

Sprite
Super Sprite
Sprite Continental
Eccles

User Handbook – 1993

INTRODUCTION

Now that you are in possession of your new caravan, May we welcome you to the world of caravanning and congratulate you on your choice. All Sprite Leisure Group caravans are backed by over forty years experience in design and manufacture. As a result, we are confident that you will derive much practical enjoyment and many years of value from your new caravan.

Do please devote a little time to reading this handbook thoroughly - you will be well rewarded by its practical advice and details of new technical developments.

But please remember that the modern caravan is a complex product – a genuine home-from-home with sophisticated appliances and systems.

This User Handbook is designed to help you:

- get to know your caravan and operate its equipment,
- handle your caravan and tour with it.
- service your caravan and maintain its value.

ADVICE

Note: throughout this handbook the following symbols are used:

* = depending on model or option

+ = additional information may be found in the manufacturer's operating instructions contained in the Caravan Service Wallet. Although basic instructions for all equipment are contained within this handbook, you should refer to the more detailed manufacturer's instructions as well, at least initially.

AFTER SALES

Parts and service

Having taken possession of your new caravan, you may relax in the knowledge that all Sprite Leisure Group caravans are supported by probably the most comprehensive after sales service available in the industry. Through our extensive network of Sprite Leisure Group Dealers you are assured of specialist help and advice for all eventualities.

Backed by the latest technical information and fully illustrated microfiche parts catalogues, your Sprite Leisure Group Dealer's factory-trained staff will be pleased to meet all your requirements. Please remember always to quote model and serial number to ensure that all orders are correctly fulfilled. (We regret that, in order to maintain the efficiency of our parts supply service, orders cannot be placed direct with the factory.)

Optional equipment

We recognise that many caravan owners wish to enhance their caravans by the addition of individual accessories. Your Sprite Leisure Group Dealer maintains a complete range of optional equipment designed for your caravan.

WARNING

Your Sprite Leisure Group dealer must be consulted if additional equipment is to be fitted e.g. water tank, spare wheel, to ensure the design is compatible.

ADVICE

Stay in contact with your dealer and give them adequate time to service or check your caravan at the beginning of each new season.

1 GETTING TO KNOW YOUR CARAVAN

Your Sprite Leisure Group caravan is a complex product with many useful features. Time spent familiarising yourself with its layout and equipment will not be wasted. This chapter gives you a brief resume of your caravan's component parts.

Construction design

Your caravan is manufactured to the strictest design standards. All Sprite Leisure Group caravans are built to the following construction: - 40mm thick insulated floor - 26mm fully bonded sandwich side and end walls with pre-coated aluminium exterior - fully insulated cavity roof - overall galvanised steel chassis - full width wheel track with top quality radial tyres - independent BPW rubber torsion bar suspension and auto-reverse mechanism - double glazed, tinted acrylic windows.

Potential

With proper attention to operation and maintenance your Sprite Leisure Group caravan will give you years of trouble-free service.

- At home and abroad you will be able to travel at will and stay where you like.
- Your caravan's excellent insulation properties mean that you will be warm in the coldest winter yet cool in high summer.
- Aerodynamic styling will ensure minimum wind resistance; and its excellent towing characteristics will make every trip a pleasure.

Chassis (fig 1.2).

- The towbar assembly houses the tow-hitch, handbrake, electrical connectors and braking devices. This is the 'business end' of your caravan. Make sure you fully understand its operation - all controls from the towing vehicle pass through here.
- The wheels/tyres/brakes must be maintained in good order - check pressures before every trip.

WARNING

The corner steadies, which wind down, are designed to 'steady' the caravan when parked - not to support it.

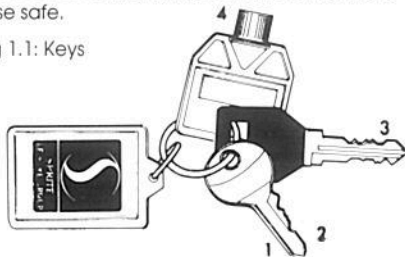
Finding your way around

Keys (fig 1.1). Two each of the following keys are supplied on a Sprite Leisure Group Caravans key ring

- main door key (1)
- battery storage locker* key (2)
- cassette toilet* key (3)
- gas cylinder locker key (4)

Make a note of their numbers on the inside front cover of this handbook and somewhere else safe.

fig 1.1: Keys



Serial number and CRIS / VIN Number

Be sure to make a note of your caravan's serial and CRIS / VIN Number in the front of this handbook and somewhere at home. The plate may be found on the exterior side wall of your caravan beside the lower, opening corner of the door which displays both numbers. The CRIS / VIN Number is also etched on all windows.

Exterior.

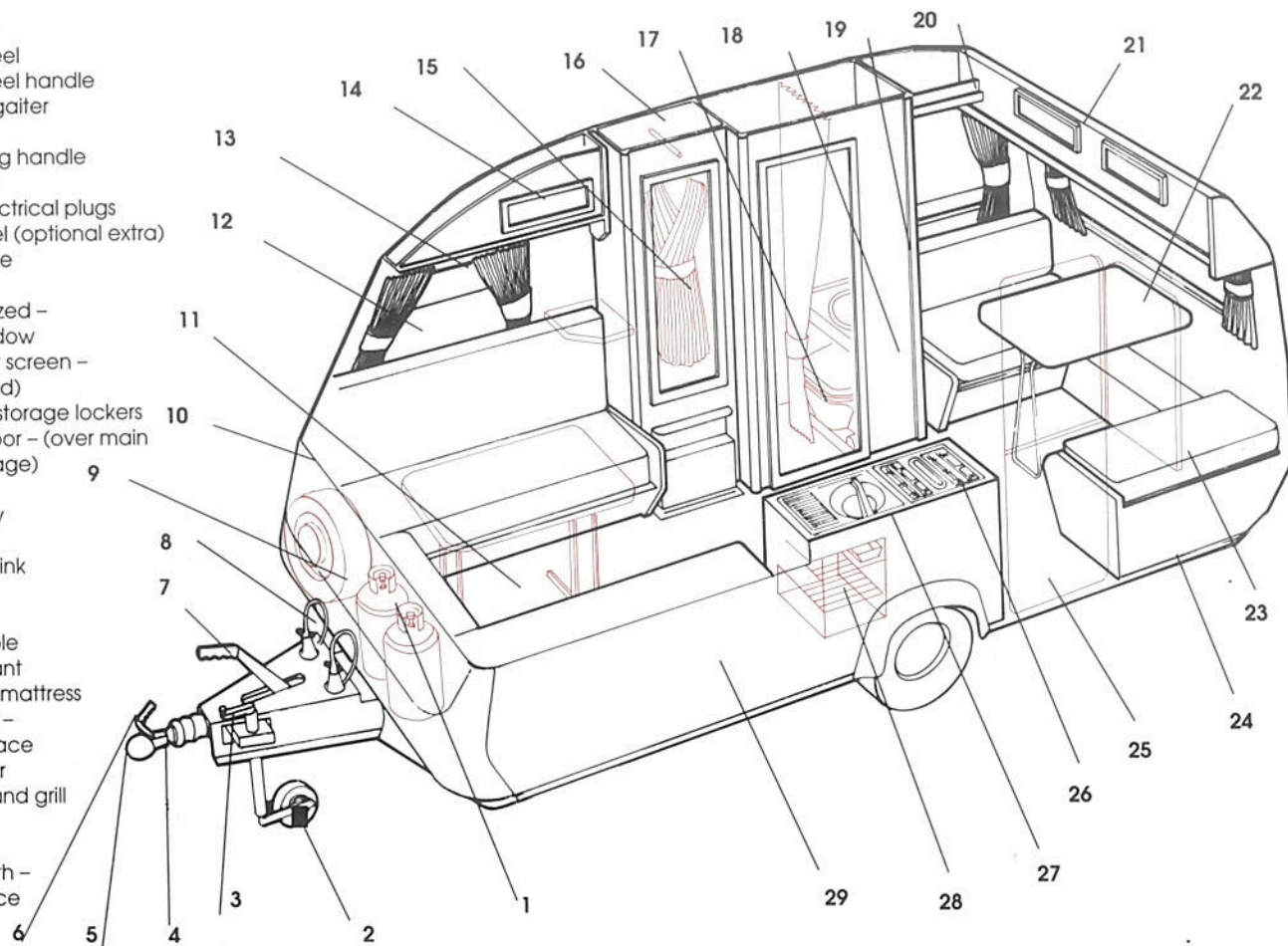
- The integrated gas cylinder locker is where gas cylinders, a spare wheel and other accessories can be stored.
- Grab handles are for use when man handling your caravan.
- Fresh water inlet and waste water outlet are for use when parked on site.
- Mains electricity inlet is for use on sites with a 220/240v supply.
- Charger/converter* converts mains electricity to 12v and charges auxiliary battery*.
- Stable door is for access and ventilation.
- Windows are double glazed, tinted and acrylic.
- Awning channel is for attachment of an awning to extend your living space.

Interior.

- Kitchen unit comprises sink, drainer, hotplate; grill, refrigerator and oven*.
- Deep cushioned settees convert to beds.
- Ample storage space is supplied by wardrobe, eye-level and under-seat lockers.
- Washroom/toilet compartment houses sink, shower* and cassette toilet.
- Gas space heater warms the whole caravan.
- Cold and hot* running water is pumped to the kitchen and washroom.
- 12v electricity powers fluorescent lights.

2 YOUR CARAVAN EXPLAINED

- 1 Gas bottles
- 2 Jockey wheel
- 3 Jockey wheel handle
- 4 Protection gaiter
- 5 Tow hitch
- 6 Hitch locking handle
- 7 Handbrake
- 8 12N/12S Electrical plugs
- 9 Spare wheel (optional extra)
- 10 Grab handle
- 11 Bed slats
- 12 Double glazed - acrylic window
- 13 Cassette fly screen - (where fitted)
- 14 Overhead storage lockers
- 15 Mirrored door - (over main table storage)
- 16 Wardrobe
- 17 Shower tray
- 18 Porta potti
- 19 Bathroom sink
- 20 Shelf
- 21 Lockers
- 22 Folding table
- 23 Fire retardant foam filled mattress
- 24 Under seat - storage space
- 25 Stable door
- 26 Hot plate and grill
- 27 Sink
- 28 Fridge
- 29 Settee berth - locker space



All Sprite Leisure Group caravans are designed to provide optimum towing characteristics. To ensure trouble-free towing, particular attention should be paid to loading, nose weight, towing height and tyre pressures.

Loading and distribution of weight in the caravan.

Do not exceed the recommended maximum loading for your caravan.

1. Load heavy items low down near the floor and mainly over or in front of the axle(s).
2. Load evenly right to left.
3. Do not load items at the extreme front or rear since this can lead to instability due to the 'pendulum effect'.
4. Load remainder, to give a suitable noseweight at the towing coupling.
5. Check noseweight.

Correct weight distribution

fig 3.1



LIGHT
ITEMS



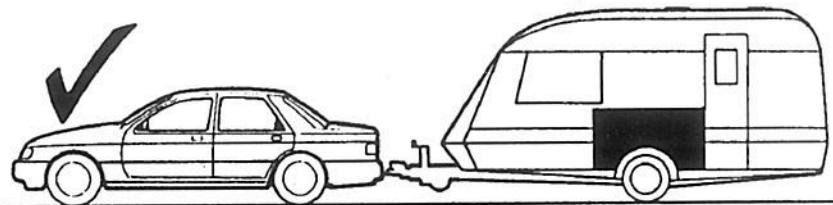
MEDIUM
ITEMS



HEAVY
ITEMS



fig 3.2



Note: Do not put excess weight in car boot.

WARNING

Never enter the caravan without first lowering the four corner steadies with the brace provided.

ADVICE

PRE-LOAD CHECKLIST BEFORE LOADING CHECK

- loose articles are stowed securely. Do not stow tins, bottles or heavy items in overhead lockers prior to towing.
- all lockers and cupboard doors are closed and secured.
- all bunks are secure.
- all roof lights are closed and secured.
- main table is stored in its transit position.
- fridge is on 12v operation and door lock is set.
- all windows are fully closed and latched.
- never tow with windows on night setting.
- leave all curtains and blinds open to aid rear visibility.
- gas cylinders are correctly positioned, secured and turned off.
- battery is secure and connecting cable is disconnected and stowed.

4 WEIGHT DISTRIBUTION

Towing preparation

Number plate. A rear number plate can be supplied and fitted by your Sprite Leisure Group Dealer.

Vehicle/caravan power/weight ratio.

- In general a petrol vehicle may tow a caravan whose actual laden weight does not exceed 85% of the vehicle kerb weight. Please refer to your vehicle handbook for specific advice.

Caravan/ vehicle weight / weight ratio.

(Petrol vehicles) In principle the actual laden weight of your caravan should not exceed 100% of your vehicle kerb weight. In practice a maximum caravan/vehicle weight ratio of 85% is recommended. The formula to calculate this ratio is:-

$$\frac{\text{ALW (caravan)}}{\text{KW (vehicle)}} \times 100 = \%$$

Nose weight. Your caravan is designed to be towed slightly nose heavy. The ideal nose weight varies from outfit to outfit, but in practice the combination should stand as level as possible when vehicle and caravan are both loaded. As a guide we recommend that in laden touring trim the nose weight of your caravan should be between 50 and 75 kg. (If your vehicle's rear springs are soft and/or there is a long overhang from the vehicle's rear axle, please talk to your Sprite Leisure Group Dealer about possible suspension aids.)

Tyres and pressures. Correct tyre pressures are essential to safety – they must be checked often and accurately, and without fail before each trip. Caravan tyre pressures and sizes for stable towing up to 60mph in UK and 75mph in Continental Europe are quoted in the specifications on pages

34-41. Consult your Sprite Leisure Group Dealer if you intend to:

- tour at sustained speeds above 60mph
- travel over unusual terrain
- exceed the specified Maximum Laden Weight.

It is normally good practice to increase the pressures of the towing vehicle's rear tyres by 3 or 4 psi.

Weight load distribution (fig 3.1) To achieve optimum nose weight and maximum stability your caravan should be loaded carefully. Stow your heaviest items amidships, as near the floor as possible and balanced evenly side to side. Avoid too much weight at front or rear. Ensure that all items are secured and will not move around while on tow.

How to establish the Actual Laden Weight (ALW)

The basic items required for two people to go caravanning will weigh a minimum of 100kg in total. These will include:

- food • crockery • cutlery • cooking utensils
 - clothing • bedding • gas bottles • water carrier
- The weight of additional items required (e.g. battery, awning, portable toilet, spare wheel, TV) must be added to the basic total.

A further 25kg for each additional person should be allowed for basic items. Having established the total weight of items to be carried by the caravan this must be added to the ex-works weight to obtain the estimated actual laden weight. If in doubt this can be done on a public weighbridge.

GLOSSARY

- Vehicle **kerb weight (KW)**: weight of full vehicle without occupants or luggage.

- Caravan **actual laden weight (ALW)**: total weight of caravan and contents.
- Caravan **ex-work weight**: weight of caravan with standard equipment but no other contents.
- Caravan **maximum laden weight (MLW)**: maximum weight caravan chassis is designed to carry. THIS WEIGHT MUST NEVER BE EXCEEDED.
- Caravan **nose weight**: weight transferred from caravan to towing ball of vehicle.

ADVICE

There are two recognised ways of calculating caravan nose weight.

- **Weighbridge:**
 - tow laden caravan onto public weighbridge with towing vehicle coupled up but its wheels off the weighbridge; make a note of the recorded weight.
 - unhitch caravan from vehicle, ensuring jockey wheel is on weighbridge. Make a note of the new recorded weight.
 - your caravan's nose weight is the difference between the two recorded weights..

- **Bathroom scales:**

- uncouple vehicle and caravan
- with jockey wheel lowered to ground, raise corner steadies and apply caravan handbrake
- position bathroom scales beneath hitch and fit a pre-cut length of wood between scales and hitch, making sure caravan is level horizontally
- wind up jockey wheel clear of the ground:
- the weight now recorded on the scales is your caravan's nose weight.

Coupling

Breakaway braking cable. This fail-safe device is designed to apply the caravan parking brake automatically in the event of uncoupling between vehicle and caravan while on tow. It **MUST** be connected on every trip.

Manhandling. A grab handle is provided at each corner of your caravan to assist in manoeuvring your caravan by hand. Always grip your caravan by these handles or by the tow hitch; do not push against body panels or windows.

Brakes

- The auto-reverse overrun brakes on your caravan will activate automatically when on forward tow whenever the vehicle brakes are applied.
- When reversing, an automatic mechanism disengages the brakes automatically. No manual action is needed.

ADVICE

The height of vehicle-caravan couplings is governed by international standards. When your caravan and vehicle are coupled the centre of the towing ball should be 420mm from the ground for your caravan to ride level. Consult your Sprite Leisure Group Dealer if you cannot achieve a level vehicle-caravan combination.

WARNING

Ensure that handbrake is fully disengaged before driving off. Failure to do so may engage the braking system resulting in overheating.

- Because your caravan can reverse without the brakes coming on, parking when facing uphill needs special care to ensure that the brake is fully applied.

Before uncoupling on a hill the following procedure is recommended:

- apply caravan handbrake firmly
- reverse gently until caravan has moved back slightly,
- further apply caravan handbrake (when no movement is possible the brake is fully ON)
- uncouple,
- remember that it is good practice to chock the wheels when parking on a slope (or on uneven, loose or slippery ground).

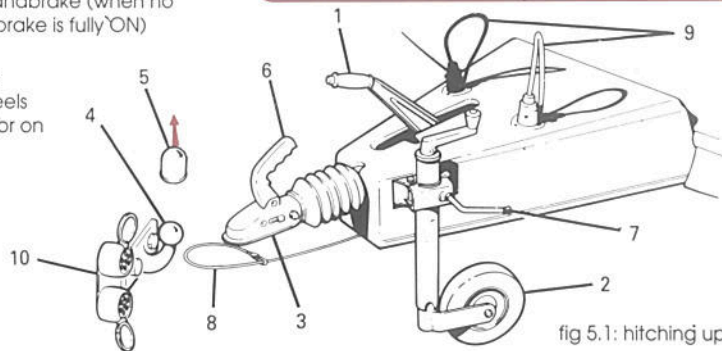


fig 5.1: hitching up

Hitching up (fig 5.1):

- ensure that caravan handbrake (1) is ON, and that jockey wheel (2) is firmly clamped in the DOWN position,
- fully wind up the four corner steadies,
- wind down jockey wheel (2), to raise ball housing (3), above vehicle towing ball (4). Remove ball cover (5) and store safely in vehicle,
- reverse vehicle into towing position with towing ball (4) just beneath ball housing (3)
- while holding up hitch locking latch (6), wind up jockey wheel (2) to lower ball housing (3) onto towing ball (4)

Uncoupling

- hold up hitch locking latch (6)
- wind down jockey wheel (2) until ball housing (3) clears towing ball (4) - replace ball cover (5)
- when unhitching while facing uphill the car towbar will be under tension. In these circumstances apply caravan handbrake and reverse vehicle an inch to release tension before attempting to unhitch.

- release locking latch (6) once ball housing (3) is properly seated on towing ball (4)
- check that locking mechanism is completely engaged on underside of towing ball (4)
- slightly wind up jockey wheel (2), slacken off jockey wheel clamp (7) and lift jockey wheel (2) to its highest position. Fully tighten jockey wheel clamp (7)
- attach breakaway braking cable (8) to vehicle and connect electrical plugs 12N/12S (9) to vehicle sockets (10), allowing just enough slack to prevent straining the electrical leads when turning
- release handbrake (1).

6 TOWING

Towing

Pre-tow drill. It makes sense to follow a routine every trip. See page 33 for a convenient pre-tow checklist.

- Remember that your caravan is rather wider than your towing vehicle, obstructing the rear view in your wing mirrors. Consult your Sprite Leisure Group Dealer for the correct towing mirror for your vehicle-caravan combination.

- Remember, too, that your extra width means you need to consider other road users carefully.

Although you need to allow a little extra room, you do not need to drive down the centre of the road - your caravan will follow your vehicle accurately and will 'cut-in' only slightly.

- Remember your extra length and do not pull in too soon when overtaking. Give cyclists a wide berth.

- Drive more gently and think ahead, indicating your intentions early. Remember that your stopping and overtaking distances are considerably greater than when not towing.

- Be prepared for the effect of slipstreams from heavy trucks or of strong cross winds.

ADVICE

'Snaking' is when the natural lateral sway of a caravan on tow becomes excessive and caused the towing vehicle to oscillate about its centre of gravity. **SLOW DOWN** using the engine but **DO NOT BRAKE**. Once at rest carefully check vehicle and caravan tyre pressures, nose weight and load distribution.

IMPORTANT

Towing mirrors must not project more than 8" outside your caravan when on tow, or 8" outside your vehicle when not towing. They must therefore be adjustable or removable. **WHILST TOWING, USE YOUR MIRRORS CONSTANTLY.**

LEGAL REQUIREMENTS

- Mirrors.** The towing vehicle must be equipped with an adequate wing mirror on both sides.

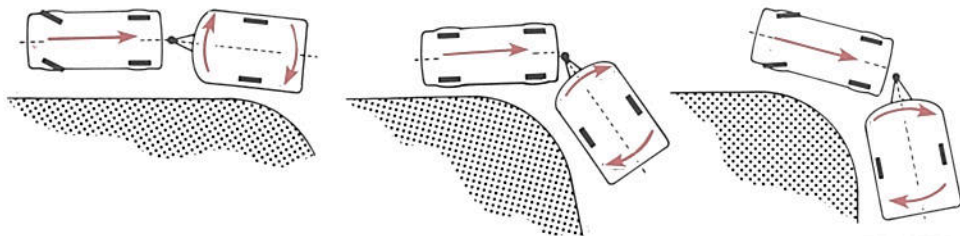
- Speed limits.** On de-restricted roads caravans may be towed at up to 50mph on single carriage ways and 60mph on dual carriageways and motorways. Caravans are forbidden to travel in the outside lane of a three or four lane motorway. (So are heavy trucks, so do not obstruct them in the centre lane.)

- Passengers.** It is illegal to travel inside a caravan on tow.

- Verges and lay-bys.** Open land within fifteen yards of a road is part of the highway. While a caravan may pause in a lay-by and sometimes on a verge, staying overnight could be construed as an obstruction and lead to prosecution.

- Gas.** The use of gas is illegal on all garage forecourts and motorway service areas.

fig 6.1: reversing



Reversing

It is advisable to have a second person available when reversing the caravan. Start practising by choosing a left-hand bend for preference. Reverse slowly, turning the wheel, initially the opposite way to the direction you want the caravan to go. Now the front of the caravan is nudged out and moving the rear in the intended direction. Take care not to hit the van with the car midway through the manoeuvre! When the caravan is correctly angled slow to a crawl and gradually apply opposite lock. Make the car follow the caravan round, then finally straighten up.

7 CARAVAN SITING

Care-free touring may be enjoyed by the observation of a few simple rules and conventions. A pre-tour equipment checklist is provided for you on page 33.

Caravan siting:

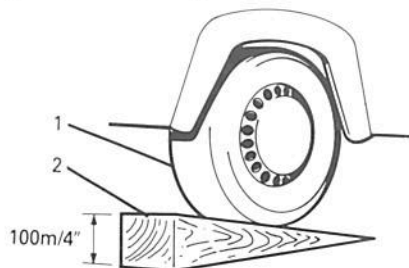
Pitch selection. On arrival at site take care to select a suitable pitch, which should be:

- Well drained.
- Not near suspected boggy ground.
- Not under or near a tree.
- As level as possible (if sloping ground is unavoidable, park the caravan facing downhill - it will be easier to tow off).

Lateral levelling (fig 7.1).

- Manoeuvre onto your chosen pitch so that the caravan is as level as possible side to side. Use a spirit level placed across the towbar to check this. If necessary, run "lower" caravan wheel (1) up a wedge shaped levelling block (2) until the spirit level indicates level.
- Apply the caravan handbrake.
- Lower the jockey wheel to the ground, lock in position and unhitch.

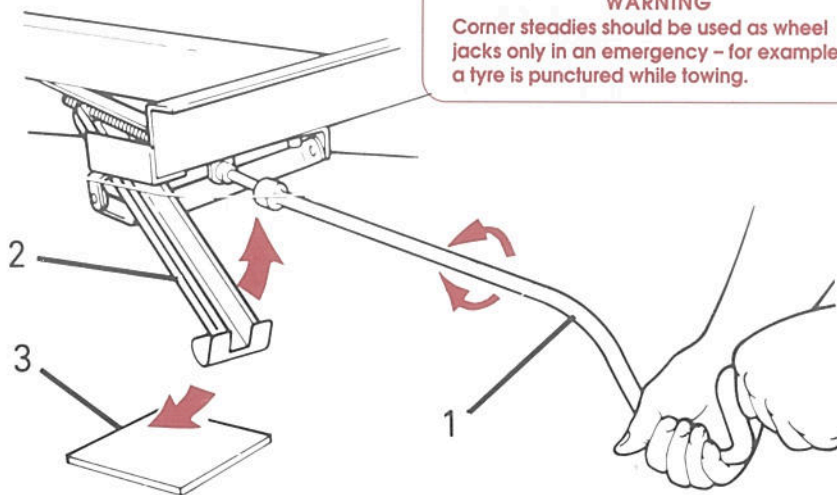
fig 7.1: lateral levelling



Longitudinal levelling (fig 7.2). The caravan must be correctly levelled front to rear for satisfactory operation of the refrigerator, water heater etc.

- Wind the jockey wheel up or down until the spirit level, placed along the towbar, indicates level.
- Using corner steady crank (1), carefully wind down the four corner steadies (2) onto the

fig 7.2: corner steadies



load spreaders (3) (pieces of wood or similar 6" square used to prevent the steadies from sinking into soft ground). Avoid lifting the caravan wheels clear of the ground as this will unduly stress the steadies.

Windy weather. A pitch beside a hedge will give added shelter. Try to keep the door (and awning) on the leeward side, or park head or tail on to the wind.

WARNING

Corner steadies should be used as wheel jacks only in an emergency - for example, if a tyre is punctured while towing.

8 SYSTEMS: Electricity

All Sprite Leisure Group caravans are equipped with two 12v circuits: one for mandatory external road lighting (brake lights, reversing lights etc.) and one for internal consumption (refrigerator, water pump, fluorescent lights etc.) The 12v circuits are powered either by your towing vehicle or by an inboard auxiliary battery if fitted. Some models are also equipped with a 220/240v circuit which can be powered from a generator or caravan site mains supply.

TO CONNECT

- Before connecting the caravan installation to the mains supply check that:
 - the supply available at the caravan pitch supply point is suitable for the caravan electrical installation and appliances
 - the caravan main switch is in the OFF position.
- Open the cover to the appliance inlet provided at the caravan supply point and insert the connector of the supply flexible cable.
- Raise the cover of the electricity outlet provided on the pitch supply point and insert the plug of the supply cable.

THE CARAVAN SUPPLY FLEXIBLE CABLE MUST BE FULLY UNCOILED TO AVOID DAMAGE BY OVERHEATING.

- Switch on at the caravan main switch.
- Check the operation of residual current devices, if any, fitted in the caravan by depressing the test button.

IN CASE OF DOUBT OR, IF AFTER CARRYING OUT THE ABOVE PROCEDURE THE SUPPLY DOES NOT BECOME AVAILABLE, OR IF THE SUPPLY FAILS, CONSULT THE CARAVAN PARK OPERATOR, HIS AGENT OR A QUALIFIED ELECTRICIAN.

TO DISCONNECT

- Switch off at the caravan main isolating switch, switch off at the pitch supply point and unplug both ends of the cable.

IMPORTANT

Low Voltage (below 10v) can damage the fluorescent tube in caravan ceiling lights causing blackening at the ends, and/or failure.

PERIODIC INSPECTION

Preferably not less than once every three years and more frequently if the vehicle is used more than normal average mileage for such vehicles, the caravan electrical installation and supply cable should be inspected and tested and a report on their condition obtained as prescribed in the Regulations for Electrical Installations published by the Institution of Electrical Engineers.

Power sources

ON ALL MODELS The electric power source for these models is 12v or 240v depending on situation.

- On tow the caravan uses:-
 - 12v vehicle battery exclusively.
- On site the caravan can use either of the following:
 - 12v vehicle battery
 - 12v on-board auxiliary battery (if fitted)
 - 220/240v mains electricity (if available).

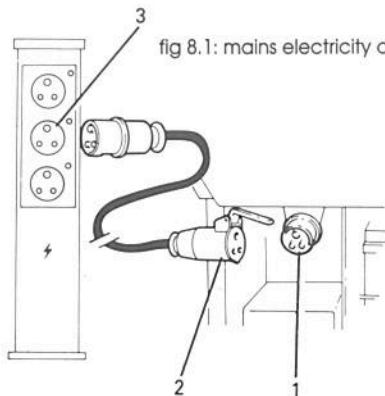


fig 8.1: mains electricity connection

ADVICE

In case of doubt about the correct mains electricity supply, it is advisable to consult the site owner or his agent.

IMPORTANT

Where cars are fitted with continental 17-pin socket an adaptor must be obtained from your vehicle retailer or accessory shop.

VEHICLE BATTERY.

Power is delivered to all caravan models from your towing vehicle through two 7-pin plugs 12N (normal) and 12S (supplementary), wired to international standards, which plug into sockets at the vehicle rear (fig 8.2) 12N controls your caravan's road lighting circuit; 12S controls your caravan's internal circuit (fluorescent lights, water pump etc.) 12N, which is black, and 12S, which is grey, are not interchangeable and cannot be plugged into the wrong socket in error. Both circuits are fed from your vehicle into a fuse box housed in the front offside bedbox or wardrobe. (Fig 8.5 on page 12 shows wiring diagrams for these plugs.)

8 SYSTEMS: Electricity - Batteries

Auxiliary battery -

SPRITE

A LabCraft trailer pack is supplied fitted in the off-side bed box. This pack has provision for a 12 volt auxiliary battery to be fitted, and is vented to the outside of the caravan.

- On tow this battery is automatically trickle charged by your vehicle.
- On site this battery may be used instead of your vehicle battery.
- Fitting of a charger/converter will trickle charge when connected to mains supply.

Auxiliary battery -

ECCLES/SPRITE CONTINENTAL/SUPER SPRITE

Provision is made in the Exterior access battery box for the addition of a 12v auxiliary battery (1).

- On tow this battery is automatically trickle-charged by your vehicle.
- On site this battery may be used instead of your vehicle battery. If 220/240v mains electricity is available, it may also be trickle-charged by the charger/converter described next

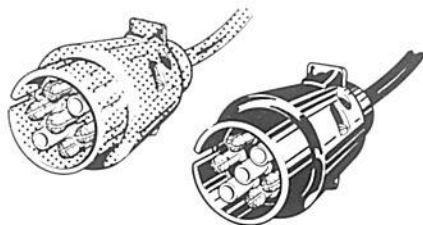


fig 8.2: vehicle/caravan connectors 12N & 12S

Mains charger/converter -

ECCLES/CONTINENTAL/SUPER SPRITE

This equipment is housed at the rear of the battery box on the inside of the dinette base of your caravan and is accessible from the inside only.

- On site the charger/converter accepts 220/240v electricity from a generator or site mains supply and converts it to 12v to trickle-charge the auxiliary battery housed adjacently. It also feeds 220/240v electricity direct to the refrigerator.
- a deep cycling 70 Amps per hour minimum rating battery is required.
- instructions on the maintenance and re-charging of an auxiliary battery are contained with the Lab Craft Trailer Pack (not supplied) for the SPRITE and Charger Unit for the ECCLES/CONTINENTAL/SUPER SPRITE.
- automatic battery chargers will only function satisfactorily if a battery is in good condition
- should a battery contain a faulty cell the charge voltage from the battery charger will not rise sufficiently to switch the battery charger off and the battery will eventually boil dry.
- the most common cause for batteries to become faulty is when used in caravans where the battery is discharged below the recommended level, approximately 10v, causing one or more of the cells to fail.

ADVICE

When on 220/240 v supply the Eccles/Continental/Super Sprite, charger converter will run all 12v internal facilities[except Refrigerator]without a battery being fitted

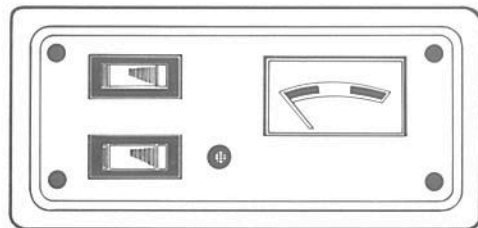
IMPORTANT

On a Sprite where the LabCraft TP2 pack is used, we strongly recommend the use of the Lab Craft venting kit.

12 volt Control panel.

Switch (a) changes 12v operation from car battery to independent caravan battery (not supplied). Meter indicates battery state (or off).

fig 8.4: 12v Control panel



Pump switch (b) with LED (fig 8.4).

SPRITE/SUPER SPRITE/SPRITE CONTINENTAL/ECCLES. The rocker switch isolates the water pump for the hot water system. The Carver Cascade 2 hot water system is self priming. Further instructions on the water system can be found on page 19

TV aerial socket

(SUPER SPRITE/SPRITE CONTINENTAL/ECCLES). A TV aerial socket is provided and the co-axial cable is run to a position inside the caravan to allow for customers own choice of TV aerial.

Exterior access mains outlet socket.

SPRITE CONTINENTAL/ECCLES

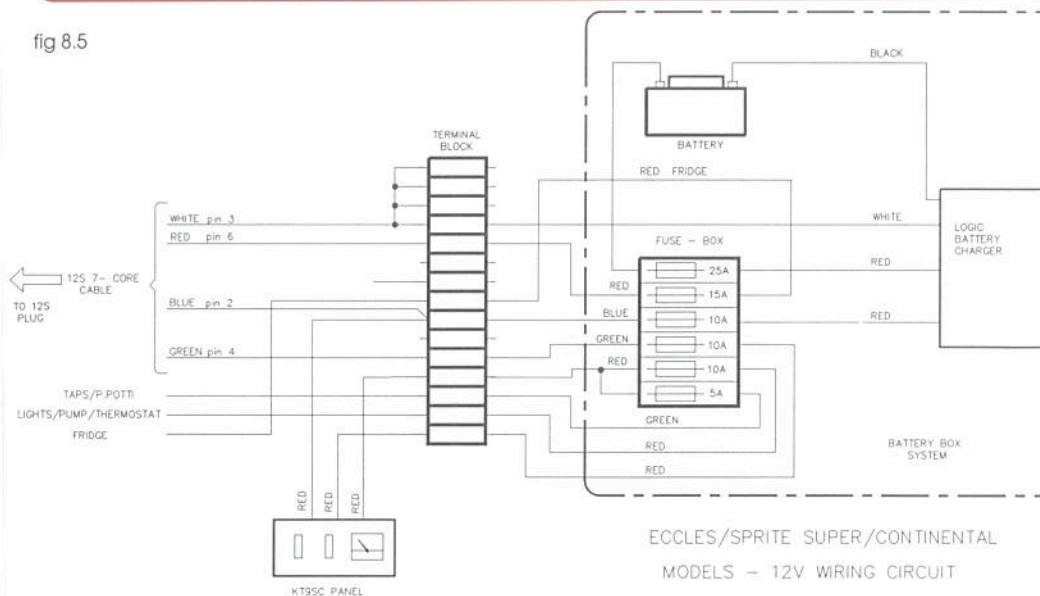
An exterior access mains outlet socket is housed on the near-side front and accepts the domestic 3-pin UK plug.

IMPORTANT

Note. This socket is permanently live when the mains is on at the RCD

8 SYSTEMS: Electricity - 12 Volt Wiring

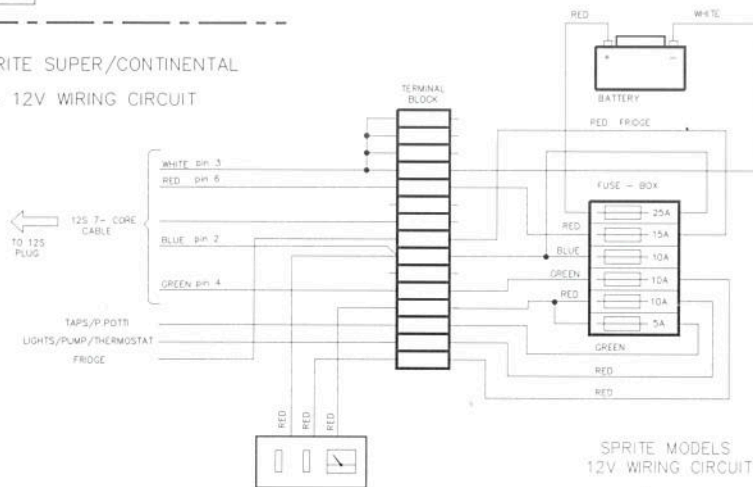
fig 8.5



ECCLES/SPRITE SUPER/CONTINENTAL
MODELS - 12V WIRING CIRCUIT

IMPORTANT

Consult your Sprite Leisure Group Dealer to ensure that your vehicle is properly equipped. Some vehicle flasher units and brake light switches cannot accept the additional load of a caravan and the vehicle may need to have a heavy duty relay fitted. By law the driver must have means of knowing that all indicators on vehicle and caravan are working. Vehicle wiring for 12S pins 6 (refrigerator) and 2 (battery charging supply) should include protection against draining vehicle battery, for example relays which allow current to flow only when vehicle alternator is in operation.



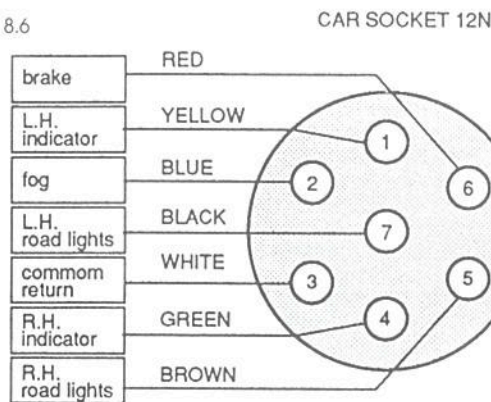
SPRITE MODELS
12V WIRING CIRCUIT

WARNING

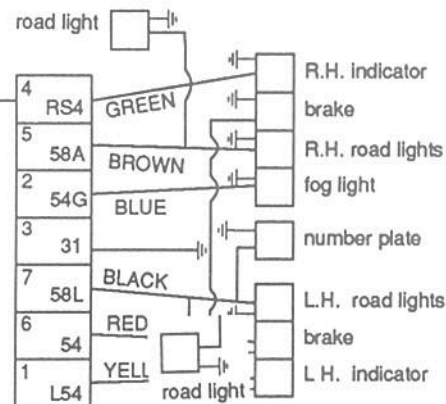
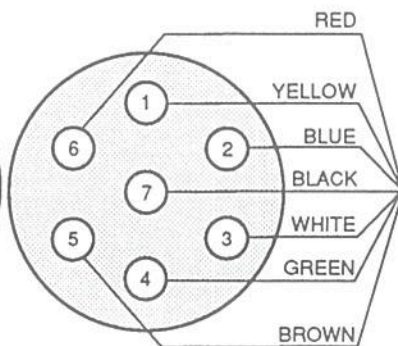
When battery not fitted please ensure that the battery terminals are either sleeved or kept apart.

8 SYSTEMS: Electricity & Roadlights

fig 8.6



CARAVAN PLUG 12N



IMPORTANT

Where cars are fitted with continental 17-pin socket an adaptor must be obtained from your vehicle retailer or accessory shop.

fig 8.7: 12v fuse box on the SPRITE

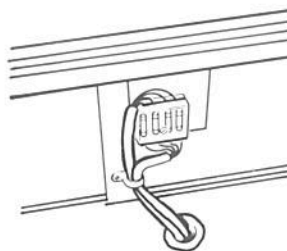
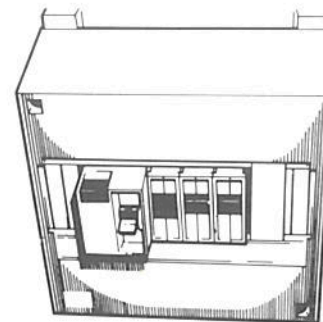


fig 8.8: 220/240v Consumer Unit



Road lights

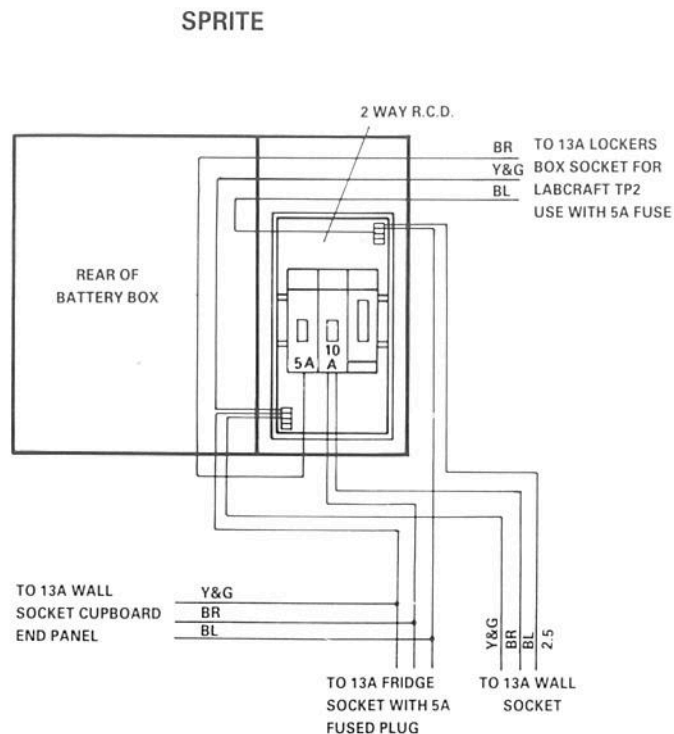
Bulb types are specified on pages 34-41 under your caravan model. To replace a faulty bulb simply unscrew lamp cover and exchange old bulb for new. Try always to carry a few sets of spare bulbs. It can be an offence to tow a caravan with faulty road lighting.

Fuses/fuse box. The 12v fuse box* (fig 8.7) is located to the rear of the off side bed box. Wiring details relating to this box can be found on page 12. All fuses are replaceable blade type.

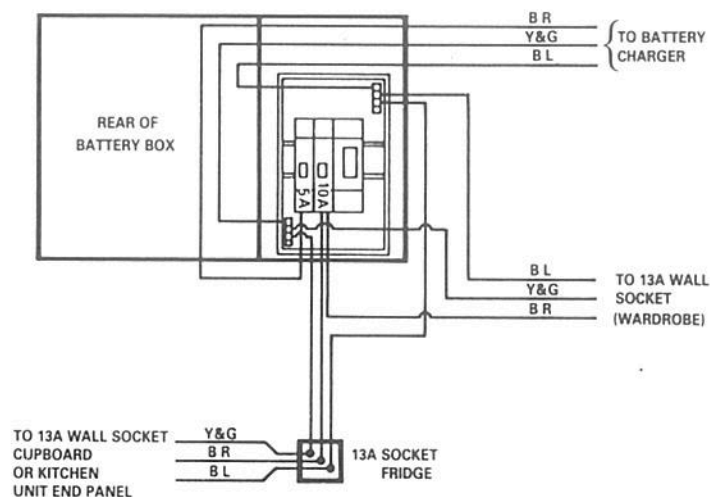
The 220/240v consumer unit* (fig 8.8) is located to the rear of the battery box*, with access from the off side bed box. When a fault occurs, the trip is activated and should not be relocated until the cause of the fault is traced.

8 SYSTEMS: Mains Wiring

MAINS WIRING DETAIL



CONTINENTAL/ECCLES/SUPER SPRITE



Y&G YELLOW GREEN
 BL BLUE
 BR BROWN

Electric and gas refrigerators

+ (fig 9.1). Electrolux RM 212F refrigerator fitted as standard on the SPRITE, SUPER SPRITE, ECCLES, and Electrolux RM 2262 on the CONTINENTAL can run on electricity or gas. On tow it MUST BE powered by 12v electricity from the vehicle. On site it may be powered EITHER by 220/240v electricity from the mains* OR by gas.

- The travel catch (2) is intended to keep the refrigerator door securely closed when on tow. Before moving off, always push the catch down so that its lower end fully engages the plastic bush in the top of the door.

- Electric operation:

- check that gas control knob (5) is set to OFF ('zero')

- set voltage selector (7) to required voltage:

- 12v vehicle battery or

- 220/240v mains

- when used on mains electricity the refrigerator is thermostatically controlled. Thermostat knob (6) should normally be set to position '3' or '4'. (On 12v electricity the refrigerator is not thermostatically controlled.)

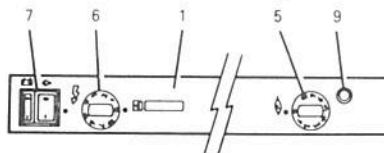
IMPORTANT

When in operation the refrigerator must be level in both directions if stationary for more than half-an-hour. If this is not convenient, the refrigerator should be temporarily turned off. (Rolling/pitching when towing will not affect its operation).

fig 9.1



Electrolux RM 212F



Electrolux RM 2262

Gas operating instructions.

Gas operation. RM 212F

- check that voltage selector (7) is set to OFF
- ensure that gas supply is available
- turn gas control (5) to '3'
- fully depress gas control (5) for five seconds (longer after changing a gas cylinder) to clear air from the pipe line
- still depressing gas control (5) push in Piezo igniter (4) several times in quick succession (a click will be heard each time igniter is pushed in)
- continue to depress gas control (5) for a further fifteen seconds to allow thermocouple tip to warm up
- then release gas control (5) and look through flame viewer (8) to check that burner is alight
- repeat the procedure if burner fails to light.

- Gas operation. RM 2262*

- check that voltage selector (7) is set to OFF
- ensure that gas supply is available
- turn gas control (5) to '8'
- fully depress gas control (5) push in Piezo igniter (9) several times in quick succession (a click will be heard each time igniter is pushed in).
- continue to depress gas control (5) for a further fifteen seconds to allow thermocouple tip to warm then release gas control (5) and look through flame viewer (8) to check that burner is alight
- repeat the procedure if burner fails to light.

WARNING

Never attempt to operate the refrigerator by both electricity and gas at the same time.

10 SYSTEMS: Gas

Liquefied petroleum gas (LPG) is supplied from an external cylinder and fuels the water heater, space heater, hob/grill and oven*.

LPG (fig 10.1).

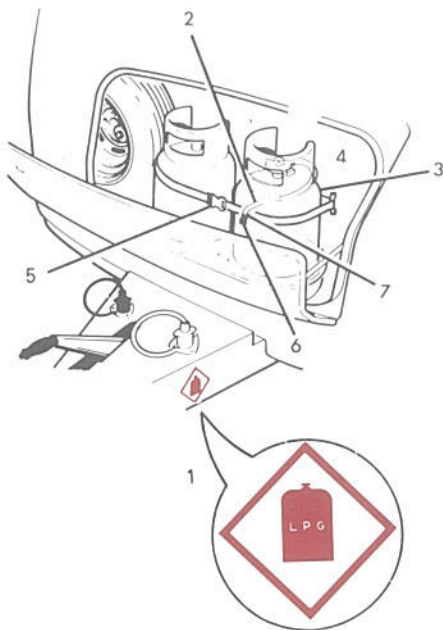
Gas types. Two types of liquefied petroleum gas (LPG) are used in caravanning: butane (blue, green or aluminium cylinder) and propane (red or partly red cylinder). Butane operates at temperatures over 0°C, and is suitable for most caravanning conditions. Propane will work at temperatures as low as -40°C. The symbol for LPG (1) is international. Calor, Shell and Camping Gaz are proprietary names.

The pressure regulators in use with the two types are not interchangeable so you must decide initially which gas you intend to use, unless you purchase both types of regulator. In either case, the hose (2) which connects the regulator to the caravan gas system must be gas approved to BS3212/1/8 (available from your Sprite Leisure Group Dealer).

WARNING

The gas system installed in your caravan is safe and efficient, however, neglect or abuse of the equipment could be dangerous in the confines of a caravan. Always observe operating/ maintenance instructions and have repairs carried out by a Sprite Leisure Group Dealer.

fig 10.1



Gas cylinders.

- Up to two cylinders (3) may be stowed in the external gas cylinder locker (4) at the front of the caravan. These are secured by adjustable retaining straps (5) with quick removal buckles.
- One cylinder should be connected to your caravan gas system by plugging hose (2) onto gas nipple (6) (Although not essential it is a good idea to clamp the hose end with a jubilee clip (7)). Once the hose is attached there will be no need to remove it for some time.
- To operate, fully turn regulator valve ON. Always turn regulator valve OFF while you are towing.
- When it becomes necessary to change a cylinder simply disconnect pressure regulator, exchange the empty cylinder for a full cylinder and re-connect pressure regulator.

IMPORTANT

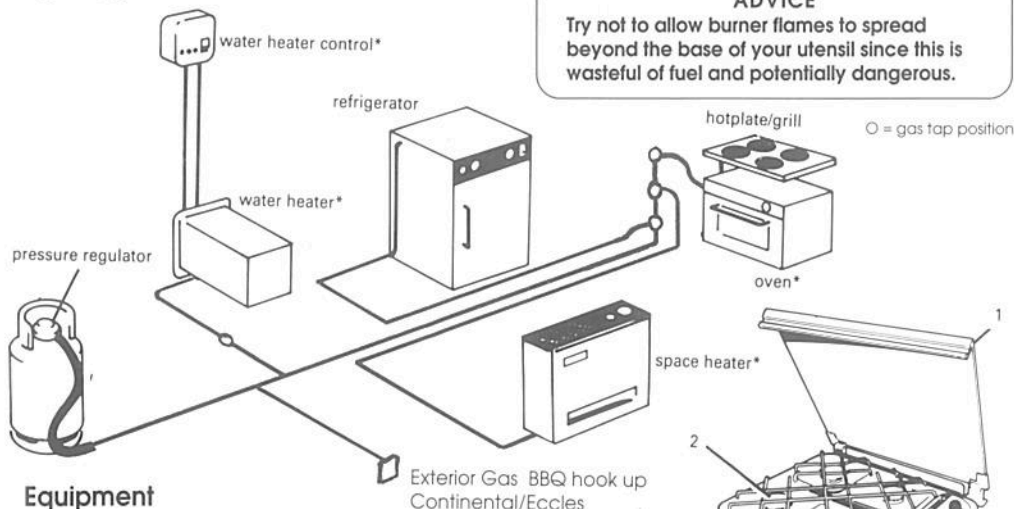
Never try to find a gas escape with a naked light. Wet, suspected joints with water mixed with washing up liquid and watch for signs of 'bubbling'.

IMPORTANT

Always switch the gas regulator valve OFF when towing. It is illegal to operate gas appliances while the caravan is in motion.

10 SYSTEMS: Gas

(fig 10.2): gas schematic



Equipment

Gas/electric refrigerator+.

- See page 15 for operation of this dual-power appliance.

Gas hotplate/grill + . A Cramer* gas fuelled hotplate/grill is fitted as standard (fig 10.3). Number of burners depends on individual caravan.

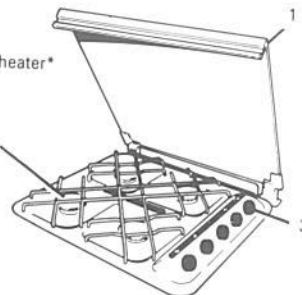
• Operation:

- lift* or lower* protective cover (1) to expose controls
- apply lighted match or taper to required burner (2)
- while depressing appropriate gas control (3) turn it anti-clockwise to FULL ON (where a flame failure device is fitted it is necessary to keep gas control (3) depressed for a further five seconds)
- repeat the procedure if burner fails to light.

ADVICE

Try not to allow burner flames to spread beyond the base of your utensil since this is wasteful of fuel and potentially dangerous.

fig 10.3: Cramer gas hotplate/grill



ADVICE

Each gas appliance is fitted with it's own independent gas shut off tap.

IMPORTANT

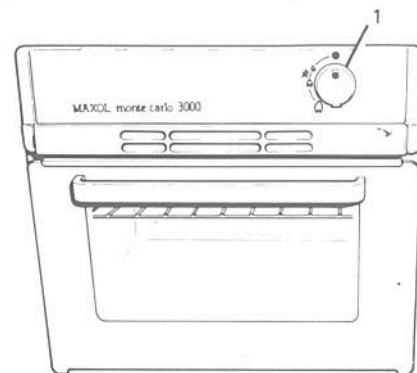
Whilst in use protective cover (1) must be in lifted position. Whilst caravan is being towed protective cover must be in lower position.

Gas oven*+ (Fig 10.4) The Maxol Monte Carlo 3000 oven is gas fuelled.

• Operation:

- slightly depress gas control (1) and rotate to ignition position
- apply lighted match or taper to burner and fully depress gas control (1)
- keep gas control (1) depressed for a further twenty seconds and then release
- rotate gas control (1) to achieve desired setting.

fig 10.4: Maxol Monte Carlo 3000 gas oven*



WARNING

Your hotplate/grill or oven* should NEVER be used as a space heater.

ADVICE

It is a good idea to keep a window open wherever the hotplate/grill or oven* is in use.

11 SYSTEMS: Heaters

Gas space heater+

One of the following Carver Trumatic space heaters is installed as standard in many Sprite Leisure Group caravans and optionally in others.

- Before lighting the heater:
 - ensure that the gas is turned on.
- Lighting the heater:
 - turn the gas control knob fully anti-clockwise and then press down. Immediately press the ignition button several times.
 - check through the viewing window on the lower half of the case that the burner is a light.
 - after the burner has lit continue to hold the gas control knob down for 30 seconds. This is to operate the flame failure safety device within the gas control.
 - the control knob can now be adjusted to the required comfort setting between the ignition/low and the high positions.
 - if the burner fails to remain alight or if it is extinguished due to abnormal wind conditions the heater will shut down to a safe condition. After shut down always WAIT 3 MINUTES before attempting to relight the heater.
- Turning off the heater:
 - turn the gas control knob fully clockwise to the 'O' position.

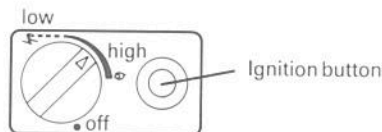
ADVICE

It makes sense to have all gas appliances checked annually by an approved Sprite Leisure Group Dealer.

WARNING

This heater has an underfloor flue and requires unrestricted ventilation beneath the caravan into which it is fitted. A minimum of three sides of the vehicle must be open at all times. This is to allow for the products of combustion to be dispersed. If there is a possibility of the sides becoming blocked by snow etc. then the heater must not be used. Curtains must not hang within 150mm of the side of the heater or within 300mm above the top of the outlet grille. Always wait 3 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.

fig 11.1: Carver 1800 gas space heater.
SPRITE/SUPER SPRITE/SPRITE CONTINENTAL



- **RIVIERA 2000 - ECCLES Only** (fig 11.2)
- Before lighting the heater:
 - ensure that the gas supply is turned on.
- Lighting the heater:
 - turn the gas control knob fully anti-clockwise and then press down. Immediately press the ignition button several times.
 - check through the viewing window on the lower half of the case that the pilot burner is alight.
 - after the pilot has lit continue to hold the gas control knob down for approximately 30 sec. This is to operate the flame failure device within the gas control
 - on releasing the control knob the pilot burner will remain alight and the main burner should then ignite.
 - if the pilot and main burner both fail to remain alight or if the flames of both burners are extinguished due to abnormal wind conditions the heater will shut down to a safe condition. After shut down always WAIT 3 MINUTES before attempting to relight the heater.
- To adjust the room temperature:

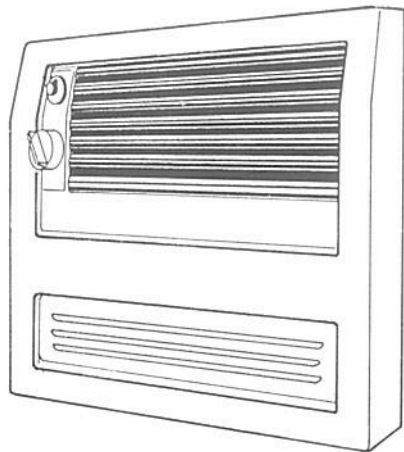
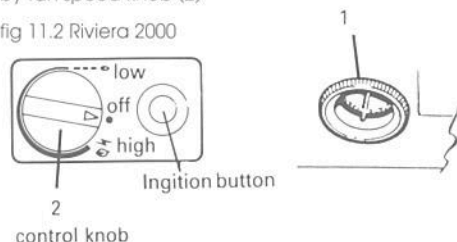
Turn the gas control knob to the setting that gives the required comfort level. The main burner will 'cycle' on and off automatically as required by the thermostat to maintain the set temperature but the pilot flame will always remain alight.

11 SYSTEMS: Heaters & Water Heaters

Optional Blown Air - ECCLES Only

- heat is circulated around your caravan by the Trauma-Vent system. Warm air is blown through concealed ducts and emerges at certain points through butterfly outlets (1) which may be angled to control the flow.
- The Truma-Vent control (a) may also be set to '0' (off) or '10' (manual) for cold air circulation controlled by fan speed knob (2)

fig 11.2 Riviera 2000



Cascade 2 GE gas water heater* + (fig 11.3).

The gas side of the Cascade 2 GE Water Heater is operated by this remote controller, normally located in the wardrobe

• Operation:

- before switching on the gas burner or the mains immersion heater make sure that water flows from the hot taps, by switching pump switch on control panel on.
- This indicates that the water heater is full.
- To operate the heater on gas:
 - check that the gas and 12 volt DC. electrical supplies have been connected and turned on.
 - switch the water heater on at the wall switch (1). The green light will come on and remain on.
 - the green light indicates that the heater is operating satisfactorily and does not refer directly to the burner operation.
 - the yellow and green lights on together indicate that the voltage of the power supply for the heater is too low. The heater is automatically switched off until the voltage is high enough.
 - the red and green lights on together show that the burner has failed to light in the 10 second ignition period. This is usually due to failure of the gas supply or, in the case of a new installation, air in the gas pipes. Switch off and on again, which resets the controller and initiates a new ignition sequence. To clear air from the gas lines, several repetitions may be required.
 - temperature and adjustment. The heater is supplied with the thermostat set at maximum (approx. 68°C) If the water at the taps is hotter than you want, the temperature may be adjusted as follows:-

- switch off heater at the controller and allow to cool for at least 10 minutes.
- remove cowl from outside of caravan (4 cross head screws) .
- lift the flap and turn the toothed wheel inside it. Each tooth is about 1 1/2°C
- replace the cowl, making sure it locates firmly on the square aluminium flue nose. Switch on and check temperature after about 1/2 hour.

WARNING

Water Heaters (as with other gas appliances) should be switched off and gas cylinder valve(s) closed whilst caravan is in motion.

- To operate the heater on mains electricity:
 - With the caravan connected to site mains, electrical power may be used instead of gas to maintain a supply of hot water. When switched on the immersion heater will maintain the tank at about 70°C under thermostat control. The mains immersion heater thermostat is not adjustable. For quick warm-up both gas and electrical supplies may be used, but for maintenance use only one or the other. The immersion heater takes approximately 3 amps when heating and this load must be taken into account if the site supply is current limited.

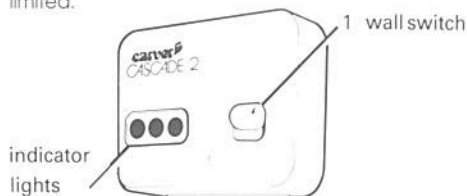


fig 11.3: Carver Cascade 2GE gas water heater control

12 SYSTEMS: Water

Fresh water is pumped from an external supply, strained and circulated throughout the caravan to all cold taps and if fitted, through a gas-fuelled water heater, to all hot taps. Waste water is disposed of externally. A schematic layout is shown in (fig 12.4).

Water pump (fig 12.1).

All Sprite Leisure Group caravans are equipped as standard with a Whale Supersub electric pump (1) complete with flexible water hose (2) incorporating a 12v electric supply (3). This pump is a completely sealed unit designed to be run submersed in water. Once connected, the pump self-primers and functions automatically when a tap is turned on.

The following points should be observed:

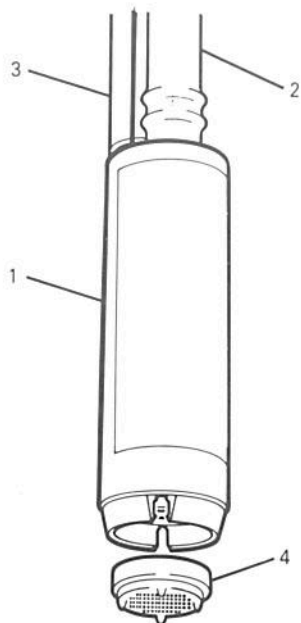
- do not attempt to run without water
- do not use in water temperatures over 60°C -140°F
- try to use the pump in a vertical position
- strainer (4) should be inspected and cleaned at frequent intervals.

WARNING

To avoid overheating, do not run the pump continuously for more than fifteen minutes at a time.

5) Slowly loosen the adjusting screw until the microswitch clicks. The diaphragm will then be properly adjusted. On all other models a micro-switch initiates the water pump whenever a tap is turned on.

fig 12.1: Whale Supersub 88 electric water pump



Waste Water (fig 12.2).

- Plug a suitable hose (1) onto waste water outlet (2) and allow to drain into a waste water receptacle (3).

Fresh Water (fig 12.3)

- Fill a fresh water container (4) and insert submersible pump (5), taking care that it reaches the bottom of the container.
- Lift cover of external water inlet (6) on side of caravan and plug in other end of supply hose (7).
- Turn on all cold and hot water taps to prime system. Turn off when water is flowing satisfactorily from all taps.

ADVICE

Drinking water. If the caravan cold water supply is to be used for drinking water, please ensure that precautions are taken to keep the system properly maintained. As an alternative, either carry a separate drinking water supply, drawn from a mains water tap, or use bottled water.

Water pressure. On Sprite Leisure Group caravans equipped with a hot water system the pump maintains water pressure continuously. This is controlled by a Whale pressure switch located in the seat base beside the water heater. Where battery voltage may not be constant the pressure switch may require re-setting as follows:

- 1) Ensure system is fully primed and all taps closed.
- 2) Leave power supply ON.
- 3) Tighten the adjusting screw (clockwise) until the pump starts running.
- 4) Partly open one cold tap to allow water to flow at about 1pt. in 15 seconds.

12 SYSTEMS: Water & Frost Precaution

fig 12.4: Hot water system ; schematic drawing

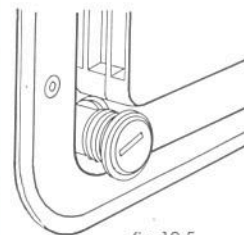
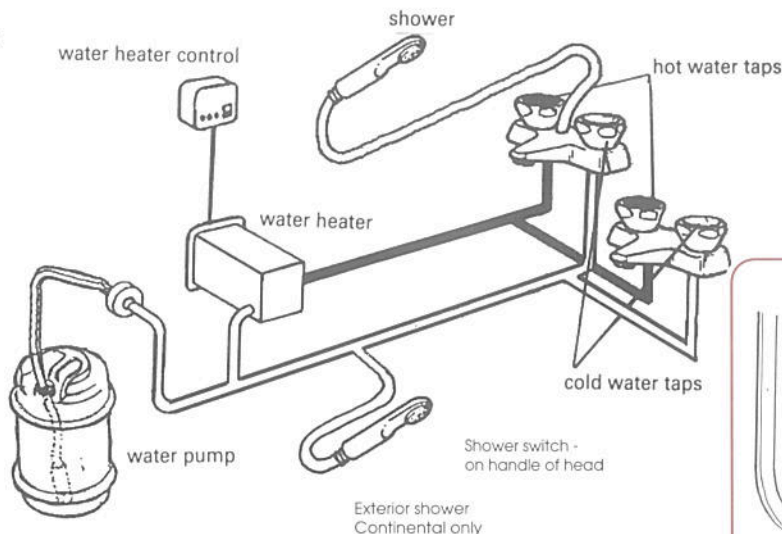


fig 12.5

fig 12.3: fresh water connection

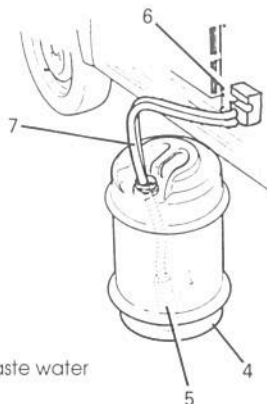
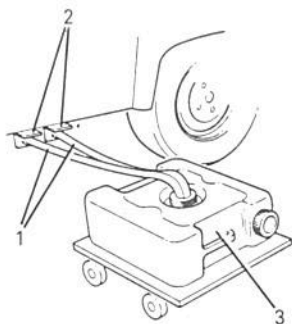


fig 12.2 waste water



FROST PRECAUTIONS - IMPORTANT

During periods when the heater is likely to freeze it **Must** be drained down to prevent damage. It is also recommended that if the caravan is stored during the winter, the water system is drained down.

To drain the system proceed as follows: (fig 12.5)

Park the caravan on level ground. Ensure that the gas and electric are turned off. Unscrew the drain plug which is located at the bottom left of the flue cowl on the outside of the caravan. When the end of the thread is reached pull the plug out slightly, although the plug will still be retained it will allow the heater to

drain. Open both the hot, and cold taps. To completely drain the water system can take a considerable time. At least 9 lts. (2 Gallons) of water should drain from the system. Close the drain plug and taps when the water has stopped flowing.

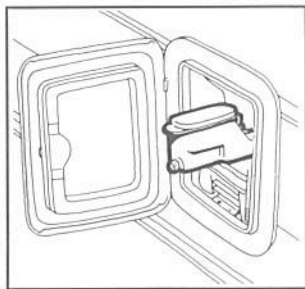
Sterilising

When cleaning the water system at the start and end of the season it is advisable to use a sterilising fluid e.g. Milton 2, Chempro SDP or similar.

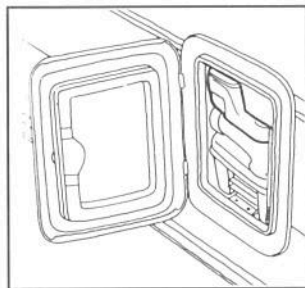
Do not use domestic bleach, Camden tablets or sodium metabisulphide.

13 PORTA POTTI: Preparation

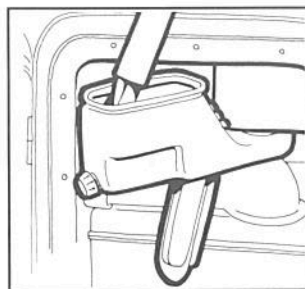
THETFORD PORTA POTTI - Preparing for use



1. Open access door on the side of the Caravan and swing out fresh water fill funnel.



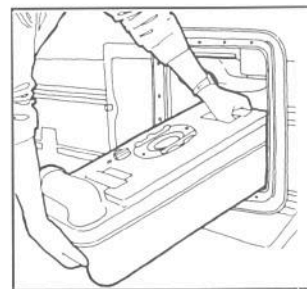
3. Replace cap. Swing water fill funnel inward until it touches side of water tank. Note: 150 ml of water will remain in fill bottle when fresh water tank is empty.



2. Fill freshwater tank using a hose or jerrycan until water funnel level reaches neck. Tank capacity is 15 litres. Aqua Rinse may be added to improve cleaning of bowl and flushing of unit.



4. Next add Aqua Kem to Cassette for controlling odours. Depress retaining clip.

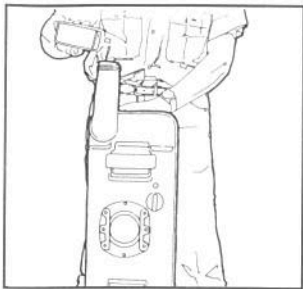


5. Remove Cassette by pulling straight out. When Cassette hits stop, tilt downward slightly and remove (stop for safety when Cassette is full).

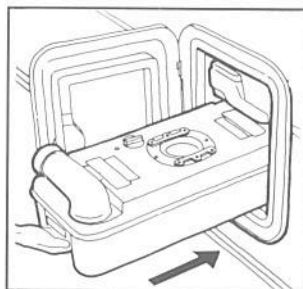


6. Position tank vertical and swivel pour out spout upward.

13 PORTA POTTI: Preparation



7. Remove cap, then remove deodorant from storage compartment. Add 100 ml of Aqua Kem or 120 ml of Aqua Kem Bio through pour out spout. Add small amount of water through spout to cover tank bottom. Replace cap and return pour out spout to its original stored position



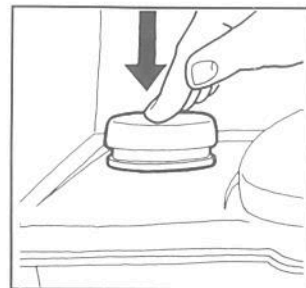
8. Slide the Cassette, pour out spout facing outside into the Caravan through access door. Never force insertion or removal of the Cassette tank, damage to system can occur. Make sure the Cassette is secured by the retaining clip. Close and lock access door.

Note:

As an alternative, deodorant can be added to the Cassette through the valve blade opening. Hotter weather or longer retention time may require the addition of more Aqua Kem.

CAUTION:

Do not add Aqua Kem Concentrate or Aqua Kem Bio directly into toilet bowl while Cassette Tank valve blade is closed. Pressure due to heat and altitude change can build up in the Cassette tank causing bowl contents to splash upward upon opening the valve blade, too fast. Before each use, open and shut the Cassette valve blade to vent the tank, with the cover down.



Operation

9. Before using the toilet we advise to add some water to the bowl by turning the flush knob in clockwise direction. When flush knob is released it will turn automatically back.



10. To flush after use turn the valve knob in anti clockwise direction and turn

13 PORTA POTTI: Emptying The Cassette

Emptying the Cassette

The Cassette capacity is 20 litres and should be emptied when the waste level gauge indicator goes from green to full red.

The gauge does not begin to move from green to red until tank is over half full.

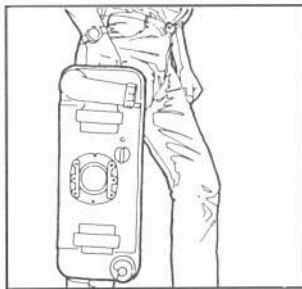
WARNING

Do not allow Cassette to become overfilled.

To empty Cassette be sure that the valve blade is in the closed position.



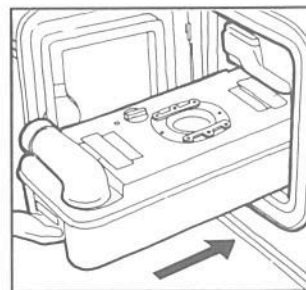
11. Open the access door on side of Caravan. Depress the retainer clip, pull Cassette until stop, tilt and remove Cassette.



12. Carry Cassette using the lower carrying handle, pour out spout up, to a normal household type toilet or other authorized disposal point. Set Cassette in vertical position on the ground and rotate pour spout upward.



13. Remove spout cap. Grasp unit by upper carrying handle nearest to pour out spout. Place other hand on upper rear hand grip so that the air relief valve button can be depressed with thumb while emptying, to insure smooth outflow of tank contents. When empty, rinse tank and valve blade area with water.



14. After preparing for use, slide the Cassette into the Caravan. Check to make sure that the retaining clip secures the tank in a locked position. The pour out spout end of the tank should be visible through the access door opening. Add water to the fresh water tank as outlined in "preparation for use" section. Close and lock access door.

ADVICE

NOTE: Depress air release valve button only when pour out spout is pointed downwards.

WARNING

Cold weather use -To prevent freezing during cold weather use, add anti freeze to the fresh water tank. Use a non-toxic (propylene-glycol) type of anti-freeze. Refer to Chart on container to obtain level of protection.

Access / ventilation

Doors (fig 14.1). Access is by way of the main door equipped with a barrel-type lock (1). The door will engage automatically when closed. When in the fully open position the door should be held open by retaining catch (2) to prevent it closing in the wind. The upper half of the door may be opened independently of the lower half by turning swivel bolt (3). In this configuration the upper half should be held open by retaining catch (2) and the lower half held closed by swivel bolt (4).

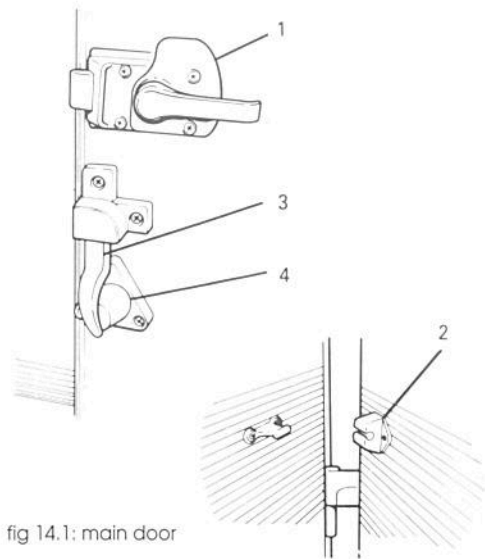


fig 14.1: main door

Windows All windows are double glazed for heat and sound insulation.

- To open, unhook retaining catches, slacken off support stay grip, open to desired position and re-tighten support stay grip. Reverse this procedure to close.

All Sprite, Super Sprite, Sprite Continental front windows operate on ratchet stays. To open, unhook retaining catches and open window to required level. To close, open window further to release ratchet action and lower. Secure window by retaining catches.

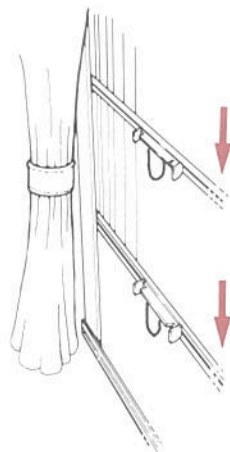
- The retaining catch is designed to operate in two ways:
 - fully closed
 - ajar for night-time ventilation.

Curtains. Curtains on sloping windows are retained in channels at lower edge as well as top edge. When open, curtains should be held back with either the velcro curtain-tie or friction washer on the curtain track.

Cassette flyscreen* Pull down for use. Release catch to rewind.

Cassette Flyscreen/ Thermal Blind* (fig 14.2). Pull down for use. Release to rewind.

(fig 14.2) cassette flyscreen / blind



Ventilation. Good ventilation in a caravan is essential.

- Your caravan is equipped with ventilators at certain points in the walls and floor. Check that the ventilators do not become blocked, for example by leaves or carpet fluff.
- In addition, the roof light may be operated high or low to suit the prevailing weather conditions. Even when closed, the roof light has provision for a permanent air flow. This must not be obstructed – what sometimes appears to be a roof leak may be condensation caused by insufficient ventilation.

15 FURNITURE: Bed Settees

ADVICE

Models equipped with a Riviera 2000 space heater may also be ventilated by fan circulating ducted cold air. See pages 18-19 for operation details.

Furniture

Bed-settees. The interior foam and fabric covering used in all settees is fire retardant to British Standard specifications. The arrangement of the deep cushioned settees is designed for ease of conversion to night-time configuration as beds. Do not be surprised if you find the cushions a little harder for sleeping on than a soft domestic bed - they are designed for dual-purpose use.

- All bed box tops are supported by pre-sprung slats with easy action self supporting hinges offering comfort and ventilation.
- All double bed settees are instantly converted by pulling out bed slats (1) from each settee and arranging the cushions as appropriate (fig 15.1).
- Most single bed settees are converted by inserting table-top (1) between each seat and arranging the cushions as appropriate (fig 15.2).

ADVICE

Please refer to the day/night plan views on pages 34-41 for the sleeping configuration for your particular caravan model.

fig 15.1: double bed

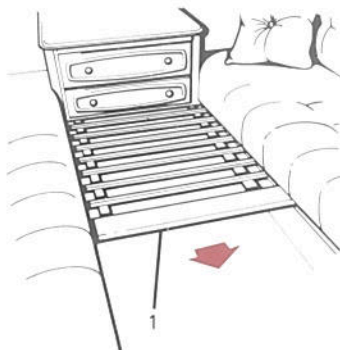
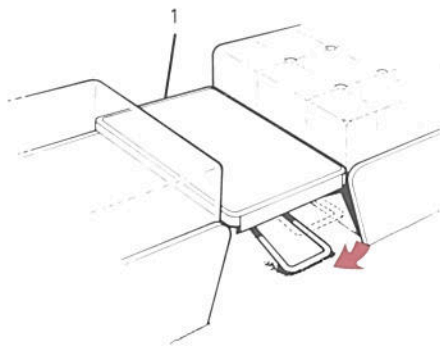


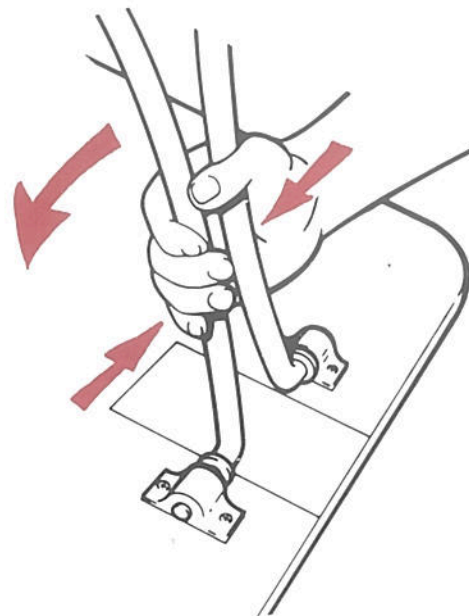
fig 15.2: single bed



IMPORTANT

To release table leg, both from the closed and open position, the right handed leg **MUST** be pushed first, in an **INWARD DIRECTION**, to release it from the special lock. **THIS IS VITAL !** (fig 15.3)

fig 15.3



15 FURNITURE: Tier Berth & Stowage

Tier berths. The method of opening the berth is illustrated in figs 15.4.

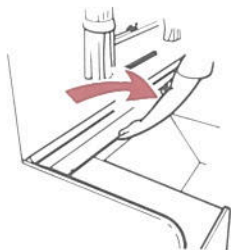
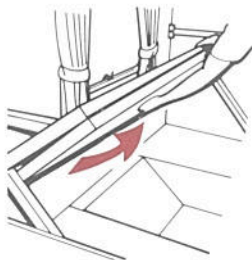


fig 15.4 tier berth



IMPORTANT
Tier berth is designed for child use. Recommended weight 11 stones.

WARNING

To prevent falling from bunk onto floor or through adjacent window always ensure bunk guards are used.

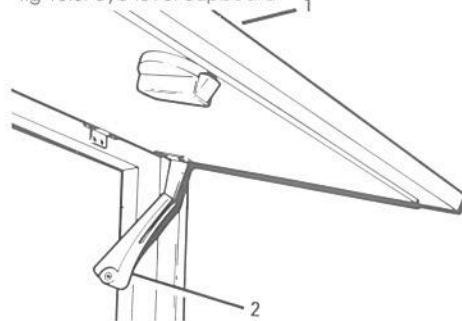
Tables. One or two tables and storage for one table are provided in all Sprite Leisure Group caravans. Tables are erected by folding down leg and clipping free end into wall catch provided.

Storage for one table is provided in all caravans, in a housed compartment to the side of the wardrobe. In most cases the door covering this compartment is mirrored and opens on a push release.

IMPORTANT

The retaining strap must be clipped into position before following the reverse procedure, for stowing to bunk in the daytime position

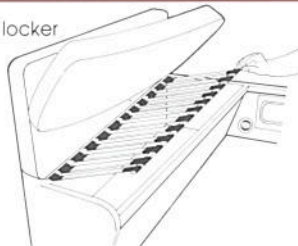
fig 15.5: eye-level cupboard



Stowage. Ample stowage space is provided on all Sprite Leisure Group caravans.

- Eye-level cupboards (fig 15.5). Lift up flap by handle or knob (1). Cupboard door will be held in position by sprung support (2). To close simply lower door and push in. Tension of sprung support (2) may be adjusted if necessary with a small screwdriver to rear of spring.
- Wardrobe. Push button to open; push shut and press button to secure. Wardrobes are provided with hanging rail.

fig 15.6: under-seat locker



- Under-seat lockers (fig 15.6).

Lift settee base for access and the sprung hinges will hold the settee base open, allowing easy access.

16 MAINTENANCE: Bodywork

Routine servicing and care will both ensure the safety and efficient working of your caravan and enhance its value. Servicing facilities are available at all Sprite Leisure Group Dealers. With safety in mind, the need to maintain gas systems, electrical systems and coupling/braking systems cannot be too strongly emphasised.

Bodywork - Cleaning exterior.

- To maintain your caravan's original finish simply wash regularly with a 'wash and wax' car cleaner at the recommended dilution. Apply with a car brush/sponge, rinse off and dry with a chamois leather.
- The windows of your caravan are acrylic. No special treatment is necessary, but avoid harsh cloths and sponges. Should a window become marked or scratched, proprietary acrylic compounds such as 'ICI Perspex Polish' are available. Tar should be removed with tar removers such as 'Jove'.

WARNING

Do not use abrasive cleaners on your caravan or proprietary cleaning fluids or petro-chemicals on your windows.

Cleaning interior.

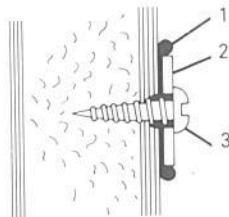
- Vinyl covered walls and laminated furniture should be wiped clean with a damp cloth and mild detergent.
- Wooden furniture should be cleaned using a good quality wax or spray polish.
- Carpets and upholstery should be vacuum cleaned (marks may be removed by using a proprietary cleaner).
- Curtains should be hand or machine washed in warm water, rinsed in cold water and spin dried (not wrung out). They should not be dry cleaned.

ADVICE

If using a high pressure washer avoid ventilators and take care not to disturb seals or emblems.

Exterior wall fixings (fig 16.1). Where permanent attachments to the outside wall of your caravan are essential, any holes drilled MUST be properly sealed with mastic sealant (1) and washer (2) to prevent ingress of moisture. Any screw used (3) must be self tapping and no longer than 3/4 inch (20mm). Sucker type fixings can sometimes be used as an alternative.

fig 16.1: exterior wall



WARNING

Before fixing permanent attachments to the wall or ceiling of your caravan, check the position of the electrical wiring runs with your Sprite Leisure Group Dealer.

Paintwork and minor repairs. Because of the specialised materials used in the construction of your caravan we recommend that you seek the advice of a Sprite Leisure Group Dealer should any paintwork or body repairs become necessary.

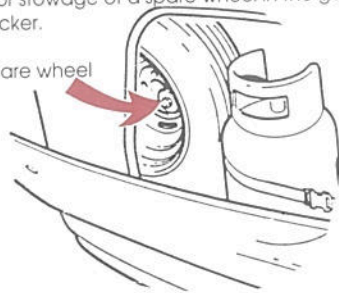
Tyres/wheels

All Sprite Leisure Group caravans are fitted with Tyron Safety Bands as standard (fig. 16.6)

Tyres. Be sure to check tyres before every trip and keep them to the pressure laid down under specifications on pages 34-41 and displayed on triangle on wheel spat (fig. 16.7). Also check tyre condition and tread depth to ensure that tyres remain legal, paying particular attention to cuts, tread wear and bulges on tread or shoulders.

Spare wheel - ALL MODELS (fig 16.2). There is provision for storage of a spare wheel in the gas cylinder locker.

fig 16.2: spare wheel



Alternative spare wheel storage - ALL MODELS*

A spare wheel carrier is available as an optional extra and is designed to be secured behind the wheels and between the chassis members. Always buy a spare wheel/tyre to match your existing set-up. Don't forget to check tyre pressure on your spare.

ADVICE

Check to ensure Tyron Band is fitted to spare wheel.

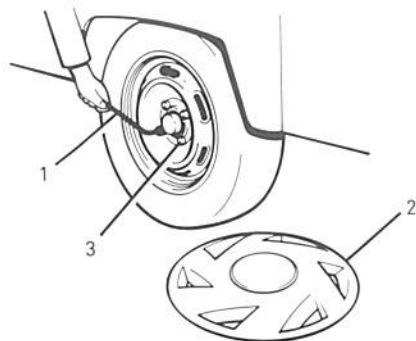
16 MAINTENANCE: Tyres & Wheels

Removing a wheel (fig 16.3). Unhitch caravan and ensure handbrake is applied. As a safety measure lower all four corner steadies. Using wheel brace (1) remove wheel trim (2)*. With a bottle or scissors jack positioned under the axle (see fig 16.5 for jacking points) jack up the appropriate side of your caravan until the wheel for removal is just clear of the ground. With wheel brace (1) slacken off and remove wheel nuts (3) and take off wheel. Reverse this procedure to replace wheel or to fit spare wheel. The wheel nuts should be tightened in the following order:

- top left
 - bottom right
 - top right
 - bottom left,
- taking care to tighten them equally.

The recommended torque is 65 lb/ft.

fig 16.3: removing a wheel



Brake adjustment (fig 16.4).

- jack up wheels clear of ground and release caravan handbrake
- check that hitch drawbar is fully extended
- rotate wheels in a forward direction
- release handbrake to fully OFF position
- turn adjustment nut (1) clockwise until wheel will no longer turn and then back off until wheel just rotates freely
- apply this procedure to each wheel
- rotate both wheels and check that braking is even while slowly applying handbrake.

fig 16.4: brake adjustment

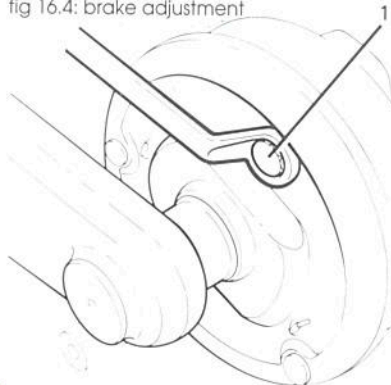
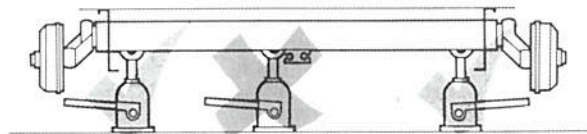


fig 16.5: jacking points



Wheel bearing adjustment. The bearings cannot, or rather need not, be adjusted as they are sealed for life and are maintenance free.

WARNING

The corner steady brace is not to be used as a wheel brace.

fig 16.6: Tyron Safety Band

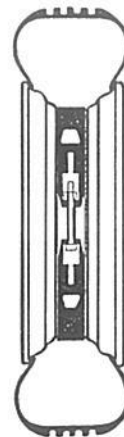


fig 16.7



16 MAINTENANCE: Chassis & Lubrication

It is recommended that an annual or 3000 mile check and service be carried out by your Sprite Leisure Group Dealer. However, those with the knowledge and the correct equipment to do their own maintenance will be pleased to know that all our products are designed for long life and minimum maintenance.

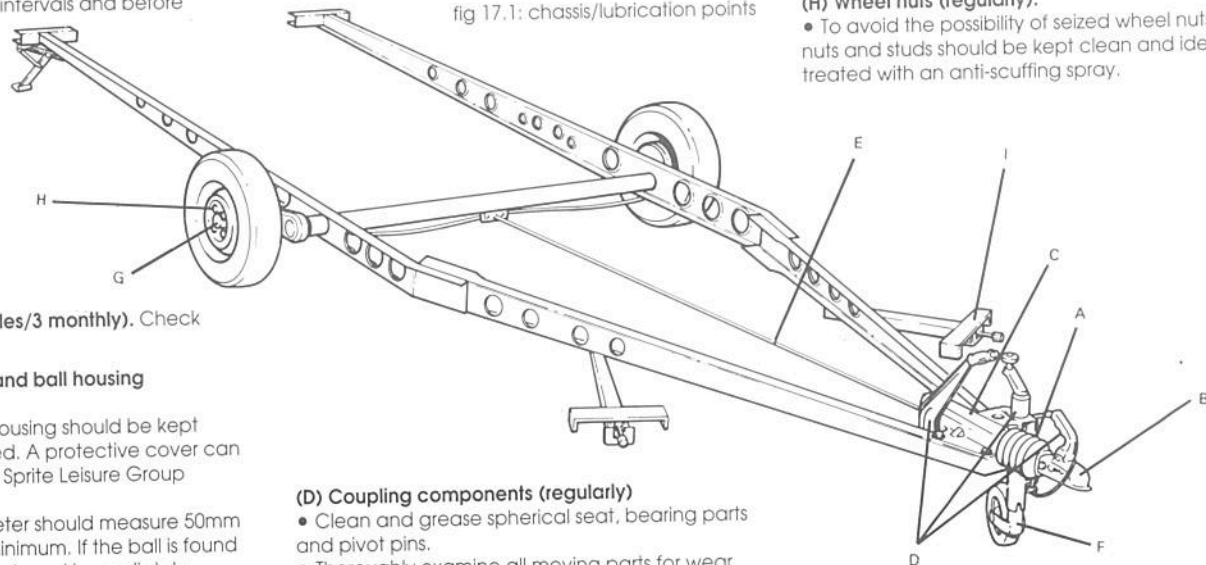
Maintenance procedures are as follows:-

Lubrication (fig 17.1).

Recommended lubricants. A good quality, multi-purpose grease and SAE 20 oil are suitable for most lubrication procedures. Lubrication should be performed at the stated intervals and before storage.

- ensure correct functioning of all pivot pins and levers and oil regularly
- ensure correct functioning of handbrake ratchet and oil regularly.

fig 17.1: chassis/lubrication points



(A) Hitch head 11000 miles/3 monthly). Check hitch head is greased.

(B) Vehicle towing ball and ball housing (before each use).

- The towing ball and housing should be kept clean and lightly greased. A protective cover can be purchased from any Sprite Leisure Group Dealer.
- The towing ball diameter should measure 50mm maximum and 49mm minimum. If the ball is found to be worn it must be replaced immediately.

(C) Overrunning device. The device housing is packed with grease and requires periodic maintenance to ensure smooth operation of the braking system

- regrease shaft bearings via nipples provided at 3000 miles

(D) Coupling components (regularly)

- Clean and grease spherical seat, bearing parts and pivot pins.
- Thoroughly examine all moving parts for wear and correct functioning.

(E) Brake linkage (regularly).

- All moving parts should be lubricated.
- All brake linkage threads should be smeared liberally with grease for protection and as an aid to future adjustment.

(F) Jockey wheel (regularly). The wheel and screw thread should be kept lubricated.

(G) Wheel bearings. The bearings are maintenance free and lubricated for life.

(H) Wheel nuts (regularly).

- To avoid the possibility of seized wheel nuts, all nuts and studs should be kept clean and ideally treated with an anti-scuffing spray.

(I) Corner steadies (regularly). The screw and pivot pins should be kept clean and lubricated.

Miscellaneous (regularly). Small catches, locks, hinges etc. should be kept lubricated with a light penetrating oil.

17 STORAGE

Servicing

Measuring the miles. Remember to keep an accurate record of miles covered by your caravan so that you always know its total mileage. You can use the mileage log on pages 44-45 for this.

1st laden journey.

- wheel nuts
- brake adjustment
- lubrication

3000 miles /12 monthly

- wheel nuts
- brake adjustment
- lubrication
- tyre wear

Storage

When your caravan is to be stored for prolonged periods (for example over a long winter) the following procedure is recommended.

- If possible do not position your caravan beneath trees.
- Perform a full lubrication procedure.
- Wash and polish the exterior.
- Make sure that all internal appliances are clean and that no food particles remain to attract vermin.
- Ensure that ventilators are effective and not blocked up.
- Jack up the chassis and support it on blocks or axle stands so that the wheels remain clear of the ground. Lower the corner steadies for stabilization. The wheels may be protected with ventilated plastic sheeting or similar material.
- Release the handbrake.
- Protect the coupling assembly from the elements.
- Rotate the wheels from time to time to keep the bearings lubricated.

17 SECURITY

Security

The very mobility of your Sprite Leisure Group caravan makes it attractive to the thief, while the loss of even a small belonging could ruin an otherwise perfect holiday. A few simple precautions will deter all but the most dogged thieves. Your Sprite Leisure Group Dealer will be able to help you make your caravan fully secure.

ADVICE

Always close all windows and lock the door when your caravan is unoccupied.

Serial number. Be sure to record your caravan serial number, CRIS/VIN number, both in the front of this handbook and at home away from the caravan. The serial/CRIS/VIN can be found on the plate fixed to the exterior side wall of your caravan beside the lower, opening corner of the main door.

Owner registration card. By filling this in and forwarding to Sprite Leisure Group Caravans without delay, the details of your caravan will be held in our central computer records.

Goldcare. Sprite Leisure Group Caravans participate in the three part Goldcare protection scheme operated by the National Caravan Council. Your Sprite Leisure Group Dealer will be pleased to explain the benefits of this scheme.

Locks.

- A hitch lock prevents towing of the caravan.
- A wheel lock prevent both towing of the caravan and removal of the wheel.

Window etching.

Your CRIS/VIN number will be etched onto the windows. Replacement of all windows by a thief would be both costly and likely to arouse suspicion.

Intruder alarm.

Several types are available, providing audible warning in the event of unauthorised entry. Ask your Sprite Leisure Group dealer for further information.

ADVICE

It is a good idea to use a security marker pen to write your postcard and house number on all valuable items and equipment.

18 SAFETY

All Sprite Leisure Group caravans are designed with safety and security in mind. The observation of a few simple rules will ensure maximum peace of mind.

Safety

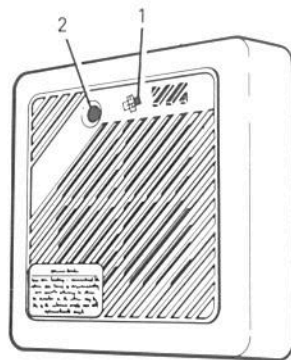
Children.

- Never leave children alone in a caravan.
- Keep matches, lighters and drugs out of their reach.

Smoke Alarm (fig 18.1). Your caravan is equipped with a battery operated Plasplugs kitchen smoke alarm fitted with a silencer circuit to prevent false alarms caused by cooking fumes.

- When cooking, press red silencer button (1). This activates the silencer for 8 - 15 minutes during which time an audible bleep will sound every minute. The alarm will reset automatically after this period, but pressing silencer button (1) again at any time will prolong the silencer for a further 8 - 15 minutes.
- In the silenced mode, the alarm will still react to smoke from a fire.
- The alarm's battery (9v zinc-carbon Ever Ready PP3S or 6F22P equivalent) lasts for about one year. When it needs replacing a warning bleep sounds for up to 30 days. To replace, unclip and swing down the alarm cover. Do not forget to test the alarm after fitting a new battery.
- The alarm should be tested before every trip and weekly. Press test button (2) firmly until the alarm sounds after several seconds. If it fails to sound, replace the battery and test again.

fig 18.1: smoke alarm



Fire extinguisher.

- Always carry a fire extinguisher mounted in a visible position close to the door.
- A dry powder extinguisher (minimum capacity 1 kg) is recommended. This will deal safely with fat or electrical fires. (Water extinguishers should not be used for these types of fire: and vaporising extinguishers should not be used in the confined space of a caravan.)
- A fire blanket is a useful complement to your extinguisher.

FIRE DRILL

- get everyone out of the caravan as quickly as possible, if necessary through a window. DO NOT STOP to dress or collect valuables. (Always keep door and windows free of obstruction.)
- raise the alarm and call the fire brigade (dial 999 in U K)
- turn off gas cylinder valve if safe to do so
- use fire extinguisher and/or fire blanket to tackle fire if safe to do so.

First aid kit. Always carry a first aid kit of at least sufficient capacity for your maximum number of occupants.

ADVICE

Your Sprite Leisure Group Dealer will be able to advise you on the most appropriate fire extinguisher and first-aid kit for your caravan model.

IMPORTANT
Never smoke in bed

19 Pre-trip Checklists, Do's & Don'ts

Pre-tow action

1. Check vehicle and caravan tyre pressures including treads and walls.
2. Close and secure all lockers, cupboards, windows and roof vents. Load caravan and make secure.
3. Check gas cylinder(s) are OFF and correctly secured.
4. Raise corner steadies fully.
5. Bring vehicle and caravan together and hitch up.
6. Check breakaway cable is attached.
7. Connect electrical plugs 12N/12S to vehicle sockets and check that all road lights work correctly.
8. Retract jockey wheel, release clamp, raise jockey wheel, re-tighten clamp securely.
9. Lock all exterior doors.
10. Check that wing mirrors are correctly set.
11. Release parking brake.
12. Drive forward one length and check your pitch for anything left behind.

Pre-tour equipment

Awning	Water hose	Waste bags
Doorstep	Matches	Ozone friendly fly spray
Dormat	Dustpan/brush	Clothing
Folding chairs	Tea/sink cloths	Coat hangers
Rugs	Washing up bowl/liquid	Clothes brush
Fire extinguisher	Tea/coffee pot	Sleeping bags/pillows
First aid kit	Cups/saucers/glasses	Soap/flannels
Warning triangle	Large/small plates	Towels
Gas regulator	Bowls/jugs	Toothpaste/brushes
Spare wheel/tube	Cutlery	Toilet rolls
Wheel brace	Kitchen utensils	Toilet/fluid
Corner steady brace	Kettle	Torch
Wheel chocks	Bottle/can opener	Radio/TV
Load spreaders	Bread board/knife	Camera
Water carrier - fresh	Food/drink	Maps
Water carrier - drinking	Shopping bag	Caravan keys
Water carrier - waste	Plastic buckets	

Do's:

- DO advise your vehicle insurer that you are towing.
- DO drive more gently when towing.
- DO check road lights before each trip.
- DO check that gas cylinder valve is OFF before each trip.
- DO remember that you may not notice a caravan puncture while towing
 - so keep an eye on your caravan's tyres in the mirrors.
- DO fit a cover on your vehicle towing ball when not towing
 - and keep the ball well greased.
- DO use the grabhandles when manhandling your caravan.
- DO keep the auxiliary battery (if fitted) charged at all times.
- DO check that corner steadies are fully retracted and doors/windows/roof lights closed before moving off.

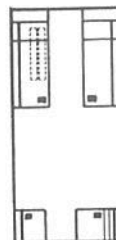
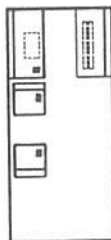
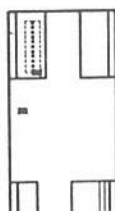
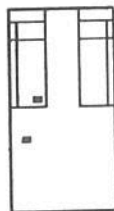
Don'ts:

- DON'T use corner steadies as jacks (except in an emergency).
- DON'T use abrasive cleaners on your Caravan's bodywork.
- DON'T try to correct your steering if you experience snaking or tailwag.
 - Instead, reduce speed gradually.
- DON'T leave items loose inside your caravan when on tow.
- DON'T search for gas leaks with a naked light.
- Finally –
- DON'T worry unduly about towing your caravan, instead regard it as an extension of your vehicle, drive carefully and enjoy the experience.

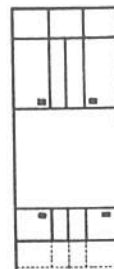
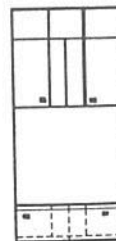
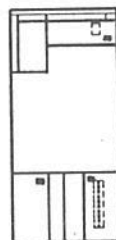
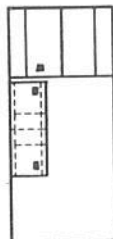
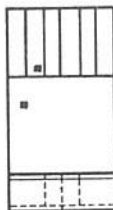
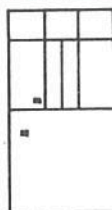
SPECIFICATIONS: Sprite

DAY POSITION

■ Ventilation Positions



NIGHT POSITION



ALPINE 2

Bed Sizes

- 1 Double 1313 x 2010mm
4' 3.5" x 6' 7"
- or
- 2 Singles 1888 x 680mm
6' 2" x 2' 3"

ALPINE C

Bed Sizes

- 1 Double 1288 x 2010mm
4' 2.5" x 6' 7"
- 1 Single 2010 x 673mm
6' 7" x 2' 2.5"
- 1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

MUSKETEER EK

Bed Sizes

- 1 Double 1288 x 2010mm
4' 2.5" x 6' 7"
- 1 Single 1786 x 673mm
5' 10" x 2' 2.5"
- 1 Bunk 1710 x 610mm
5' 7" x 2' 0"

MUSKETEER CD

Bed Sizes

- 1 Double 1288 x 2010mm
4' 2.5" x 6' 7"
- 1 Double 1218 x 2010mm
4' 0" x 6' 7"
- 1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

MUSKETEER C

Bed Sizes

- 1 Double 1313 x 2010mm
4' 3.5" x 6' 7"
- or
- 2 Singles 1888 x 680mm
6' 2" x 2' 3"
- 1 Single 2010 x 673mm
6' 7" x 2' 2.5"
- 1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

MAJOR 5

Bed Sizes

- 1 Double 1888 x 2010mm
6' 2" x 6' 7"
- or
- 2 Singles 1888 x 680mm
6' 2" x 2' 3"
- 1 Double 1218 x 2010mm
4' 0" x 6' 7"
- 1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

MAJOR 6

Bed Sizes

- 1 Double 1288 x 2010mm
4' 2.5" x 6' 7"
- 1 Single 1811 x 650mm
5' 11.5" x 2' 1"
- 1 Single 1811 x 673mm
5' 11" x 2' 2.5"
- 1 Bunk 1811 x 620mm
5' 11" x 2' .5"
- 1 Bunk 1873 x 620mm
6' 1.5" x 2' .5"

SPECIFICATIONS: Sprite

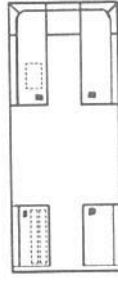
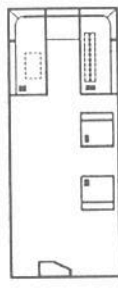
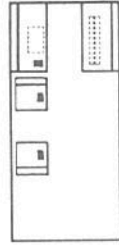
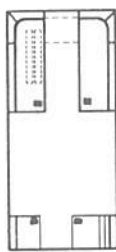
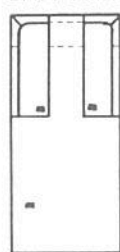
	ALPINE 2		ALPINE C		MUSKETEER EK		MUSKETEER CD		MUSKETEER C		MAJOR /5, MAJOR /6	
Nominal dimensions:												
Ext. length (mm/ft)	5450	17'11"	5450	17'11"	6030	19'10"	6030	19'10"	6030	19'10"	6602	21'8"
Ext. height (mm/ft)	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"
Ext. width (mm/ft)	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"
Int. height (mm/ft)	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"
Int. length (mm/ft)	3895	12'9"	3895	12'9"	4475	14'8"	4475	14'8"	4475	14'8"	5047	16'7"
Ex works weight ± 5% (kg/cwt)	698	13.7	698	13.7	770	15.1	770	15.1	770	15.1	835	16.4
Allowable payload	192	3.7	192	3.7	220	4.3	220	4.3	220	4.3	225	4.4
Manufacturers Max. authorised weight (kg/cwt)	890	17.5	890	17.5	990	19.4	990	19.4	990	19.4	1060	20.8
Maximum technically permissible weight (kg)	1060		1060		1060		1060		1060		1060	
Nose weight	Recommended nose weight for caravan in touring trim 50 - 70kg. >											
Chassis:												
Wheel track (mm)	1880	>										
Tyre size	175R13 4PR		175R13 4PR		175R13 4PR		175R13 4PR		175R13 4PR		175R13C 6PR	
Tyre pressure	36 psi 2.5 bar		36 psi 2.5 bar		36 psi 2.5 bar		36 psi 2.5 bar		36 psi 2.5 bar		45 psi 3.1 bar	
Wheel rim type	5J x 13	>									Wheels fitted with Tyron safety band	
Suspension	BPW Torsion Bar	>										
Stubs	BPW 200 x 50	>										
Brakes	Knott Mechanical Auto Reverse	>										
Coupling	BPW GTA 13C	>										
Ball coupling ht (mm)	420	>										
Load light bulbs:												
Side	12v 5W Festoon	>										
Tail/number plate	12v 5W SBC	>										
Stop/indicator/rear fog	12v 21W SBC	>										
Marker Light	12v 5W Festoon	>										
Interior light bulbs:												
Kitchen Fluorescent	1 x 8W		3 x 8W		3 x 8W		3 x 8W		3 x 8W		3 x 8W	
Nashroom	1 x 8W Fluorescent	>										
Ceiling Light	2 x 5W Halogen											
Equipment:												
Pressure switch	FFO Whale	>										
Water pump	Whale Super Sub 88, Fully submersible Self Priming 12v	>										
Gas space heater	Carver 1800	>										
Refrigerator	Electrolux RM212 Gas /12v/240v	>										
Gas water heater	FFO Carver Cascade GE	>										
Mains Electric (240v) water heater	FFO											
Cassette toilet	Thetford Porta-Potti – Manual flush	>										
Smoke alarm	Plasplugs Kitchen 9v integral battery 6F22P or equivalent	>										
Hotplate/grill	Vitreous enamel Cramer 3 burner and grill	>										
Gas built-in oven	FFO Monte Carlo 3000	>										
Awning sizes:												
Ground to ground measurements (cms)	770		770		830		830		830		890	

Key: FFO - Factory Fitted Option

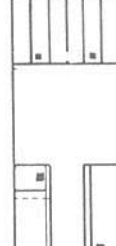
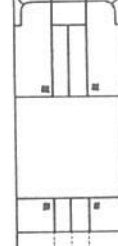
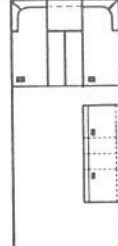
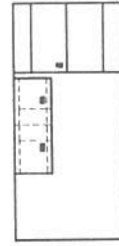
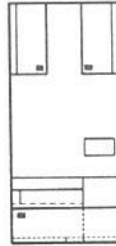
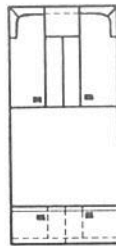
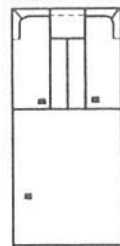
SPECIFICATIONS: Super Sprite

DAY POSITION

■ Ventilation Positions



NIGHT POSITION



450/2, 390/2, 450 EB

Bed Sizes

1 Double 1313 x 2010mm
4' 3.5" x 6' 7"

or

2 Singles 1888 x 680mm
6' 2" x 2' 3"

450 C

Bed Sizes

1 Double 1313 x 2010mm
4' 3.5" x 6' 7"

or

2 Singles 1888 x 680mm
6' 2" x 2' 3"
1 Single 2010 x 673mm
6' 7" x 2' 2.5"
1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

450 CD

Bed Sizes

1 Double 1288 x 2010mm
4' 2.5" x 6' 7"

1 Double 1218 x 2010mm
4' 0" x 6' 7"

1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

450 EK

Bed Sizes

1 Double 1288 x 2010mm
4' 2.5" x 6' 7"

1 Single 1786 x 673mm
5' 10" x 2' 2.5"

1 Bunk 1710 x 610mm
5' 7" x 2' 0"

500 EB

Bed Sizes

1 Double 1488 x 2010mm
4' 10.5" x 6' 7"

Offering daytime

1 o/s Single 1808 x 680mm
6' 0" x 2' 3"

1 Single 1788 x 673mm
5' 10" x 2' 2.5"
1 Bunk 1710 x 610mm
5' 7" x 2' 0.5"

500 C

Bed Sizes

1 Double 1888 x 2010mm
6' 2" x 6' 7"

or

2 Singles 1888 x 680mm
6' 2" x 2' 3"
1 Double 1218 x 2010mm
4' 0" x 6' 7"

1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

500 / 6

Bed Sizes

1 Double 1288 x 2010mm
4' 2.5" x 6' 7"

1 Single 1811 x 650mm
5' 11.5" x 2' 1"

1 Single 1811 x 673mm
5' 11" x 2' 2.5"

1 Bunk 1811 x 620mm
5' 11" x 2' 5"

1 Bunk 1873 x 620mm
6' 1.5" x 2' 5"

SPECIFICATIONS: Super Sprite

	390/2	450/2,	450/C/CD/EK/EB	500 EB/C/6				
Nominal dimensions:								
Ext. length (mm/ft)	5450	17'11'	6030	19'10"	6030	19'10"	6602	21'8"
Ext. height (mm/ft)	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"
Ext. width (mm/ft)	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"
Int. height (mm/ft)	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"
Int. length (mm/ft)	3895	12'9"	4475	14'8"	4475	14'8"	5047	16'7"
Ex works weight ± 5% (kg/cwt)	718	14.1	770	15.1	790	15.5	855	16.7
Allowable payload	182	3.5	230	4.4	210	4.1	245	4.8
Manufacturers Max. authorised weight (kg/cwt)	900	17.7	1000	19.6	1000	19.6	1100	21.6
Maximum technically permissible weight (kg)	1060		1060		1060		1100	
Noseweight	Recommended noseweight for caravan in touring trim 50 - 70kg. >							
Chassis:								
Wheel track (mm)	1880	>						
Tyre size	175R13 4PR		175R13 4PR		175R13 4PR		175R13 C6PR	
Tyre pressure	36 psi 2.5 bar		36 psi 2.5 bar		36 psi 2.5 bar		45 psi 3.1 bar	
Wheel rim type	5J x 13	>			<i>Wheels fitted with Tyron safety band</i>			
Suspension	BPW Torsion Bar	>						
Hubs	BPW 200 x 50	>						
Brakes	Knott Mechanical Auto Reverse	>						
Coupling	BPW GTA 13C	>						
Ball coupling ht (mm)	420	>						
Road light bulbs:								
Side	12v 5W Festoon	>						
Tail/number plate	12v 5W SBC	>						
Stop/indicator/rear fog	12v 21W SBC	>						
Marker Light	12v 5W Festoon	>						
Interior light bulbs:								
Awning Light	12v 10W SBC	>						
Spotlight	12v 10W SBC	>						
Kitchen Fluorescent	1 x 8W		2 x 8W		3 x 8W		4 x 8W	
Washroom	1 x 8W Fluorescent	>						
Ceiling Light	2 x 5W Halogen							
Equipment:								
Pressure switch	Whale	>						
Water pump	Whale Super Sub 88, Fully submersible Self Priming 12v	>						
Gas space heater	Carver 1800	>						
Refrigerator	Electrolux RM212 Gas /12v/240v	>						
Gas water heater	Carver Cascade GE	>						
Mains Electric (240v) water heater	-							
Cassette toilet	Thetford Porta-Potti – Manual flush	>						
Smoke alarm	Plasplugs Kitchen 9v integral battery 6F22P or equivalent	>						
Hotplate/grill	Vitreous enamel Cramer 3 burner and grill	>						
Gas built-in oven	FFO Monte Carlo 3000	>						
Awning sizes:								
Ground to ground measurements (cms)	770		830		830		890	

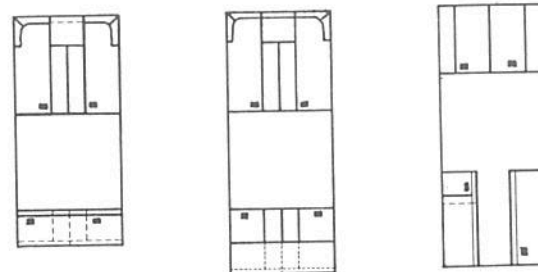
SPECIFICATIONS: Sprite Continental

DAY POSITION

■ Ventilation Positions



NIGHT POSITION



450 C

Bed Sizes

1 Double 1313 x 2010mm
4' 3.5" x 6' 7"

or

2 Singles 1888 x 680mm
6' 2" x 2' 3"

1 Single 2010 x 673mm
6' 7" x 2' 2.5"

1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

500 C

Bed Sizes

1 Double 1888 x 2010mm
6' 2" x 6' 7"

or

2 Singles 1888 x 680mm
6' 2" x 2' 3"

1 Double 1218 x 2010mm
4' 0" x 6' 7"

1 Bunk 1920 x 600mm
6' 3.5" x 2' 0"

500 / 6

Bed Sizes

1 Double 1288 x 2010mm
4' 2.5" x 6' 7"

1 Single 1811 x 650mm
5' 11.5" x 2' 1"

1 Single 1811 x 673mm
5' 11" x 2' 2.5"

1 Bunk 1811 x 620mm
5' 11" x 2' .5"

1 Bunk 1873 x 620mm
6' 1.5" x 2' .5"

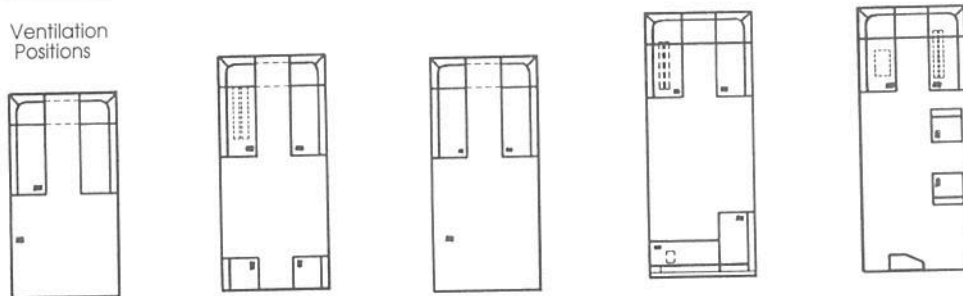
SPECIFICATIONS: Sprite Continental

	450 C	500 C	500 / 6	
Nominal dimensions:				
Ext. length (mm/ft)	6030	19'10"	6602	21'8"
Ext. height (mm/ft)	2546	8'5"	2546	8'5"
Ext. width (mm/ft)	2150	7'1"	2150	7'1"
Int. height (mm/ft)	1942	6'5"	1942	6'5"
Int. length (mm/ft)	4475	14'8"	5047	16'7"
Ex works weight ± 5% (kg/cwt)	790	15.5	855	16.7
Allowable payload	210	4.1	245	4.8
Manufacturers Max. authorised weight (kg/cwt)	1000	19.6	1100	21.6
Maximum technically permissible weight (kg)	1060		1100	
Noseweight	Recommended noseweight for caravan in touring trim 50 - 70kg. >			
Chassis:				
Wheel track (mm)	1880 >			
Tyre size	175R13 4PR	173R13C 6PR	173R13C 6PR	
Tyre pressure	36 psi 2.5 bar	45 psi 3.1 bar	45 psi 3.1 bar	
Wheel rim type	5J x 13 >	<i>Wheels fitted with Tyron safety band</i>		
Suspension	BPW Torsion Bar >			
Stubs	BPW 200 x 50 >			
Brakes	Knott Mechanical Auto Reverse >			
Coupling	BPW GTA 13C >			
Ball coupling ht (mm)	420 >			
Road light bulbs:				
Side	12v 5W Festoon >			
Tail/number plate	12v 5W SBC >			
Stop/indicator/rear fog	12v 21W SBC >			
Marker Light	12v 5W Festoon >			
Interior light bulbs:				
Awning Light	12v 10W SBC >			
Spotlight	12v 10W SBC >			
Kitchen Fluorescent	1 x 8W	1 x 8W	1 x 8W	
Washroom	1 x 8W Fluorescent >			
Ceiling Light	2 x 5W Halogen			
Equipment:				
Pressure switch	Whale >			
Water pump	Whale Super Sub 88, Fully submersible Self Priming 12v >			
Gas space heater	Carver 1800 >			
Refrigerator	Electrolux RM2262 Gas /12v/Mains >			
Gas water heater	Carver Cascade GE >			
Mains Electric (240v) water heater				
Cassette toilet	Thetford Porta-Potti – Manual flush >			
Smoke alarm	Plasplugs Kitchen 9v integral battery 6F22P or equivalent >			
Hotplate/grill	Vitreous enamel Cramer 3 burner and grill >			
Gas built-in oven	FFO Monte Carlo 3000 >			
Awning sizes:				
Ground to ground measurements (cms)	830	890	890	

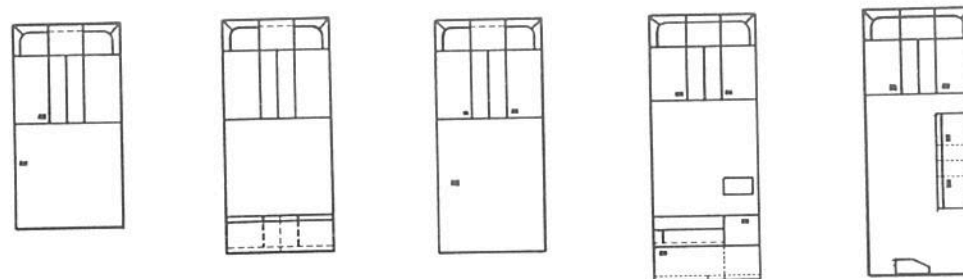
SPECIFICATIONS: Eccles

DAY POSITION

■ Ventilation Positions



NIGHT POSITION



TOPAZ SE	AMETHYST SE	JADE SE/DIAMOND SE	SAPPHIRE SE	EMERALD SE
Bed Sizes 1 Double 1313 x 1960mm 4' 3" x 6' 5" or 2 Singles 1888 x 655mm 6' 2" x 2' 1"	Bed Sizes 1 Double 1313 x 1960mm 4' 3" x 6' 5" or 2 Singles 1888 x 655mm 6' 2" x 2' 1" 1960 x 673mm 6' 5" x 2' 2" 1 Bunk 1920 x 600mm 6' 3" x 2' 0"	Bed Sizes 1 Double 1313 x 1960mm 4' 3" x 6' 5" or 2 Singles 1888 x 655mm 6' 2" x 2' 1"	Bed Sizes 1 Double 1888 x 1960mm 6' 2" x 6' 5" or 2 Singles 1888 x 655mm 6' 2" x 2' 1" 1 Double 1960 x 1138mm 6' 5" x 3' 8.5" 1 Bunk 1920 x 600mm 6' 3" x 2' 0"	Bed Sizes 1 Double 1488 x 1960mm 4' 10.5" x 6' 5" Offering daytime 1 o/s Single 1808 x 655mm 5' 11" x 2' 1" n/s 2088 x 655mm 6' 10" x 2' 1"

SPECIFICATIONS: Eccles

	TOPAZ SE		AMETHYST SE		JADE SE / DIAMOND SE		SAPPHIRE SE		EMERALD SE	
Nominal dimensions:										
Ext. length (mm/ft)	5450	17'11"	6030	19'10"	6030	19'10"	6602	21'8"	6602	21'8"
Ext. height (mm/ft)	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"	2546	8'5"
Ext. width (mm/ft)	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"	2150	7'1"
Int. height (mm/ft)	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"	1942	6'5"
Int. length (mm/ft)	3895	12'9"	4475	14'8"	4475	14'8"	5047	16'7"	5047	16'7"
Ex works weight \pm 5% (kg/cwt)	786	15.4	840	16.5	820	16.1	925	18.1	925	18.1
Allowable payload	214	4.2	260	5.1	280	5.5	325	6.3	525	6.3
Manufacturers Max. authorised weight (kg/cwt)	1000	19.6	1100	21.6	1100	21.6	1250	24.5	1250	24.5
Maximum technically permissible weight (kg)	1060		1100		1100		1300		1300	
Noseweight	Recommended noseweight for caravan in touring trim 50 - 70kg. >									
Chassis:										
Wheel track (mm)	1880	>								
Tyre size	175R13 4PR		175R13C 6PR		175R13C 6PR		175R13C 6PR		175R13C 6PR	
Tyre pressure	36 psi 2.5 bar		45 psi 3.1 bar		45 psi 3.1 bar		45 psi 3.1 bar		45 psi 3.1 bar	
Wheel rim type	5J x 13	>					<i>Wheels fitted with Tyron safety band</i>			
Suspension	BPW Torsion Bar	>								
Hubs	BPW 200 x 50	>								
Brakes	Knott Mechanical Auto Reverse	>								
Coupling	BPW GTA 13C	>								
Ball coupling ht (mm)	420	>								
Road light bulbs:										
Side	12v 5W Festoon	>								
Tail/number plate	12v 5W SBC	>								
Stop/indicator/rear fog	12v 21W SBC	>								
Marker Light	12v 5W Festoon	>								
Interior light bulbs:										
Awning Light	12v 10W SBC	>								
Spotlight	12v 10W SBC	>								
Kitchen Fluorescent	1 x 8W		1 x 8W		1 x 8W		1 x 8W		1 x 8W	
Washroom	1 x 8W Fluorescent	>								
Ceiling Light	2 x 5W Halogen									
Equipment:										
Pressure switch	Whale 12v	>								
Water pump	Whale Supersub 881 with dual connector – electric submersible	>								
Gas space heater	Riviera Palermo 2000	>								
Refrigerator	Electrolux RM2262 Gas /12v/Mains	>								
Gas water heater	Carver Cascade 2 GE	>								
Mains Electric (240v) water heater										
Cassette toilet	Thetford Porta-Potti – Electric flush	>								
Smoke alarm	Plasplugs Kitchen 9v integral battery 6F22P or equivalent	>								
Hotplate/grill	Vitreous enamel Cramer 4 burner and grill with electronic ignition	>								
Gas built-in oven	Monte Carlo 3000	>								
Awning sizes:										
Ground to ground measurements (cms)	770		830		830		890		890	

21 THE ENVIRONMENT – USEFUL INFORMATION

Taking care of nature.

Fuel economy.

- By careful driving on your part will play an even more important role. Accelerate and brake gently, anticipating problems well ahead.
- Maintain correct tyre pressures on both your caravan and vehicle.
- Do not carry more weight than is absolutely necessary.

Waste.

- Please be meticulous in disposing of waste carefully.
- Note that all caravan sites have appointed areas for the tipping of toilet effluent and waste water.
- Always store garbage in waste bags until you find an appropriate place for its disposal.

Barbecues.

- Be especially careful when making a barbecue in the country.
- Select a safe area clear of trees and be sure to fully extinguish the fire afterwards.

Wildlife / Farmstock.

- Take care not to endanger wildlife or frighten farmstock.
- Remember to close all gates behind you.
- If you have a dog with you take care to keep it under proper control at all times.

Rights of Way.

- Do respect the property of others and remember you should not stray from public rights of way.

The Country Code

Wherever you go, follow the Country Code:

- Enjoy the countryside and respect its life and work.
- Guard against all risk of fire.
- Fasten all gates.
- Keep your dogs under close control.
- Keep to public paths across farmland.
- Use gates and stiles to cross fences, hedges and walls.
- Leave livestock, crops and machinery alone.
- Take your litter home.
- Help to keep all water clean.
- Protect wildlife, plants and trees.
- Take special care on country roads.
- Make no unnecessary noise.

Helpful organisations

The Caravan Club
East Grinstead House
EAST GRINSTEAD
W Sussex RH19 1UA
Tel: 0342-326944

Camping & Caravanning Club Ltd.
Greenfields House, Westwood Way,
Coventry CV4 8JH
Telephone: 0203 694995
Fax: 0203 694886
The National Caravan Council
Catherine House
Victoria Road
ALDERSHOT
Hants. U11 1SS
Tel: 0252-318251

Proprietary equipment manufacturers

The following appliances are supplied by
Electrolux Ltd or Carver & Co to whom all
enquiries about service and claims should be
addressed.

ELECTRIC/GAS REFRIGERATORS

Electrolux Limited
Oakley Road, LUTON, Beds LU4 9QQ.
Tel: 0582-57325

HEATERS

Carver & Co
Engine Lane, Coppice Side Ind Est.
Brownhills, WALSALL, W Midlands WS8 7ES.
Tel: 0543-374521

22 TOURING IN CONTINENTAL EUROPE

Touring in Continental Europe

The following checklist indicates driving regulations and mandatory equipment for various countries.

- Do not forget to fix a GB plate to the rear of your caravan as well as vehicle.
- Headlight beams should be adjusted for driving on the right hand side of the road.
- Remember - on-the-spot fines can be levied everywhere!

NB. Headlamps should be adapted even though driving at night may not be envisaged, as European countries have headlamp use regulations similar to those now in force in the U.K. For instance, dipped beams to be used in daylight when there is reduced visibility, i.e. rain, fog, snow or smoke etc.

IMPORTANT

"Legislative changes are due to be introduced during the lifetime of this Handbook and you are strongly advised to check the current situation before towing abroad"

IMPORTANT

INCORRECTLY ALIGNED HEADLAMPS ARE ILLEGAL, AND ON-THE-SPOT FINES CAN BE LEVIED EVERYWHERE.

CONTINENTAL SPEED LIMITS

The Speed Limits shown apply unless local signs show otherwise. Speeds are in Kilometres per Hour (KPH).



Motorway



Rural Dual Carriageway



Rural Dual Carriageway



Built up Suburban Areas

Austria	100	100/80	80	50
Belgium	120	120	90	60
Denmark	70	70	70	50
Finland	80/50	80/50	80/50	50
France	130	110	90	60
Germany	80	80	80	50
Gibraltar	N/A	N/A	32	32
Greece	100	80	80	50
Italy	100	80	80	50
Luxembourg	90	75	75	60
Netherlands	80	80	80	50
Norway	80/60	80/60	80/60	50
Portugal	90	90	70	60
Spain	80	70	70	60
Sweden	70/40	70/40	70/40	50/40
Switzerland	80	80/60	80/60	50

Conversion Gallons and Litres

Use this table to convert from litres to gallons and from gallons to litres.

The figure in the middle column is the number you wish to convert: read the figure on the right to convert litres to gallons, and the figure on the left to convert gallons to litres.

4.546	1	0.22
9.092	2	0.44
13.638	3	0.66
18.184	4	0.88
22.730	5	1.10
27.276	6	1.32
31.822	7	1.54
36.368	8	1.76
40.914	9	1.98
45.460	10	2.20

OWNER SERVICE STATEMENT

- 1) Sprite Leisure Group Caravans Ltd. (hereinafter called 'the Company') warrant that, the Owner of a caravan manufactured by the Company (hereinafter called 'the Caravan') will, subject to the conditions specified below, receive the following service free of all charges, including labour charges, from the authorised Sprite Leisure Group Dealer from whom the caravan was purchased, namely:
- The repair or replacement of any part (except those mentioned hereafter) of the Caravan which, as a result of defective material or workmanship in manufacture, require repair or replacement within twelve months from the date on which the Caravan was released in a new and unused state by the authorised Dealer to its first Owner.

The conditions mentioned above are:

- a) that the Caravan has not been overloaded or used for racing or time trials or used for hire or reward or otherwise misused.
- b) that the Caravan has been maintained in accordance with the Sprite Leisure Group Caravans User Handbook maintenance instruction supplied with each Caravan.
- c) that neither the Caravan nor any part has been altered, modified or repaired without the Company's prior written consent.
- d) that the Manufacturer's identification numbers on the Caravan have not been removed or defaced.
- e) that the Caravan has not been used on unsuitable roads or in conditions unsuitable for holiday touring caravans.

- f) that the Owner notifies the authorised Dealer of the alleged defect within fourteen days of discovering it (the notification should be in writing and should specify the brand and model name and serial number of the Caravan plus the supplying Dealer's name) and give sufficient particulars to enable the matter complained of to be identified.
- g) that the Caravan is used only in the United Kingdom (other than temporary removals outside the United Kingdom for the purposes of a holiday or business tour).

The excepted parts referred to above are tyres, hubs, couplings, glass and proprietary products such as cookers, refrigerators and heaters are normally covered by the respective manufacturer's own guarantee.

- 2) The Company's agents have no authority to vary the terms of this Statement.
- 3) In this Statement the words 'the Owner' mean the purchaser or hirer under a hire purchase agreement and the words 'authorised Dealer' means a person, firm or company under contract with Sprite Leisure Group Caravans to supply or service Sprite Leisure Group Caravans touring caravans.
- 4) Nothing in this Owner Service Statement affects the Owner's statutory rights in respect of the Caravan.
- 5) In the event of any defect please contact your supplying Dealer.

Be sure to complete the Owner Registration Card attached and send to us within ten days of purchase.

In all communications please quote the CRIS/VIN number of your Caravan.

Postage
will be
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Sprite Leisure Group Limited
The Oaks Business Park, Oaks Drive Newmarket, Suffolk CB8 7SX
TEL: (0638) 663251 FAX: (0638) 667327