

THE COCKBURN HOLDSWORTH VOLKSWAGEN BASED

VISTA HIGH TOP

USER'S HANDBOOK

THE VOLKSWAGEN VISTA

Welcome to your Cockburn Holdsworth VOLKSWAGEN VISTA motor caravan which we hope will give you great enjoyment for many years to come. The following notes are to help you become familiar with the use of the excellent motor caravan conversion; they should be read in conjunction with the Volkswagen Instruction Manual provided by the vehicle manufacturers, which provides information on the vehicle itself.

Naturally, you will want both your vehicle and your motor caravan conversion to give the very best service, and we would underline the need to read these instructions with care, and to implement their recommendations wherever necessary. The same applies to the instructions provided by the manufacturers of standard and optional items such as the cooker, refrigerator and caravan heater.

Failure to do so in the case of gas appliances can - for example - result in the occupants being put at some risk, while failure to follow recommendations on other items can result in their premature failure for which the manufacturer may not wish to be held responsible.

Cockburn Holdsworth Ltd
Headley Road East
Woodley
Reading
Berkshire
RG5 4NE

October 1996



WARNING - before every journey the driver must carry out a number of checks for the safety of the vehicle and its occupants. These include those contained in the Owner's Manual produced by the vehicle manufacturer; AND the driver must check the conversion including:

- * Turn off regulator on gas cylinder and check that cylinder(s) are stored securely. NEVER operate any gas appliance - including refrigerator on gas - when in motion or in a petrol station/when filling with petrol.
- * Remove all but the lightest items from cupboards above waist level.
- * Stow securely all heavier items within other cupboards and **MAKE SURE** they will not become loose while the vehicle is in motion.
- * Stow toilet and other pieces of equipment securely.
- * Stow table, table leg and other motor caravan fittings securely.
- * Close all cupboard doors, lower furniture unit lids and locate all sliding seats (if fitted).
- * Carry only lighter items in roof rack and make sure any such items are secure.
- * Apply rear (three point) seat restraints as these can lead to a more comfortable journey and help reduce the risk of injury in the event of a slow speed collision.

IN NO CIRCUMSTANCES SHOULD VEHICLE OCCUPANTS MOVE AROUND THE VEHICLE WHILE IT IS IN MOTION.

CONTENTS

Driving Compartment	1
Seating/Dining/Sleeping	2
Security - Flyscreens	3
Storage - Toilet	4
Kitchen unit - Water & Gas Supply	5
Gas Supply & Cooking	7
Gas & Water System Diagrams	13
Electrical Systems & Fittings 240V	15
Electrical Systems & Fittings 12V	17
Refrigerator	18
Wiring Diagram - 12 Volt	22
Wiring Diagram - 240 Volt	23
Wiring Diagram - Aux. Battery	24
Optional Equipment - Propex Heater Diagram/instructions	25
Water Heater	28
Care & Maintenance of your Motorcaravan	29
Technical Data	32
Vehicle Weight Data	33
Vehicle Vent Locations	34
Zig Control Panel Instructions	35

THE DRIVING COMPARTMENT

We design our driver and passenger seats for comfort and versatility. They have to fulfil the dual roles of comfortable driving seats and, of course, comfortable beds at night time. To achieve this there are a number of adjustments with which you must be conversant to obtain the best results.

First, the seats have infinite adjustment of the back-rest by means of the lever at the base of each seat.

Both the cab driving and passenger seats can be moved forwards and backwards by means of a lever on the front of the seat.

The front, near-side (passenger) seat can be rotated through 360° degrees. This can best be done by sitting on the driver's seat or by standing outside the vehicle with the passenger door open. First push the safety belt stem down out of the way. Open the passenger door to allow the seat to swing. Find the locking lever which is at the rear of the seat. Lift the lever and rotate the seat to the required position. The locking lever operates when the seat is in the full front position or in the full rearward position, (after rotating through 180 degrees). When the seat has been put at the desired position, adjust the seat fore and aft and back-rest position as necessary.



WARNING: Do not drive or use your motor caravan without first reading and implementing the instructions at the beginning of this manual. The instructions are for the SAFETY of YOU, YOUR PASSENGERS AND OTHER ROAD USERS!

SEATING/DINING/SLEEPING arrangements

FOR TRAVELLING: The seating in your Vista is provided by the two single seats in the cab, while in the rear there is a bench seat on the offside of the vehicle and a face-forwards seat on the n/s, just to the rear of the side door opening. Both cab seats are fitted with seat belts and they must be used by their occupants by law. In addition a three point seat belt is fitted to the face forward seat and this will contribute to a more comfortable journey for any rear passenger.

SINGLE BEDS: To make up the single bed, remove headrests from the cab seats and slide the seat as far as it will travel, release the lever on the inside of the seat and lie the cab seats flat. Your o/s bed is now complete. In order to make your n/s seat just release the paddle latch located on the front and slide forward to meet the back of the cab seat.

DOUBLE BED: (Optional extra) Follow the same procedure as for the single beds, also insert the large cushion on a board between the cab seats. Release the paddle latch and pull the cushion out to meet the side on the face forward seat.

DINING: An extensive dinette is provided by the long bench seat on the o/s of the van and with the nearside seat in the face-forward position. Further space can be created around the table by folding out the nearside seat as if you were making the bed.

TABLE

The main table is located on a single pillar so that it will swivel through 360°. Take the table pillar leg from its position in the wardrobe, and press it firmly into the floor recess. Take the table, also from the wardrobe, and mount it on top of the table leg.

NOTE: Single pillar tables cannot be as firm or steady as the conventional four legged table, but maximum firmness can be achieved each time the table is erected by pressing down firmly on the table so that the leg is forced hard into the floor and table cones.

The table must be stored in its special position when the vehicle is on the move.

The main table is designed to be used in conjunction with the rear bench seat and is too far away from the swivelling passenger seat to be used in comfort. Additional meal settings can be achieved in the dining area by having the cab driver's seat swivel and having the optional cab table fitted. This would be fitted on a swinging pillar located behind the front passenger seat.

NIGHT-TIME PRIVACY AND SECURITY: The vehicle is fully curtained. The rear door locks from the outside, the side sliding door and two cab doors can be locked from inside the van by pressing down the relevant knob to the 'locked' position.

For night-time privacy, full curtaining is provided in your Vista. In particular, you will note that the curtains overlap at the centre and there are velcro tabs, or poppers on most curtains to hold them in place. In addition, the cab curtains are provided with small elasticated loops which can be hooked over the window winder handle to keep these curtains firmly against the side of the van.

There are ample lights provided when darkness falls. There are also 8 watt fluorescent lights on either side of the van and also a small courtesy filament light immediately to the rear of the vehicle sliding door which operates when the sliding door is opened and a similar light in the vehicle cab which operates from the cab doors. These two lights are installed by the vehicle manufacturer and your local VW dealer will be able to provide replacement bulbs while replacement fluorescent tubes can be obtained at most good motor caravan or caravan accessory shops.

Ventilation can be obtained by removing the flyscreen and opening the roof ventilator - remembering to replace the flyscreen afterwards. Increased ventilation - yet with security - can be obtained by winding the cab windows down no more than 2 inches and sliding the caravan windows and locking them in place in the first 'notch'.

FLYSCREENS

Cassette Flyscreens are fitted to the side windows. To operate press levers together (located either side of the handle) and slide the screen carefully up or down and locate in the nearest slots to the required position. (i.e. partially closed or fully closed). The screens can be used for extra privacy within the vehicle.

Cassette flyscreens are also fitted to the high top double glazed windows. Pull the flyscreen up and locate tab over pin to hold in position.

TOILET

On the offside rear of your Vista there is fitted as standard a Thetford Cassette toilet (manual flushing). Covering the top of the toilet is a hinged cushion which hinges up to 90° and then using the strap poppers into position. For privacy there is a unique divider, release the shoot bolt at the bottom and just pull on the handle and it will close the toilet area off from the lounge area of the van. The rear door and nearside rear curtain will need to be closed for total privacy.

DO NOT USE TOILET WHEN COOKING

STORAGE

There is ample storage in your Vista motor caravan both within the vehicle and in the roof rack.

Only lighter items should be stored in the area beneath the fibreglass high top - items such as sleeping bags, pillows etc are ideal for this area.



WARNING: The top lockers are for LIGHT ITEMS only. Heavy items - such as tins of food etc. - must NOT be carried in cupboards or shelves above waist level as such items may become dislodged if the vehicle has to be braked heavily - or the driver has to swerve suddenly to avoid another road user and these objects can cause injury to the motor caravan occupants.

EXTERIOR STORAGE

The Vista high top has a roof top storage area and a rear ladder to reach this storage. Care should be exercised in gaining access to the storage particularly in wet or frosty weather, the rungs to the ladder can be slippery and cause a fall. Please note that the roof top storage area is for light items only - such as awning tents - and there is a maximum weight limit of approximately 15 kilos or 30lbs., and **in no circumstances should operators stand or kneel on the floor of the storage area**, damage thus caused will only be repaired by the converter at the owner's expense.

KITCHEN UNIT - WATER & GAS SUPPLY

The fresh water tank is located under the vehicle and holds approximately 63 litres. Some water remains in the tank below the level of the pump draw off. The tank is filled by means of the external fresh water filler cap in the centre of the offside of the vehicle.

The exterior filler is provided with a locking cap which is filled by means of turning the cap in an anti-clockwise direction, and using either a water container and funnel or direct from a tap with the aid of a pipe, (many experienced motor caravanners carry with them a short length of piping specifically for this task).

PLEASE NOTE: When operating the lock on the water filler cap, make sure that the key is fully turned before attempting to remove the cap. When operating key it is advisable to hold the cap with your other hand to prevent it rotating. Hold the cap firmly, press in and turn anti-clockwise. To avoid damaging the lock, never attempt to remove or replace the cap with the key.

The water tank is fitted with breather holes which may allow water to leak onto the ground - this is especially so when the tank is filled to the brim or if the vehicle is parked on an angle. It does NOT necessarily mean that the tank is leaking!

The locking cap is provided with two numbered keys. We would suggest you keep one in a safe place while the other is kept for regular use.

NOTE: Always retain a reference of your key number so that replacements can be provided if they both become lost.

WARNING: Neither ourselves as manufacturers nor your dealers retain the key numbers, and we are unable to provide replacement keys without the appropriate number.

The water tank can be drained by means of a plastic tap situated on the nearside of the tank. The tap turns through 180°. A small white plastic filter unit is fitted in the pipe from the water tank and can be removed from underneath the vehicle by unscrewing the jubilee clips joining it to the water pipe.

The water tank itself should be drained periodically and flushed through. Before winter, it is essential to drain the tank and - in fact - the whole water system to prevent it from freezing up. Failure to do so can result in damage to the tank, pipes and water pump for which the manufacturer will not wish to be held responsible.

Water left in the fresh water tank for extended periods may also become unsuitable for drinking or for washing up purposes, and for this reason also the tank must be drained and flushed through if the motor caravan is not to be used for even short periods.

Sometimes, water from plastic tanks can taste a little strange - particularly early on in the life of the motor caravan. Should the water become tainted, the water tank and water system can be treated with a proprietary product called Milton (available from chemists). Puritabs (also available from chemists) will make water safe but many motor caravanners these days prefer to fit in-line filters. There are several good filters on the market, one of the most popular being the Safari available from good motor caravan accessory shops or direct from Associated Chemists Ltd, 61 Wicker, Sheffield, S3 8HT

PLEASE NOTE: When draining down the water system, it is wise to remove the water tank filler cap to prevent the possibility of air locks in the system. If you are laying the vehicle up before winter (or frosty weather) make sure the water pump as well as the water tank is free of water.

INSIDE THE VEHICLE: The fresh water tank is fitted with a water level gauge, the dial and controls of which are situated on the control panel fitted beside the wardrobe. To set the dial, turn on the motor caravan 12 volt system, depress the button beneath the water level gauge and adjust the calibration knob with the water tank full. Please bear in mind the fact that the water level gauge is not precise in its accuracy and can vary with water from different areas of the country. Consequently, re-calibration may be necessary during your motor caravanning journeys.

The sink waste water drains to a tank which is situated under the vehicle, a tap is fitted into the system so that the contents can be emptied either directly into a drain for waste disposal or into a separate container for disposal into the appropriate area on the site. See Technical Data for the tank capacity.

GAS SUPPLY & COOKING: The conversion is designed to carry two Camping Gaz containers (2.72kg size) in a sealed compartment in the base of the wardrobe. Gas containers can be obtained from Gaz dealers and from many caravan sites. They must be used with the appropriate regulator and the suppliers recommend that flexible rubber hose from the regulator to the gas piping should be replaced every year. This system is very efficient in use, but all gas fuel is potentially dangerous, and should any leaks be suspected the supply should be turned off immediately and the system checked by an authorised dealer. It is essential that the gas supply should always be turned off at the container when the vehicle is driven because of the risk of fire or explosion in the event of an accident.

NEVER ALLOW MODIFICATION OF GAS SYSTEM OR APPLIANCES EXCEPT BY QUALIFIED PERSONNEL.

Care should be taken not to damage any exposed gas piping when packing or using the vehicle. DO NOT obstruct gas ventilation holes in floor of vehicle, they are specifically to allow the escape of gas in the event of a leak.

It is recommended that the flexible gas hoses are regularly checked for deterioration and expiry date and renewed as necessary.

As a further safety measure secondary gas taps are located inside the kitchen unit. This controls the gas supply to all appliances in the vehicle and can be used to turn off the gas for short periods when on site.

Full manufacturers instructions are supplied with the cooker. The sink flap top is held up by the fold out chrome splash guard. The cooker should never be used without adequate ventilation in the van as otherwise there will be a build up of fumes.

In draughty situations, especially in windy weather, it may be found that the gas burners may blow out, and although your Vista cooker unit is fitted with a flame failure device (which automatically cuts off the gas supply to the burner in question should its flame be blown out), it is vital to check for this eventuality so that the control knob can be returned to 'off' and the lighting sequence be commenced all over again.

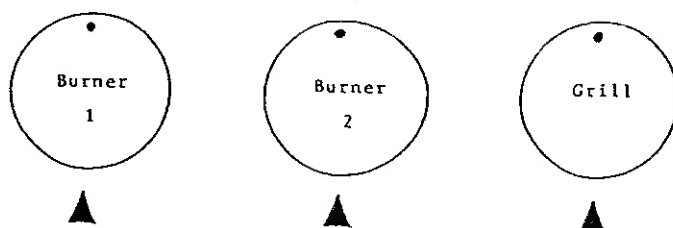
When the gas supply in a gas cylinder is coming towards the end, it will be found that the gas burners appear to burn low with a yellow flickering to the flame, and it will then be necessary to change gas cylinders.

The gas cooker must not be used as a space heater - a specially designed caravan heater can be fitted to your vehicle by most competent motor caravan dealers if required.

CHANGING OF THE GAS BOTTLES: First extinguish any flame or source of ignition before changing gas cylinders and check that all appliances are switched off, next turn off the main gas valve situated between the gas bottle and the regulator. Remove the regulator from the empty gas bottle, check that any sealing washer is not perished or damaged (replace if necessary) and refit to the recharged bottle. After fitting the regulator, ensure that the rubber base pipe is not twisted or kinked and secure the bottle by the straps. Turn on the main gas valve.

THE SPINFLO TWO BURNER AND GRILL COOKER: Your Vista is fitted with the latest type of stainless steel two burner and grill cooker, which will prepare high quality meals quickly and efficiently. This unit is the Spinflo combination unit, and it is for this unit that these instructions particularly apply.

Lighting the appliance: Turn on the gas supply at the gas regulator and at the appropriate gas tap in the wardrobe. To operate either of the three burners, depress the appropriate burner knob in an anti-clockwise direction until the indicator of the knob coincides with the large flame symbol. Apply a match to the burner and keep the knob depressed for a further 10-15 seconds until a flame is established. Turn the knob as far as it will go in an anti-clockwise direction. This indicates the bottom of the simmer range. By turning the knob clockwise, a larger flame can be obtained. To turn off, turn the knob clockwise to the off position when a stop will be reached; then release and the tap will spring out. See diagram below:



Never allow a full flame to burn without a utensil over the burner as this is wasteful and it may also result in heat damage to the underside of the cooker lid or the headlining immediately above the cooker. Care should also be exercised in operating gas taps, because of the restricted space between the chrome windshield and the two left hand taps, and this area can become extremely hot when the burners are alight.

Please note: Gas may take some time to reach the burners, (or other appliances) if the motor caravan has not been used for some time, or a fresh cylinder is fitted. When lighting the cooker use a taper or match, if it fails to ignite the first time, make one further attempt with a naked flame held against the burner for 20 seconds, but if it fails to light, check the gas supply.

When using the burners we recommend that both lids are in the upright position. Follow the above operation for the other burner and the grill. Under no circumstances should the kitchen unit lid be lowered while the cooker unit is alight, nor should it be lowered until the complete cooker unit has cooled down. Always keep the fold-down door in front of the grill unit in the open position while the grill is being used.

Care should also be taken to avoid scorching the laminate immediately adjacent to the cooker. While this material is a genuine heat resistant plastic laminate, it can be damaged when the burner jet is on full heat and a pan so placed that the flame heat is directed against the surround.

VENTILATION: It is extremely important that all the vents as provided by the Motor Caravan manufacturer do not become restricted or blocked through the placement of contents, in addition it is recommended that all vents are inspected at least once a year to ensure that any protective screens have not become damaged or blocked by dirt. In the event of a screen requiring cleaning, the screen should first be removed from the vent and then left to soak in warm, soapy water for approximately 15 minutes. The screen should then be rinsed and thoroughly dried before refitting.

**WARNING! RISK OF FIRE**

There is always the risk of fire in a motor caravan. Use care and common sense; in particular:

DO NOT use gas appliances while vehicle is on the move and DO NOT use gas appliances - including refrigerator on gas - when filling vehicle with petrol.

Turn off regulator and secure gas cylinder for road travel.

Keep curtains, seat covers and other inflammable items WELL AWAY from cooker and other gas appliances.

Never use portable heating equipment, other than electric heaters that are not of the direct radiant type.

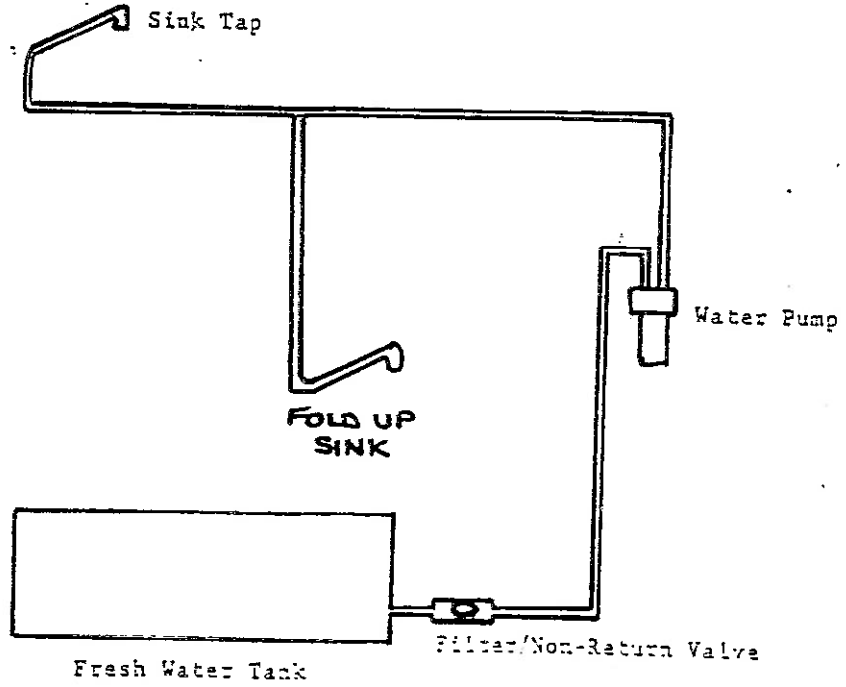
It is recommended that you provide fire extinguisher(s) that comply with the requirements of BS.5423 and a fire blanket next to the cooker.

Do not scale

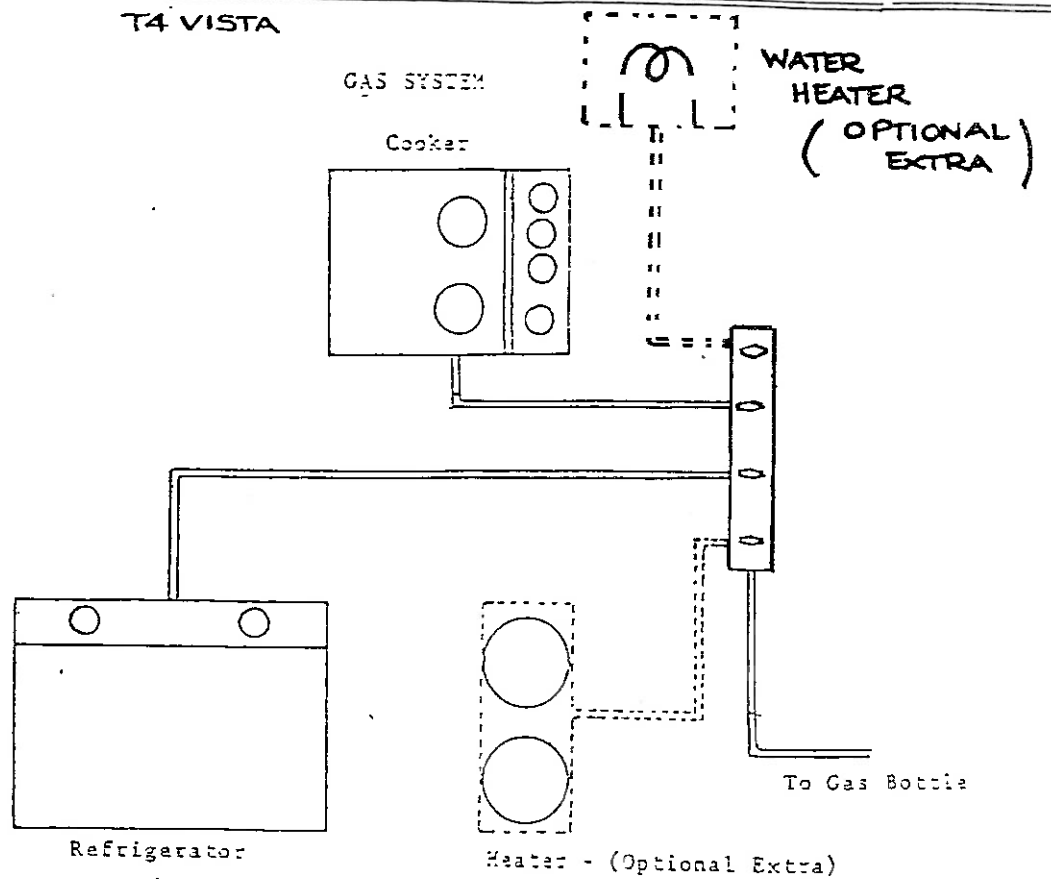
A

SK 4008

WATER SYSTEM



T4 VISTA



CARAVAN MAINS ELECTRICAL SYSTEM - 220-240 VOLT A.C.

The caravan is equipped with mains electrical equipment for use with a mains supply fed to the vehicle via a connector mounted on the offside middle of the vehicle, behind a white pull-up flap. The supply can be obtained from an ordinary domestic power socket when the vehicle is at home, or from a caravan site 'electrical hook-up' which many sites now make available, usually for a small fee.

This will enable use to be made of any ordinary 240 volt electrical mains equipment such as portable TV's, vacuum cleaners, razors, hair driers etc, always providing that the total current demanded by the equipment does not exceed the available supply current. This equipment is used from the domestic power socket mounted on the side of fridge unit.

The mains supply can also be used to re-charge the caravan battery through the Zig charging unit. Full protection is built into the design to ensure that the mains supply is isolated from the 12 volt caravan and vehicle battery circuits. The RCD unit gives protection against faults, this being located beneath the wardrobe. It is recommended that each time before using mains equipment, you should check the operation of this protection device. This is simply done by switching on the mains supply and the circuit breaker switch and pressing in the black tongue above the switch, when the switch should immediately fly 'off' again. This indicates the circuit breaker is operational and the switch can then be reset to 'on'.

NOTE: For additional protection, these three switches are of the industrial type for which the supply is 'on' when the switch is in the 'up' position - the opposite to most domestic switches.

TO USE FROM THE MAINS SUPPLY AT HOME: The motor caravan can be plugged into an ordinary domestic 240 volt supply before you leave for your holiday (you can 'cool down' your refrigerator in this way). To do this you will need to obtain the appropriate electrical lead from your supplying motor caravan dealer, or, alternatively, from a good caravan or motor caravan accessory shop. Please note that although the vehicle connector and flap provides splash protection, it should not be regarded as completely waterproof and it is not recommended that it is used in the rain or when the vehicle is being washed.

TO USE THE MAINS SUPPLY FROM A CARAVAN SITE 'HOOK-UP': First ensure that the caravan main switch is in the OFF position. Using the mains cable provided install the connector socket to the appliance inlet found on the exterior of the vehicle, then insert the plug on the other end of the cable to the outlet on the pitch supply point. Switch on at the caravan main switch.
TO DISCONNECT: Switch off at the caravan main switch, carefully remove the plug at the pitch supply point and unplug the socket from the appliance inlet on the vehicle.
Always take great care when connecting/disconnecting the cable as camp sites often provide wet conditions due to rain, mist and dew.

NOTE: THE SUPPLY CABLE MUST BE FULLY UNCOILED TO AVOID DAMAGE BY OVERHEATING.

SWITCHING PROCEDURE: To use the van power socket connect up the supply cable and switch on as follows:

- 1) Switch on at the house or caravan site socket.
- 2) Switch on the Residual Current Device unit (RCD), test as described in the manual and switch on again.
- 3) Switch on the 10 amp switch (the centre one of the group of three on the RCD unit).
- 4) Switch on the van power socket.
- 5) Switch on the appliance if necessary.

To use the domestic supply to charge the battery, connect up the supply cable and switch as follows:

- 1) Switch on at the house or caravan site socket.
- 2) Switch and test the RCD and switch on again.
- 3) Switch on the 6 amp switch (the right one of the group of three on the RCD unit).
- 4) Operate the switch of the charging unit which will illuminate amber.

The caravan battery should now be charging. An automatic cut-out is fitted if it should overheat, charging will be interrupted.

The Zig unit does not charge the main vehicle battery.

Provided the supply current is adequate, use of the power socket and battery charging can proceed simultaneously.

After using the mains supply and removing the supply cable, close the white plastic flap cover to the connector on the outside of the vehicle to prevent it swinging and becoming damaged.

ELECTRICAL SYSTEMS & FITTINGS

CARAVAN 12 VOLT ELECTRICAL SYSTEM: Your Vista motor caravan is equipped with a comprehensive electrical system with both 12 volt and 220/240 volt circuits to provide comfortable motor caravanning under a wide variety of conditions. Naturally, the fluorescent lights consume the least electricity and these can be operated for some considerable time, along with the 12 volt water pump, without risking a 'dead' vehicle battery.

The Vista can be fitted with a Zig X7 caravan battery charger unit which is connected to the CP400 control panel and separate instructions have been provided by the manufacturers. This unit is designed to ensure that the caravan (secondary) battery can be charged by the mains electrical supply if this is available. The unit automatically prevents overcharging and a battery condition warning light on the control panel indicates when the 12 volt system is switched on. The caravan battery is automatically charged from the alternator when the vehicle engine is running via the split charging relay fitted in the engine compartment.

The left hand rocker switch on the CP400 distribution panel will dictate whether the caravan 12 volt appliances are operated from the vehicle battery (by pushing the switch at the top) or the caravan battery (bottom). The centre position for this switch turns off power to all 12 volt appliances. Once the left hand switch has been set, the appropriate 12 volt appliance can be operated with the use of the three other rocker switches plus - of course - the switches on each individual appliance. The following appliances are controlled by the switches:

PUMP	-	Water pump
LIGHTS	-	All fluorescent lights
AUX 1	-	Fridge ignition
		Water Heater ignition
		Water level gauge

The main vehicle accessories (such as vehicle lights, windscreen wiper etc) are protected by fuses contained in a fuse box located behind the panel in the dashboard to the right of the driver. (see your Volkswagen manual for details). The caravan fuses are fitted in the engine compartment to the right of the main battery. There are two fuses - each of 25 amp (1) to protect the refrigerator and (2) the Zig control panel.

Carry spare fuses at all times. However, if fuses continually blow, an electrician - or your Vista supplier would be consulted for the root cause of the problem.

NEVER ALLOW MODIFICATION OF ELECTRICAL SYSTEMS AND APPLIANCES EXCEPT BY QUALIFIED PERSONNEL.

FRIDGE

Operation on 12 volt electrics: Operation on 12 volt (vehicle) electrics should only be performed when the vehicle engine is running, to prevent battery drainage.

Set the switch on the refrigerator control panel to 12 volt (switch 'A'), then start the vehicle.

The refrigerator will now be operating from the vehicle electrics while on the move and will keep perishables chilled, but it must be remembered that all caravan type refrigerators are not as efficient on 12 volt electrics and it is asking a great deal of the fridge to, say, form ice cubes.

Operation on mains electrics: Hooking the vehicle up to mains electrics is covered on page 15 of your User Manual and should be followed at all times.

Having established a mains supply, make sure all switches on the RCD unit in the wardrobe are in the 'on' position (up). Turn the control switch to the 'mains' position and ensure that there is not a gas supply to the fridge. You are now free to control the temperature of the appliance by means of progressively turning the knob to the extreme right of the fridge control panel - knob 'D' on the diagram.



It is essential that the vehicle batteries are disconnected before working on 12 volt fitments. All 12 volt appliances in this vehicle must be turned off before the battery or batteries are disconnected. The mains hook up (if fitted) MUST be disconnected before working on the vehicle or conversion. Adjustment or servicing of 220 volt appliances MUST be left to a competent electrician.

REFRIGERATOR:

The vehicle is fitted with an Electrolux 4213 Tilt Tolerant refrigerator of 60 litre capacity with a freezing compartment, and the manufacturer has supplied instructions regarding its use and these should be referred to. Briefly the refrigerator can be used in three ways:

- a) Via the vehicle battery when in motion by switching on refrigerator switch 'A'.
- b) The gas supply when the vehicle is stationary and the ignition switched off, by using refrigerator switches 'D' and 'E' then following the instruction manual.
- c) By mains, by using refrigerator switches 'B' and 'C' and a caravan hook-up or other mains supply if available.

The 12 volt supply is from the main vehicle battery circuit. There is a 25 amp fuse on the refrigerator circuit which is located in the fuse box in the vehicle engine compartment, next to fridge relay and vehicle battery.

Operation on gas:



WARNING

It is vital that the two exterior plastic ventilator covers for the refrigerator are removed when the refrigerator is operating - whether it is on 12 or 220 volts or camping gas. These covers are found on the outside of the vehicle, adjacent to the refrigerator at middle of offside of vehicle.

By removing the covers, air can pass across the rear of the refrigerator and keep it at the correct operating temperature. Replace the covers when the refrigerator is not operating - this prevents unnecessary draughts particularly during colder weather. Also when washing the vehicle to prevent ingress of water.



WARNING!! Always turn off the gas supply to the refrigerator at the gas isolating tap when the refrigerator is off or not operating on gas.

PLEASE NOTE: The fridge will only work properly when parked on the level, if it is even at a slight angle it will not work.

To Turn Off/Gas Supply to Fridge: To turn off the fridge the gas tap in the cupboard below the sink must be turned fully off.



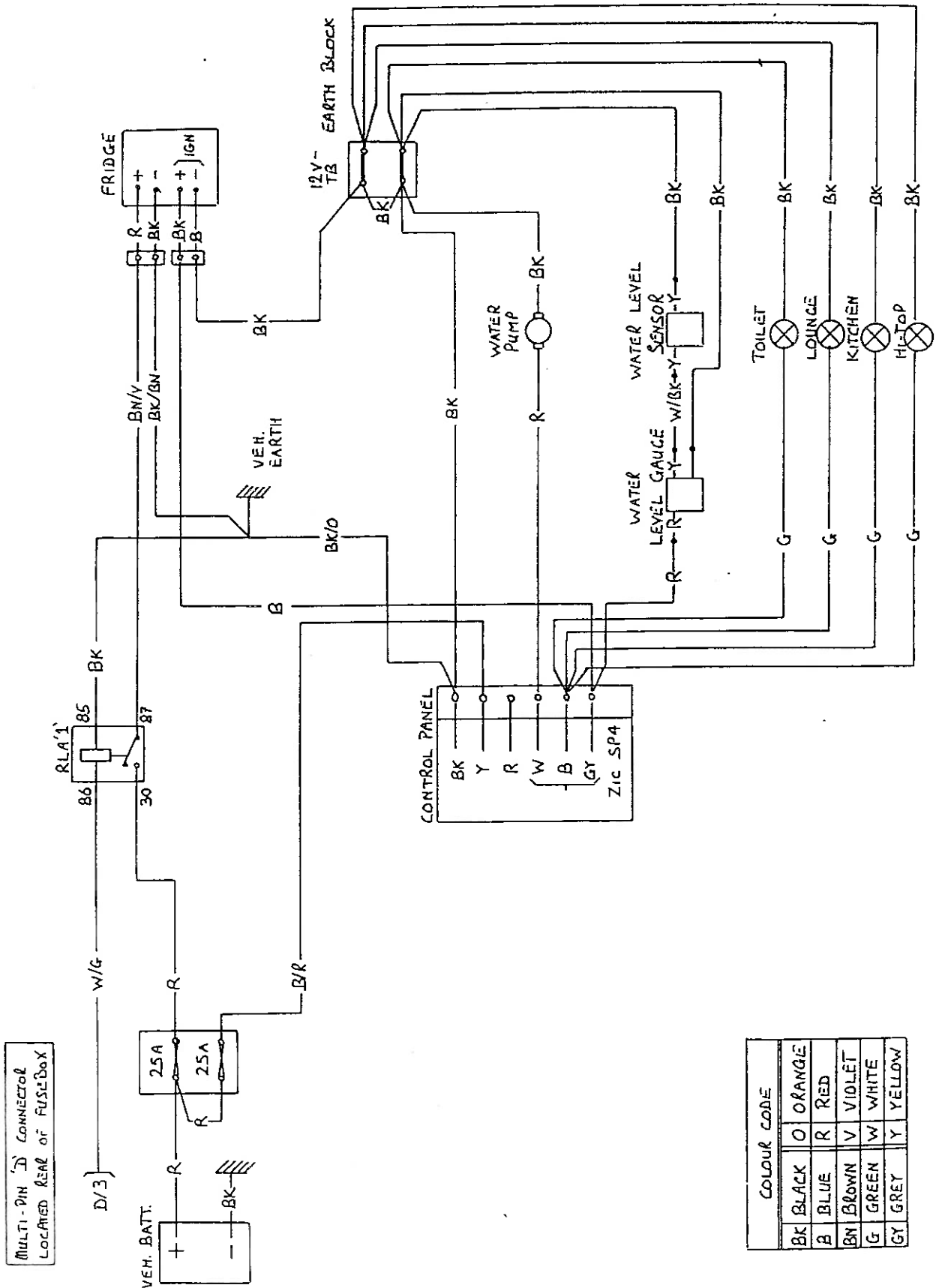
WARNING Space heaters using LPG have a high output and are continuous burning and therefore produce a high volume of exhaust. They should not be used if their outlets discharge into an awning space which is fully enclosed and which people are occupying.

There is no danger of exhaust gas pollution in awning spaces from refrigerators and storage water heaters which vent in to them but some fresh air circulation in the space should be provided.



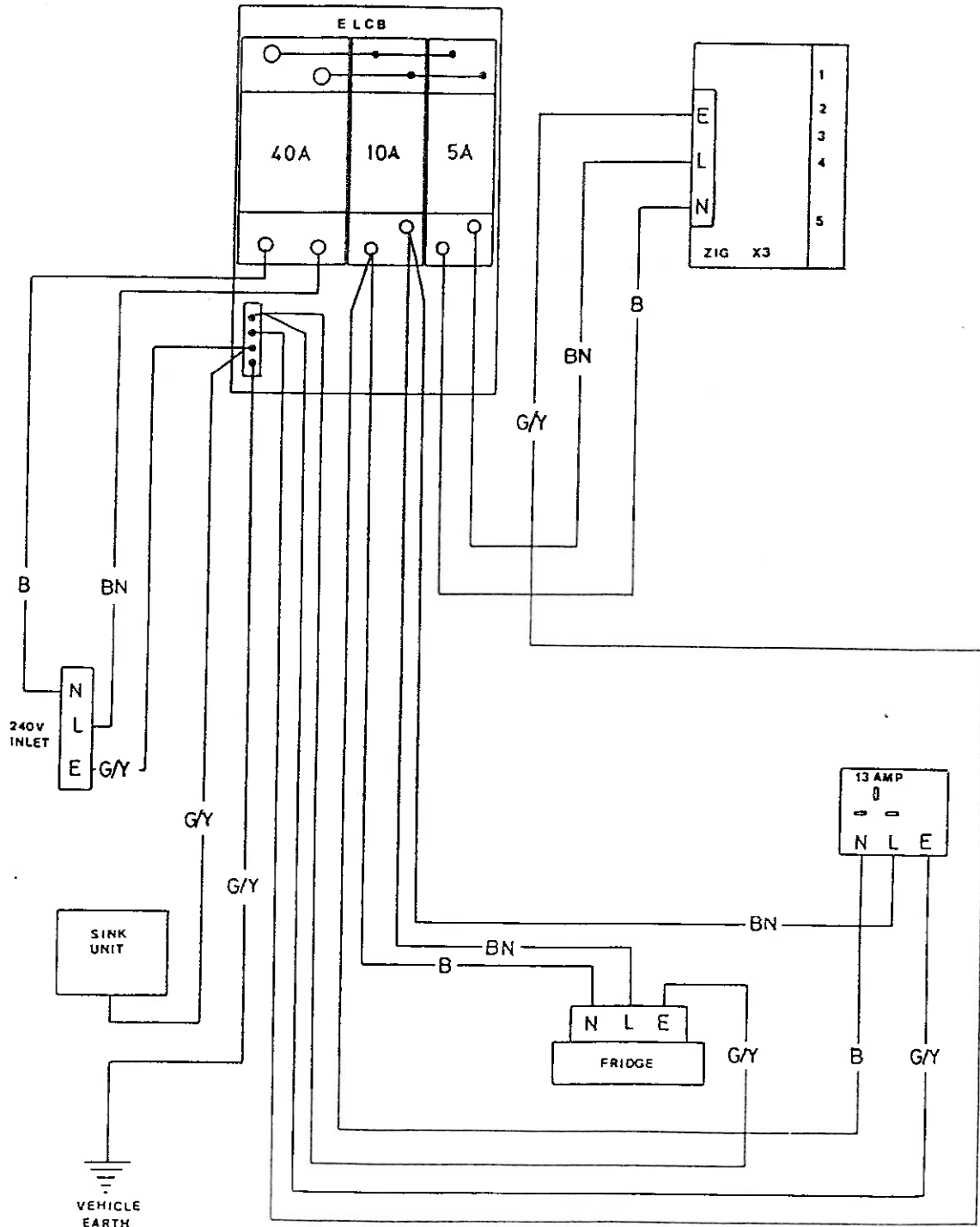
WARNING

IT IS DANGEROUS TO STORE AEROSOL CANISTERS IN DRAWERS AND CUPBOARDS ABOVE OR NEAR ANY GAS APPLIANCES IN YOUR MOTOR CARAVAN.



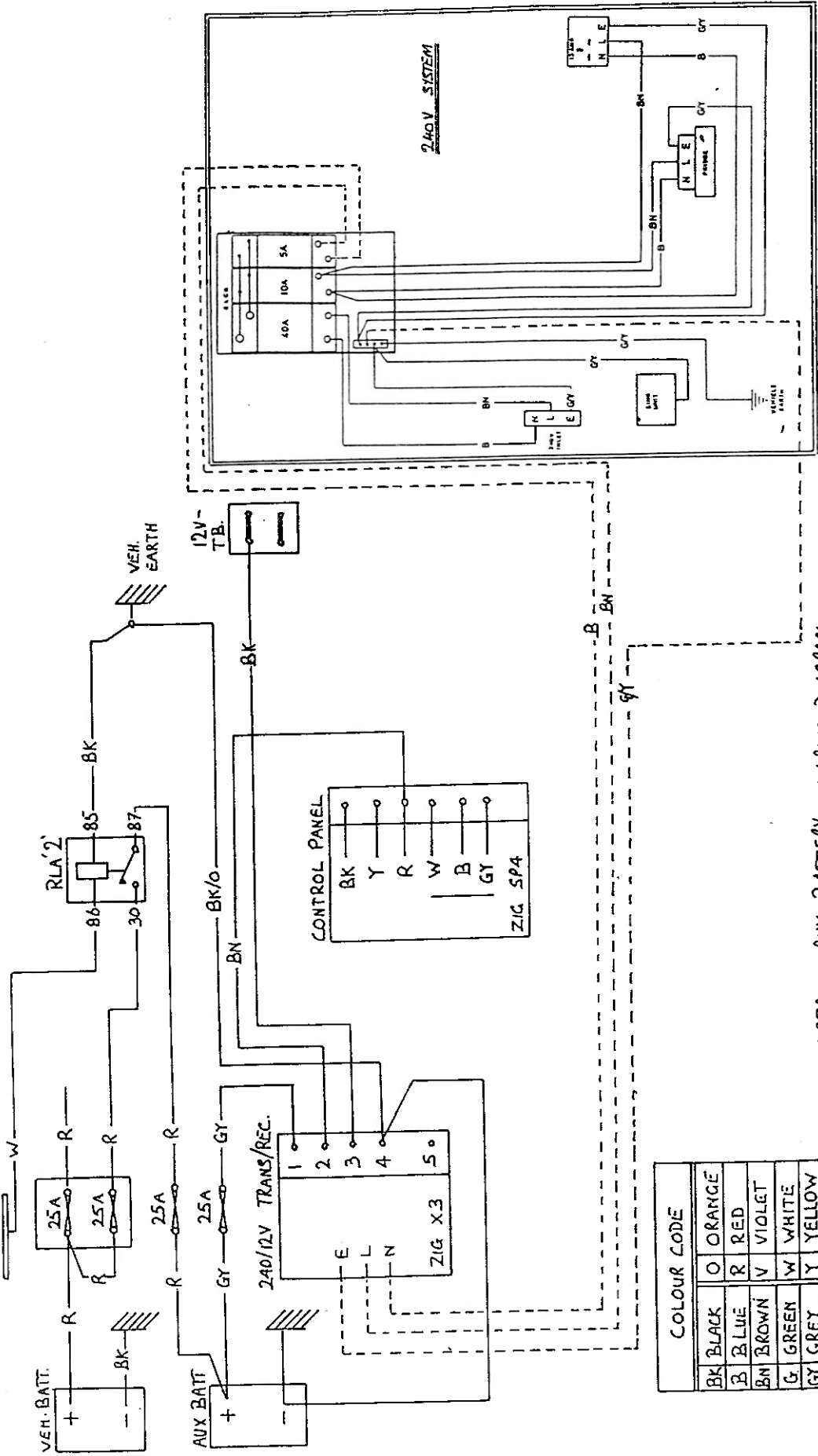
VISTA 12V WIRING DIAGRAM

LV WIRING DIAGRAM 240V



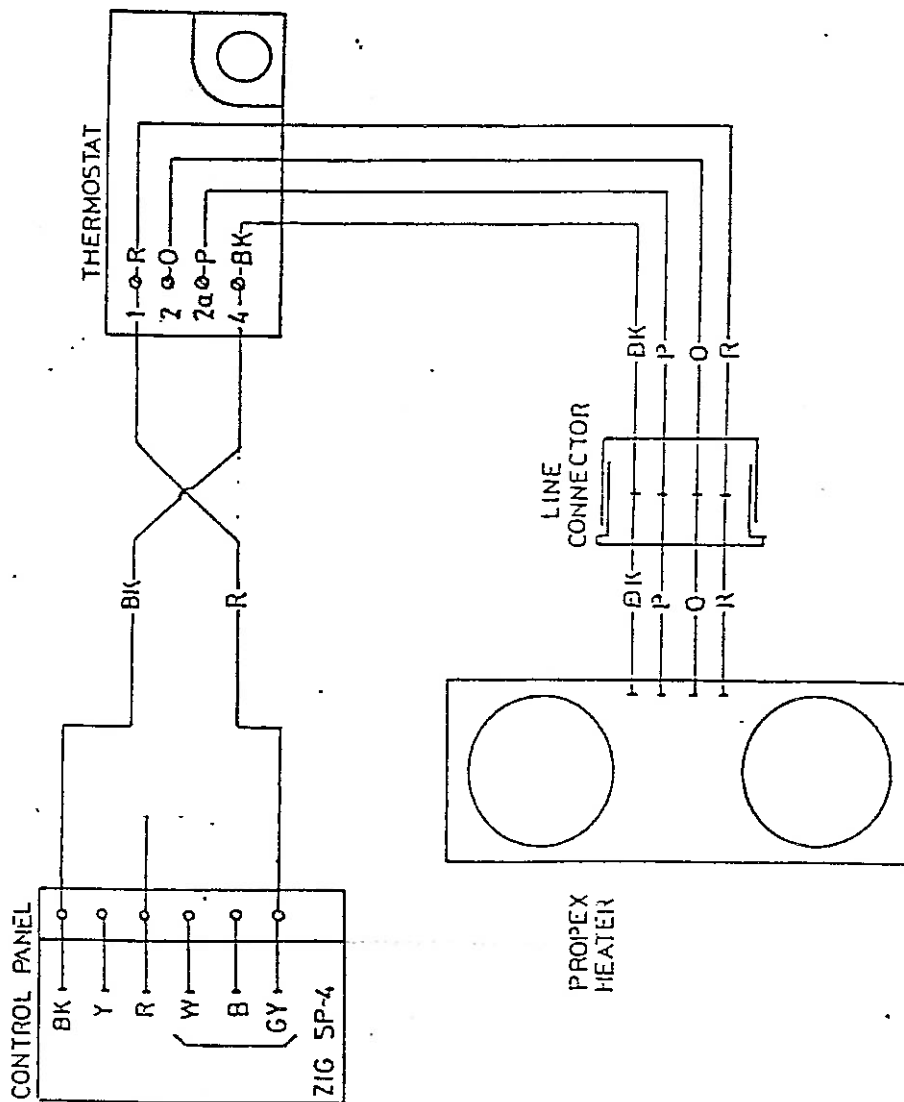
Colour Code	
BN	= BROWN
B	= BLUE
G/Y	= GREEN & YELLOW

CONNECT DIRECT TO FUSE BOX
TERMINAL F/3 (BLUE WIRE)



COLOUR CODE	
BK	BLACK
B	BLUE
BN	BROWN
G	GREEN
GY	GREY
O	ORANGE
R	RED
V	VIOLET
W	WHITE
Y	YELLOW

VISTA AUX BATTERY WIRING DIAGRAM



WIRING DIAGRAM - VILIA/VISTA T4
 PROPEX X2 COMPACT HEATER & ELECTRONIC THERMOSTAT

Colour Code	
R	Red
O	Orange
P	Purple
BK	Black

OPTIONAL EXTRA

PROPEX HEATER

Your Cockburn Holdsworth motor caravan may be fitted with the optional Propex heater which is a useful feature for motor caravanning in colder conditions or in winter.

The heater should be ordered so that it can be fitted as original equipment at the time of building the motor caravan conversion in the Cockburn Holdsworth factory. The heater can be installed at a later date by the companies recommended by the heater manufacturers. If in doubt, contact the heater manufacturers:-

Propex Marketing Ltd
Unit 5
Blackmore Road
Ebblake Industrial Estate
Verwood Dorset
BH21 6BB Telephone: 0202-823538/9

It is pointed out that the cost of fitting the heater at a later date may well be greater than when fitted as original equipment due to the additional work involved.

OPERATION:

The heater is operated by two controls - the thermostat dial and the function switch.

The thermostat dial selects the temperature and has a wide function range. The function is selected by the 3-way switch. If heat is to be selected, press the switch on the side of the small flame and if cool air is to be blown, press the switch on the side of the propeller. When heat is selected, the red power light will glow and if the thermostat dial is set high enough, the green light will come on and the heater will automatically ignite. If the cool air vent facility is selected, the red power light will turn green and the heaters fan will run without the burner.

**WARNING:**

The heater is a particularly safe unit in that the combustion area is completely sealed from the inside of the vehicle. In other words, the air to be warmed is drawn into the unit through the lower of the two fixed exterior oblong vents, passed over the combustion chamber and returned into the vehicle via the multi-directional (circular) vent. The combustion chamber is fed from air drawn in beneath the vehicle and returned by another pipe also beneath the vehicle.

THE ELEVATING ROOF (LOW LINE VERSION)

The elevating roof is manufactured in Germany and meets all the required VAG standards.

To raise the roof ensure that the windows are zipped up, the canvas is inside the top plinth and the buckles are secure before driving away.

**WARNING:**

UNDER NO CIRCUMSTANCES SHOULD THE VEHICLE BE DRIVEN WITH THE ROOF UP!!

OPTIONAL EQUIPMENT CONTINUED....

Care should be taken at all times the unit is running, that neither the exterior oblong or interior circular vents on the vehicle are blocked, as this could lead to the unit running poorly or becoming over-heated.

In the same way, periodic checks should be made to make sure the inlet and exhaust pipes beneath the vehicle have not become blocked and if the motor caravan is used in snow IT IS ESSENTIAL THAT THE PIPES BENEATH THE VEHICLE BE KEPT FREE FROM SNOW AT ALL TIMES; failure to do this could cause inefficient operation of the heater or - at worst - a complete shutdown.



THERMAL INSULATION: Cockburn Holdsworth vehicles are designed to achieve a high level of insulation. However, it is not advisable to use the vehicle for habitation purposes when it is likely to be subjected to severe or freezing conditions for long periods.

WATER HEATER

The Cascade GE water heater which should give first class service for many years to come has a 9 litre (2 gallon) capacity and is installed through the wall of your van with only the white exterior cowl - containing the balanced flue and drain plug visible.

The heater is a particularly simple one to operate and control is by means of the wall mounted control panel with lights. To operate - follow the instructions contained in the manufacturers handbook. After some ten minutes warm water will be available while really hot water will take up to thirty minutes.

The water is pumped by a Whale fully automatic pump. To operate, switch on at the control panel and open the tap, the pump will then start.

Hot water flows to the sink in the kitchen unit and the fold up sink in the toilet area via mixer taps.

CARE & MAINTENANCE OF YOUR MOTORCARAVAN

We recommend that the outside of your vehicle is kept clean in the usual way. We also recommend that the vehicle is regularly serviced by a reputable garage.

THE INTERIOR: We recommend that the interior of the vehicle is cared for in the usual manner. Specifically the following can be referred to:

- CARPETS: Vacuum as usual. A dry (powder) cleaner can be used if necessary.
- CURTAINS: Curtains are washable on a 40° wash cycle.
- WOODWORK: Use of a normal household polish is recommended, particularly to remove scuff marks.
- WINDOWS: These can be cleaned using a normal household window cleaner. However, extreme care should be exercised when cleaning a heated rear window, and this should only be cleaned using a damp wash leather.
- WALL/HEADLINING: The interior head lining should be kept clean by regular vacuuming.
- WORK SURFACES: A damp cloth or household polish can be used.
- UPHOLSTERY: This should be kept clean by regular vacuuming. Any stains should be removed as quickly as possible by soaking up any excess fluid, and then using a well wrung cloth. There are also proprietary cleaners on the market that are specifically designed for modern fabrics, including carpets, curtains, and the fabrics used for the headlining and on the side panels of your vehicle. In particular, we would suggest the use of 'Vanish' soaps and aerosol cleaners to remove stains and marks on all soft furnishings in the conversion; these cleaners are available at most stores, but if you experience difficulties - write to the manufacturer - Benckiser Ltd., Electra House, Farnsby Street, Swindon. SN1 6AH (Tel:0793 612422) Please note that the labels should be read with care first.

CARE & MAINTENANCE OF YOUR MOTORCARAVAN CONTINUED....

COOKER:

Cleaning is best carried out when the hob is still warm but not hot. Never start cleaning the hob before all taps and isolation switch have been switched off. Do not keep aerosols or inflammable products in the cupboards and drawers in the immediate vicinity of the hob. It is important that all burner ports are kept clean and free from blockage. Wash in soapy water only. To unblock the flame ports use a brush with hard bristles. Dry carefully before reassembly and ensure they are resealed in venturi correctly.

Do not use abrasive cleaner. Polish with a dry cloth of chamois leather. Clean up spillages of acidic liquids immediately, i.e. lemon juice, vinegar etc.

LEAKAGE OF GAS - If a leak is suspected, turn off all appliances. Turn off gas at cylinder, do not operate electrical equipment or use naked lights, open all doors to thoroughly ventilate vehicle (if doors are connected to courtesy lights, do not open them). When these precautions have been taken contact a qualified caravan dealer who is Corgi registered. **IMPORTANT:** Do not use penetrating oil on gas taps. If in doubt, contact the manufacturers.

EXTERIOR STRIPES:

When cleaning the exterior of your motor caravan care should be exercised so that the vehicle stripes and Cockburn Holdsworth names and logos are not damaged. In particular, care should be shown when cleaning around the area of the stripes and logos to prevent them from 'lifting'. The manufacturer will not wish to be held responsible for damage caused in this way.

REAR LADDER:

The rear ladder on your Villa motor caravan may be constructed from aluminium or a similar alloy which has a number of advantages, but needs regular cleaning to keep it in pristine condition. This is especially so during frosty weather when anti-icing salts are applied to the roads; these salts need to be washed off the vehicle including the ladder every day to avoid corrosion.

GENERAL:

Every new Cockburn Holdsworth motor caravan is supplied with a copy of the S.M.M.T. booklet giving advice on annual service and checks for your motorcaravan conversion and we thoroughly recommend that the advice contained therein is followed in detail. Further copies of this booklet can be obtained from most motor caravan dealers or from Cockburn Holdsworth Ltd, at £1.20 each plus 50p handling charge.

TECHNICAL DATAConversion on SWB 1.0 Kombi - 4 Cylinder Petrol/Diesel

WEIGHT:

MODELS	G.V.W.	KERB WEIGHT	MAX PAYLOAD	MAX ROOF LOADING
High Top	2515kg	2075kg	440kg	15kg

KERB WEIGHT consists of fully converted van, full tank of fuel, and drinking water, spare wheel, and tool kit.

KERB WEIGHT does not include driver, passengers, personal effects, camping equipment or food stuffs.

DIMENSIONS:

Overall Length/shipping length	4.655m
Overall Width:	1.84m
Overall Height	2.495m

BEDDING CAPACITY:

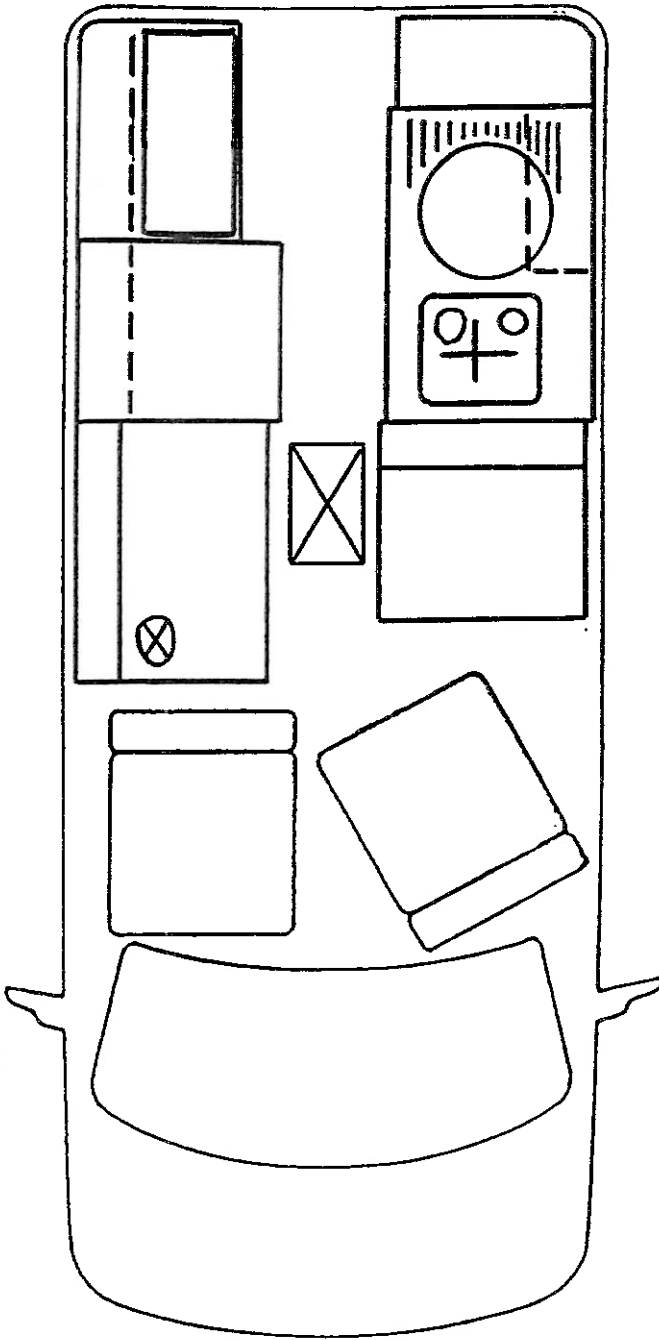
Standard 2 berth-

CAPACITIES:

Fresh Water Tank:	68 litres
Waste Water Tank	36 litres
Gas cylinder:	2.72kg Butane x2



VEHICLE WEIGHT DATA

	WEIGHT KG
MAKE: VW T4	
MODEL: VISTA	
G.V.W:	2515 Kg
KERBSIDE WEIGHT: Note: Kerbside weight includes driver, oils, coolants, spare wheel, full fuel tank.	2075 Kg
MAXIMUM PAYLOAD:	440 Kg
OPTIONAL EXTRAS:	
Oven	N/A
2nd Battery & Charger	10 Kg
Fire Trace	2 Kg
Overcab Bed	N/A
Hot Box	5 Kg
Single Beds	STD
Double Bed	5 Kg
Roof Bed	N/A
Swivel/Seat - Driver	10 Kg
Swivel/Seat - Passenger (1)	STD
Roof Rack	15 Kg
Spring Assistors	N/A
Diesel Engine	NO EXTRA
OTHER ALLOWANCES:	
General	75 Kg
Passengers	75 Kg
Gas Bottles (2)	20 Kg
Toilet Waste Tank	15 Kg
Water Tank (full)	63 Kg
NET PAYLOAD	145 Kg



- A Swivel cab seat
- B Cooker
- C Sink/Drainer
- D Wardrobe
- E Fridge
- F Bed
- G Toilet
- L Storage

VENT LOCATIONS

- HIGH LEVEL 
- LOW LEVEL 

CONTROLS

All the accessory switches are clearly marked with their functions, except the auxiliary switches these outlets allow for a choice of equipment when the panels are fitted as standard by your caravan manufacturer. These switches, together with their separate fuses serve to isolate the various 12 volt outlets in your caravan and allow you to choose which circuits you wish to use at any time.

The main control switches are the "Caravan Battery/Car Battery" control and the "12V ON/OFF" control this is in the centre position on some panels and their operation is as follows:

BATTERY SELECTOR (Caravan battery/Car battery)

This switch does exactly as its name implies; it allows you to choose the source of 12 volt supply to your caravan. It is a feature of all ZIG control panels and will be found very useful, especially when on sites without a mains supply for battery charging. The ability to utilise your car battery to run your caravan accessories will allow much longer time before recharging. At the same time the facility will allow you to be independent of your car by using the caravan battery only.

Note. Permanent use of the car battery only will inevitably result in the infuriating situation of a fully charged caravan battery and a car which won't start!

THE 12V ON/OFF SWITCH

This switch serves to isolate all 12V circuits in the caravan and also the ZIG battery condition indicator, it is similar to the main circuit breaker in your house, the one you turn off before you go away on holiday. N.B. Some caravans which are fitted with electrically controlled heating systems need to have a permanent supply to thermostats etc., if you have such a system check your instruction book before turning off the 12V supply during periods when the caravan is in use.

THE BATTERY CONDITION INDICATOR

This device is fitted to all ZIG control panels, its purpose is to warn that the batteries are becoming discharged and to allow remedial action to be taken. The red light will glow when the battery voltage is below 11 volts, above this voltage the green light will glow. No harm will come to the system or the battery if the accessories are used when the red light is on, and it will be found that possibly another few days reserve of current is available after the red light first appears. A true reading will only be given when all the 12 volt equipment is switched off and when no charging system is in operation. The red light may come on when an appliance is switched on, this is normal - current surges cause momentary voltage drop. It is important to remember that the battery monitor is not a charging indicator. The fact that the green light is on does not mean that the battery is fully charged. Even with a flat battery the green light will glow if a charging system is operating, due to the high terminal voltage present at the battery.

BATTERY CHARGING FROM THE MAINS

None of the ZIG Control Panels covered in this publication incorporate any facilities for battery charging, their function is confined to the safe control of the low voltage circuits in your caravan together with system and battery state indication. These products were however designed to be used in conjunction with the ZIG DCU3 and DCU15 AUTOMATIC REMOTE BATTERY CHARGERS.

BATTERY CHARGING FROM THE CAR

Most modern installations allow charging of the caravan battery when the vehicle is connected to the caravan (and the vehicle engine is running), the wiring for this is usually incorporated in the caravan during manufacture. However it is unfortunately true that very few car manufacturers make provisions for proper operation of caravan electrical supply and it is usually left to the owner of the vehicle to make his own modifications in order to take full advantage of the sophisticated electrical systems available in today's caravan. Fortunately these modifications are not too difficult or expensive and can be completed by the owner in a few hours. Full details follow in the next paragraph.

WIRING YOUR CAR

The most important aspect of any modification to your car's wiring is safety; there is no possibility of getting an electric shock from a 12 volt supply but low voltage/high current supplies are the ideal way to start fires, and a fire in a caravan is probably even more dangerous than one in a car. PROPER FUSING IS ESSENTIAL. The complete system requires three separate cables to be run from the car battery positive terminal to the 12S socket fitted on the towbar. It is very important that the proper cable is used, the MINIMUM recommended size of cable is 2mm² (27.02) and thicker cable will give higher current capability if physical space allows. Wiring should commence at the 12S socket by first ensuring a good earth connection to the car chassis to Pin 3 on the socket, this is most easily accomplished by running a cable direct to bare metal a short distance away from the socket. The other three wires should be run either underneath the vehicle or through an available channel directly back to the engine compartment. It is most important that these cables be protected by a proper fusing system and the easiest way to accomplish this is to fit an in-line-fuseholder in each cable before it is connected to a supply. Note. The fuses must be fitted as close to the battery as possible, any cable between the battery and the fuse is unprotected and therefore a potential fire hazard. The cables from No. 4 and No. 6 of the 12S socket should be connected through the previously fitted fuse links to the POSITIVE terminal of the vehicle battery, using proper terminations to the battery posts.

The cable from Pin No. 2 of the 12S socket should be connected through a relay switched via the ignition switch of the vehicle, fitting will depend on the relay used; (full fitting instructions are included with the ZIG RM12 relay, only four connections are required). When all the connections are completed and carefully checked, insert a 25 amp fuse in