Propane (G31) 30mbar

Product Overview (4 burner shown)



- | | |
|---|---|
| 1. Burner / Thermocouple/ Spark ignition | 9. Gimbal pivot (gimbaled version only) |
| 2. Pan support lock | 10. Gimbal pivot bracket (gimbaled version only) |
| 3. Pan support | 11. Gas connection point (rear right) |
| 4. Sea Rail | 12. Battery housing cover (front base) |
| 5. Harbour lock bolt (gimbaled version only) | 13. Rating plate (rear panel) |
| 6. Harbour lock bracket (gimbaled version only) | 14. Counterweight (on base) (gimbaled version only) |
| 7. Pan clamps | |
| 8. Door lock | |

Control panel (4 burner)



Using the appliance

For your safety

- The appliance shall not be operated when refueling the boat or other appliances.
- The appliance must be sited in an area free from draughts which could effect combustion in a manner which will allow a build up of unburned gas.
- All air vents must be open and well maintained.
- Whenever operating the appliance ensure that the gas cylinder is correctly connected to the appliance gas supply
- When lighting any burner check that it has lit before you leave the appliance.
- When turning off a burner, **do not** leave the appliance until the flame has gone out.

Lighting the appliance

Warning : All hob and burner flames should be prominently blue and without yellow tips.

Hob, grill and oven ignition

Replacing the Battery



The battery for the ignition will usually last for many months. If the ignition system doesn't work you probably need to replace the battery.

The battery (1.5V AA size) is at the bottom rear of the appliance. When you need

to replace the battery unscrew the battery cover by hand, change the battery and replace the lid. Make sure that the -ve end of the battery is held in the spring.

You can light the burners with a match if needed.

Using the hob

Heat control

The hotplate control knobs turn anticlockwise from 'OFF' to 'HIGH' and then to 'LOW'. You can adjust the heat by turning the control between the highest and lowest settings.

Burner sizes

Depending on the model the hotplate has two burner sizes to suit different types of cooking:

Semi Rapid (Normal) - use for everyday cooking.

Auxiliary (small) burner - use for simmering food such as soups and stews.

If you have any trouble lighting a hotplate burner turn all hotplate control knobs off and make sure the hotplate burner parts have been replaced correctly.

Hob

To light hob



1. Push in the control knob and turn it to the maximum setting. Keep the control knob pushed in and press the ignition button immediately.
2. When the burner has lit, release the ignition button, but keep holding in the control knob for 15 seconds (to heat the thermocouple).
3. Release the control knob and then turn it to the required setting.

Warning: Press the ignition button immediately. If not pressed immediately then a build up of gas may cause the flame to spread. The ignition button should not be operated for more than 15s. If after 15s the burner has not lit, stop operating the device and wait at least 1min before attempting further ignition of the burner.

Using and adjusting the pan fiddles



The cooker is fitted with a sea rail onto which the 8 adjustable pan fiddles (2 per burner) are fitted.

To attach the pan fiddle, open the thumbscrew on the clamp and place the saddle onto the sea rail. When the fiddle is in the correct position, tighten the thumb screw to hold the fiddle firmly in position.

Using the grill

WARNING : Accessible parts may get very hot when the grill is in use. Children should be kept away.

Grill Heat control

The grill control has one heat settings. The control knob turns to the right from 'OFF' to



If the burner flame is accidentally extinguished during cooking, turn off the gas and wait at least one minute before attempting to re-ignite.

Grill

To light grill:



1. Open the oven door
2. Push in the control knob and turn it to the grill setting. Keep the control knob pushed in and press the ignition button immediately.
3. When the burner has lit, release the ignition button, but keep holding in the control knob for 15 seconds (to heat the thermocouple).
4. Leave the grill door partially open when you are using the grill.

WARNING : Press the ignition button immediately. If not pressed immediately then a build up of gas may cause the flame to spread.

If the burner flame is accidentally extinguished during cooking, turn off the gas and wait at least one minute before attempting to reignite.



Fitting the grill deflector.

Using the oven

Shelf positions

The oven has three shelf positions - top (for grilling), middle and lower.

The oven is supplied with two removable oven shelf pan holder as standard. Additional oven shelf pan holders are available as optional accessories.



1. To remove the oven shelf pull it out until it reaches the safety stop.
2. Slightly angle the shelf upwards and pull out of the runners.

Heat zones

When using the oven you will find that the top shelf of the oven cavity is hotter than the lower shelf. The oven temperature that you have chosen will be on the middle shelf.

You may therefore have to adjust the temperature or cooking time depending on which shelf level you are using in the oven.

Preheating

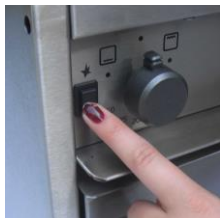
Important, when you need to preheat the oven, we recommend you do so for at least 15 minutes (20 minutes when cooking large amounts of food). Placing cold food in an oven that has not been pre-heated considerably reduces the cooking performance.

Oven thermostat

Immediately initiate repair or replacement of the thermostat if an abnormal drift of oven temperature occurs during cooking.

Oven

To light oven:



1. Open the oven door.
2. Push in the control knob and turn it to the maximum oven setting. Keep the control knob pushed in and press the ignition button immediately.
3. When the burner has lit, release the ignition button, but keep holding in the control knob for 15 seconds (to heat the thermocouple)
4. Release the control knob and then turn it to the required setting.
5. Wait until the burner is showing large flames.
6. Close the oven door.

WARNING : Press the ignition button immediately. If not pressed immediately then a build up of gas may cause the flame to spread.

If the burner flame is accidentally extinguished during cooking, turn off the gas and wait at least one minute before attempting to re-ignite.

To turn off any burner (hob, grill and oven)

1. Push in the control knob and turn it to the off position. This is shown by a large dot.

Cooking

The oven is designed to accept standard and Gastronorm cooking trays which are available in a number of sizes and depths. There are 3 shelf positions.

Always pre-heat the oven before placing cold food in the oven. The oven is capable of reaching full cooking temperature from cold, in approximately 20 minutes.

When using the hotplate, care must be taken to ensure that pans do not overlap the edges of the hotplate. When circular pans are used the minimum diameter shall not be less than 120mm and the maximum shall be 180mm, on all the burners.

Care and cleaning

General

Clean your appliance regularly using a cloth that has been wrung out in hot soapy water (ie. hot water with dishwashing liquid). Rinse and polish it dry using a soft cloth.

Do not use any polishes, caustic cleaners, abrasives, washing soda or soap except those recommended. When you remove parts of your appliance for cleaning **do not** plunge them into water whilst they are very hot as this may damage the finish of the parts.

Cleaning the hob

- You can remove the pan support, burner caps and burner rings to clean them. Take care not to damage the spark electrodes and thermocouples.
- For hygiene and safety reasons you must keep this gas appliance clean. A build up of fat or other foodstuff could cause a fire.
- Try to clean up spills and splashes as soon as possible. But be careful as parts of the cooker will be **hot**.
- You can wash the removable parts in very hot soapy water.
- Make sure that the electrode and the hole and slots in the ring are not blocked with food or cleaning materials.
- Clean the burner rings by soaking them in very hot soapy water.
- You can remove any stubborn stains by scouring with a soap-filled scrubbing pad.
- If you look after the burner rings in this way they will stay reasonably clean. However the surface will dull with time.
- Aluminium-based saucepans can leave shiny metal marks on the pan supports.
- Clean the pan supports regularly.
- After cleaning the appliance parts, dry them thoroughly before you put them back.

Pan support - removal and replacement



1. Undo the holding nut in the centre of the hob.
2. Lift off pan support.

Hob burners - removal and replacement



1. Remove the pan support
2. Grip the burner cap and rotate it anticlockwise through $\frac{1}{4}$ turn and lift off.
3. Lift off the burner cap and burner ring.
4. Reverse procedure to replace. Make sure that the holes on the ring align with the thermocouple and spark electrode.
5. Do not try to force the ring on to the body. Check for ignition.
6. If a burner will not light then you need to check the ring and cap positions.

General

Regularly clean the oven cavity and door while they are still slightly warm. This way you can easily remove any splashes and spills. Wipe with a cloth that has been wrung out in hot soapy water.

To avoid the possibility of the shelf jamming, ensure that all the entrance holes to the shelf runners are kept clean and clear of spillage.

Do not clean the grill burner or oven burner itself. The burners are designed to be self cleaning. Cleaning the burners may cause the holes in the burner to become blocked preventing them from operating correctly.

Maintenance and servicing

In addition to regular cleaning of the appliance, it is recommended that servicing is carried out once a year by a suitably qualified engineer.

The manufacturer shall make servicing instructions available, on request, to competent persons to enable the appliance to be maintained in a safe working condition.

Warning. Any servicing or maintenance work carried out by an unauthorised person will invalidate the manufacturers warranty and could result in a dangerous situation.

Installing the appliance

It is a legal requirement that all gas appliances are installed by competent persons qualified in accordance with the local and national regulations (GasSafe registered in the UK). Failure to install the appliance correctly could invalidate any warranty or liability claims and lead to prosecution.

The appliance shall be installed in accordance with the local and national/European standards in force. Particular attention shall be given to the requirements regarding ventilation.

This appliance may not be installed in a room containing a bath or a shower.

Read these instructions before installing or using the appliance.

Ventilation

This appliance is suitable for installation into boats, recreational vehicles and caravans. The national standards regarding ventilation must be adhered to.

The use of this cooker results in the production of heat and moisture in the area in which it is installed. Ensure that the galley is well ventilated. Keep natural ventilation passages open or install a mechanical ventilation device.

Loose items supplied with cooker (Qty / Description)

1	Instruction book	4	Sea Rails (1 front rail (low height), 3 side and back rails)
1	Oven wire shelf	1	1.5V Battery size AA
2	Oven frames	2	Gimbal pivot brackets
1	Grill deflector	1	Harbour lock bracket
1	GN 2/3 pan	1	Counterweight (if not supplied fitted)
1	GN 2/3 wire trivet		
8 (6)	Pan fiddle clamps (depending on model)		

Positioning the cooker

A horizontal distance of 200mm must exist between the edges of the appliance and any combustible material unless that material is protected by a layer of non combustible material. All combustible material such as curtains and shelves must be kept well clear of the appliance. Any fittings such as a cupboard above the cooker must have a minimum clearance of 500mm between the fitment and the top of the pan support.

Installation for Gimbaling

The cooker is designed to be installed into a 'cooker box' sited between two vertical walls using the two gimbal mounting plates fitted to appropriate wooden blocks held using M6 bolts or screws. The cooker is set up to fit into a 540 mm gap.

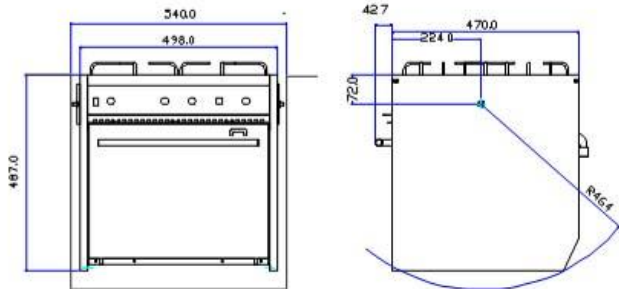
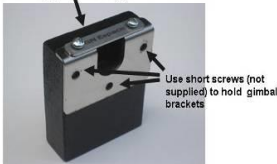
To install:

1. Use the diagram below to establish the relative positions of the gimbal pivot facing bracket and harbour lock facing bracket (on left wall).
2. Identify a suitable position to mount the left and right hand gimbal pivot and the harbour lock facing bracket.
3. The gimbal and harbour lock facing brackets should be located in such a position to allow the cooker to gimbal perpendicular to the vertical furniture walls and also to be horizontal plane.
4. Suitable mounting blocks for the gimbal pivot facing bracket and harbour lock facing bracket in order to create a 540 mm wide gap need to be fabricated. See pictures below.
5. Attach counterweight to base of cooker (if not already fitted) with screws provided. Lift cooker into position on the gimbal pivot facing bracket. Attach the securing caps onto the gimbal pivot brackets using the screws provided.

Guide for mounting the gimbal mounting bracket



Gimbal securing plate screws (A)



Installation for Fixed Installation (Boats, Recreational Vehicles and Caravan)

The cooker is set up to fit into a 500mm gap with the gimbal pins removed. The cooker is designed to be mounted and held safely in place by means of a set of specifically designed runners (available from GN Espace as an accessory - supplied separately) fitted to the cooker box base. A ventilation gap of at least 30mm must be provided at the back edge of the cooker.

Gas connection

The Cooker is fitted with a ½" Tapered Female BSP iron at the rear of the appliance. The appropriate sized connector to suite the hose needs to be fitted. The final connection will be by means of a flexible hose, (UK : which must comply with BS3212 pt 2). It must have a length which does not exceed 1Metre and be marked to identify its suitability for use with LPG appliances. Flexible hoses should not pass through bulkheads, decks or partitions unless protected from abrasion. Flexible hoses should not be subjected to temperatures above 50°C

After installation the appliance must be tested for gas soundness.

In the event of problems being encountered during installation, commissioning or operation the manufacturer should be informed and any necessary service arranged. Unauthorised servicing will invalidate the manufacturers warranty.

Gas connection (Recreational Vehicles, Caravans)

The Cooker is fitted with a ½" Tapered Female BSP iron at the rear of the appliance.

When installing the cookers in caravans/recreational vehicles the gas system installation must be carried out in line with the requirements as laid down in BS EN1949:2002:

- If more than one appliance is fitted in the caravan and gas is supplied via one single line, there must be individual shut-of valves for each appliance and the user must be able to identify the shut-off valves and their open and close positions. - (as set out in Clause 8.8)
- Pipes conveying gas shall not be used as an earth electrode or earth continuity conductor. Bonding to the earth continuity conductor is required. – (as set out in Clause 8.9)
- For caravan installation a metallic connection to the cooker is required. Appliances shall be connected to the supply by metallic piping which shall be rigid and free of stress. (– as set out in Clause 9.1)

Before first use

- Remove all accessories and packing from within the oven and before the first use, clean the interior and all fittings with a soap and warm water solution.
- Important When using the grill for the first time, or when re-connecting after the gas supply has run out, you will need to prime the grill burner. To do this set the control knob to grill setting and hold in the knob for 10 seconds. Continue to hold in the knob and ignite the grill using a match or lighter, moving the flame in a circular motion until the grill is fully ignited. Release knob and leave grill to run for a 1-2 minutes. The grill can then be lit using the ignition button.
- To burn off lubricants used in manufacturing heat the oven to 200°C and leave for 30 minutes before introducing the initial batch of food to be cooked.

Spare parts

Please contact us if you have a technical problem or need a spare part.

When you report a problem try to describe the nature of the fault.

Always give your appliance's full name, model and serial number.

Make a note of this information in this space:

Name:

Model Number:

Serial Number:

Technical Specification

The appliance is for use with LP gas.

CAT I3+ (28-30/37)	CAT I3B/P(30)
Butane (G30) 28-30 mbar	Butane (G30) 30 mbar
Propane (G31) 37 mbar	Propane G(31) 30 mbar

Oven

Internal dimensions (HxWxDmm): 265 x 354 x 325
Number of tray positions: 3

4 Burner

Total Heat Input (kW/g/h) 7.6 kW (552 g/h)
Hotplate burners 3 x 1.5 kW (110 g/h), 1 x 1.1 kW (80 g/h)
Grill burner 2.0 kW (145 g/h)
Oven burner 1,5 kW (110 g/h)

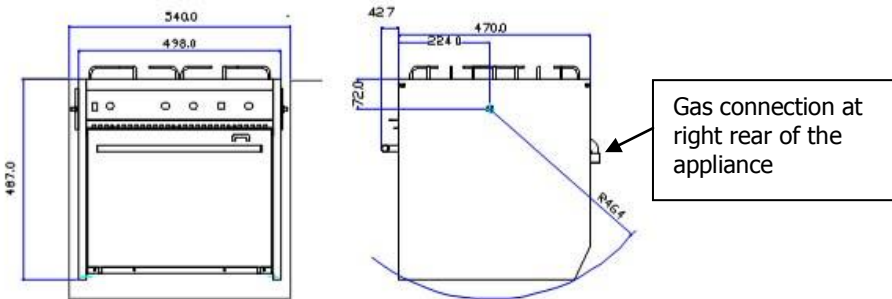
3 Burner

Total Heat Input (kW/g/h) 6.1 kW (451 g/h)
Hotplate burners 2 x 1.5 kW (110 g/h), 1 x 1.1 kW (80 g/h)
Grill burner 2.0 kW (145 g/h)
Oven burner 1,5 kW (110 g/h)

Injector size (mm) Hotplate burners - Small burner 0.5 , Large burners 0.6 ,
Grill burner 0.6, Oven burner 0.5

Weight (cooker only) 35 kg , Weight complete with fittings 37 kg

Product Dimensions



IMPORTANT NOTICE

In line with our continuing policy of research and development, we reserve the right to alter models and specifications without prior notice.

This instruction booklet is accurate at the date of printing, but will be superseded if specification or appearance are changed.

Information Safety Information for users

ANNEX A Emergency procedures

Leakage

- If LPG leakage is detected or suspected, the following action should be taken immediately.
- Shut off the LPG supply at the cylinder valve(s).
- Extinguish naked flames and other ignition sources(heaters,cooking appliances, pilot lights, cigarettes etc).
- Do not operate electric switches.
- Ventilate the area with a through draught.
- Evacuate the area if possible.

If leakage is from a cylinder and cannot be stopped, move the cylinder to where LPG can disperse away from the vessel (and other vessels). Take care not to spill LPG while moving the cylinder.

Do not use an installation that has leaked until it has been checked by a competent person.

Fire from an LPG leak

If an LPG leak has ignited, action should be taken in accordance with (a) or (b) as appropriate.

If the vessel is moored:

- Alert everyone in the area and evacuate if possible.
- Call the fire brigade, if practicable.
- Do not attempt to extinguish any flame unless it is safe to do so. Shut off the LPG supply before attempting to extinguish the flame. After shutting off the LPG supply, extinguish any free burning materials with extinguishers or water.
- Do not reuse the installation unless it has been checked by a competent person.

If the vessel is off shore:

- Alert everyone on the vessel.
- If it is safe to do so, shut off the gas supply.
- Extinguish any free burning material with extinguishers or water.
- Do not reuse the installation unless it has been checked by a competent person.

Fire close to an LPG cylinder:

WARNING: Cylinders exposed to fire can explode.

If there is a fire near to an LPG cylinder, the following action should be taken.

- Alert everyone in the area and evacuate if possible.
- Call the fire brigade if practicable.
- If it is safe to do so, shut off the gas supply and move the cylinder to a safe place in the open.
If the
- cylinder cannot be moved, keep it cool with wet blankets and spraying with water.
- Do not reuse the installation unless it has been checked by a competent person.

ANNEX B Safe usage : Changing a cylinder

The following safe practices should be complied with when changing a cylinder.

- (1) Ensure that any manually operated valves on both the full and empty cylinder are turned off before changing. Replace the plastic safety cap or plug on disconnected cylinders.
- (2) Store, transport and use cylinders vertically with the valve uppermost.
- (3) Do not use a cylinder if the cylinder, valve or regulator are damaged. Return the cylinder to the supplier. Do not attempt to repair the fault.
- (4) Before changing the cylinder, extinguish any fire, flame or source of ignition, including cigarettes and pilot lights.

- (5) Joints should be firm and gas tight. If a leak is suspected, after changing a cylinder and opening the valve, check the cylinder valve with an ammonia free leak detection fluid. Do not use a naked flame for testing.
- (6) If a leak cannot be stopped, move the cylinder to a safe place in the open, ensuring that the leaking LPG is dispersed safely.
- (7) Ensure that replacement cylinders are appropriate for the installation.
- (8) Ensure that the regulator is appropriate for the appliance and use in accordance with the manufacturer's instructions.
- (9) Ensure that sealing washers, if required, are sound and correctly positioned prior to connecting. Mating surfaces of connections that require metal to metal sealing should be clean and undamaged. Do not use damaged valves or connections.
- (10) Use the correct size of spanner for connections, and tighten firmly. Self-sealing valves should be connected in accordance with the manufacturer's instructions.
- (11) Regulators fitted with integral relief valves should be ventilated to the open, away from sources of ignition.
- (12) Ensure that all appliance taps are turned off before reconnecting cylinders that have been closed, or connecting replacements.
- (13) Light appliances without an ignition device, by applying a match or taper to the burner before turning on the supply.

Refuelling LPG powered vessels

As well as taking normal precautions against spillage, smoking or naked lights, ensure that all gas burners are turned off and the permanent pilot lights extinguished. Disable automatic ignition systems when refuelling.

Appliance usage

The following should be complied with when using the appliance.

- (1) Operation and maintenance of the appliance should be carried out in accordance with the manufacturer's instructions.
- (2) Ventilate the area. Do not obstruct ventilator openings. Do not use this cooking appliance to heat the area.

WARNING: Non room-sealed fuel burning appliances consume oxygen and can release combustion products into the vessel.

- (3) Check flexible hoses regularly. Replace if cracked or otherwise deteriorated. Ensure that the ends of replacement hoses are secure and gas tight.
- (4) Ensure that the LPG system is regularly tested for leakage. Connections should be checked by:-
 - (a) Routine observation of a bubble tester installed in the cylinder locker or housing, or
 - (b) routine observation of a pressure gauge in the high pressure side of the system, or
 - (c) testing with leak detection fluid, with the appliance burners turned off and the main shut off valve open.

WARNING: If there is a leak discovered in the LPG system, close the cylinder valve and ensure that it is repaired by a competent person.

WARNING: Do not use solutions containing ammonia to detect leaks.

WARNING: Do not check leaks with a naked flame.

- (5) Check flues at least once a year.
- (6) Check the cylinder locker is not damaged so as to allow the escape of leaked LPG.
- (7) Check the cylinder locker drain is not blocked or damaged.

Note: For side opening cylinder lockers installed in accordance with BS EN ISO 10239, check the effectiveness of any seal.