THE VALENTINE

Welcome to your Richard Holdsworth VALENTINE 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.

Richard Holdsworth Conversions Ltd Headley Road East Woodley Reading Berkshire RG5 4NE

January 1993



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 tables, table legs and other motor caravan fittings securely.
- * Close all cupboard doors, (including shower/toilet) lower furniture unit lids and locate all sliding seats (if fitted). Secure all rear windows in the closed position.
- * Apply rear 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.

Annual service check for your motor caravan conversion:

The conversion part of your motor caravan - as against the vehicle itself which must be serviced and maintained as per the vehicle manufacturer's instructions - should be checked regularly in accordance with the SMMT service and maintenance guide book, a copy of which is contained in your van.

Most good motor caravan dealers will carry out the service check on an annual basis and complete any maintenance or service on your behalf.

IT IS HIGHLY RECOMMENDED THAT THE CONVERSION BE CHECKED IN THIS MANNER EVERY YEAR.

THE DRIVING COMPARTMENT

All the controls in the driving compartment of your VALENTINE motor caravan are provided by the vehicle manufacturer. Hints on driving your Valentine and the use of the various controls are contained in the vehicle manufacturer's instructions and these should be studied carefully before taking the vehicle out on the road.

The two single cab seats are also those installed by the vehicle manufacturer and are designed for comfort and versatility. There is adjustment for both fore and aft movement of the seat while the backrest can be adjusted by use of the lever on the side of the seat, and the seats are provided with head rests as standard.

A swivel facility is available for the cab passenger seat as an optional extra and should be ordered before the conversion is built in the Richard Holdsworth factory. Alternatively, a swivel base can be installed by your supplying dealer or subsequently at the Richard Holdsworth factory (by appointment) - although this involves additional work and can attract extra costs over and above those for fitting as original equipment.

To operate the passenger seat fitted with a swivel facility, open the cab door and lift the swivel release knob situated below the front of the seat squab. The seat will now swivel freely - but it may be necessary to move the seat backwards and forwards to enjoy the full 360 degrees as the seat may well foul the side door, door pillar or seat belt straps.

NOTE; The cab passenger seat MUST be locked in the face-forwards position when the vehicle is travelling on the road - this is achieved by swivelling the seat until the swivel release lead is heard to 'click'.



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

The seating in your Richard Holdsworth Valentine Motor Caravan is provided by the two single seats in the cab of the vehicle, while in the rear caravan section of the van there is two bench seats which enable several people to sit at the table.

The large table is stored against the wall in the wardrobe compartment as is the table leg. The table and table leg MUST NOT be left in the dining position when the vehicle is on the move but MUST be stored in the appropriate storage places.

Both cab seats are provided with seat belts and these must be used by their occupants by law. In addition, we recommend that lap restraints are fitted on the rear seat as these will contribute to a more comfortable journey for any rear passenger.

The rear seat restraint should be ordered so that it can be fitted by Richard Holdsworth Conversions during the conversion of the van. Alternatively, it can be installed by your supplying dealer although this involves additional work and can result in the cost being greater than the price when fitted originally in the Richard Holdsworth factory.

DINING

An extensive dinette is provided in the Valentine in fact this is one of the winning features of the motor caravan. During evenings, the table can be stored and the dinette can form a large lounge area and on chilly nights the heater can be operated to make a real 'home from home'.

TABLE

Take out the table from its special storage position in the wardrobe. Take out the table leg and insert it in the table recess in the floor. Please note: This arrangement has many advantages for a motor caravan but the single or double table pillar design 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 pressed hard into the floor and table cone.

SLEEPING

The Valentine is provided with a double bed across the vehicle. An over-cab bed measuring approximately 6ft 2ins by 3ft 4ins is available as an optional extra.

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The main bed is created by fitting between the two bench seats the table and two bed boards located in the o/s bench seat.

PLEASE NOTE:

For a comfortable night's sleep ensure that the front rolled edge of the seat cushions are located towards the outside of the van.

NIGHT TIME

The Valentine is provided with curtains all round for night time privacy. At night, the Valentine can be locked from the inside to provide security and peace of mind; the cab doors are locked by pressing down the small lever on the top of each door while the side caravan door is locked when the handle is in the 'up' position.

DAY TIME SECURITY

The van doors can be locked from the inside by following the above instructions with the last exit door being locked by either the van key or the key for the caravan door. Please Note: There should be two sets of keys for all locks and a careful note should be made of these key numbers because neither your supplying dealer nor Richard Holdsworth Conversions retain these numbers and are, therefore, unable to supply replacements if they become lost.

When leaving the vehicle unattended during hot weather, ventilation can be obtained by leaving open the two roof ventilators. The cab windows can be left open about one inch to further increase the flow of air without the risk of intruders entering the vehicle. When sleeping in the vehicle, ventilation can and MUST be provided by opening the ventilators and cab windows as described above plus - of course - the cravan side windows if further flow of air is required.

LOADING YOUR VALENTINE MOTOR CARAVAN

Your Valentine has a maximum payload of 705 kg (approximately 1553 1bs) which should be more than adequate for up to five people to tour in comfort.

However, it is essential to plan the loading of the van beforehand so that heavier and lighter items are carried in storage areas for which they are specifically designed, thus making a safer and more stable vehicle on the road.

In particular, we draw your attention to the following points:

It has already been pointed out in this booklet that heavier items should <u>not</u> be carried in cupboards above waist level because of the risk of these items falling onto occupants during the use of the van.

It is also essential to store all caravan fittings - such as the table and table legs securely before the driver sets off on each and every journey.

Finally, we must stress the need to load heavier items in the low level storage compartments between the vehicle axles - for example the seat boxes, and to concentrate the heaviest items towards the front. Thus, a typical loading plan will look like this:

- * Lightest items paper towels, matches, packets of soup in the top cupboards.
- * Heavier items tins of food, heavier clothing such as shoes, boots etc., awning tent in the seat boxes.

Note: Sleeping bags, pillows etc. should be carried in the luton storage compartment above the driving compartment.

GAS SUPPLY

Gas supply and cooking: The gas compartment for the Valentine is on the nearside rear of the vehicle. Entry to the compartment is by means of the key provided. The compartment has space for two 7kg (approx) Calor cylinders which must be secured firmly by means of the straps provided. You will also require two gas regulators plus rubber hosing.

PLEASE NOTE; that the gas supply MUST be turned off while the vehicle is in motion and when the vehicle is to be refuelled. Also make sure that the ventilation holes in the base of the gas compartment - and inside the vehicle - are kept free from obstruction at all times, they are specifically to allow the escape of gas in the event of a leak.

NO GAS APPLIANCE can be used while the vehicle is on the move because of the danger of fire, if the vehicle were to go off the road or be involved in an accident and NO GAS APPLIANCE can be operated in the close proximity of petrol or other fuels because of the risk of fire and explosion.

Ensure adequate ventilation when operating gas appliances:

When being operated, gas appliances consume oxygen and use of such appliances without providing a source of fresh air could lead to breathing problems for the motor caravan occupants and even asphyxiation. Ventilation MUST be provided by opening cab windows, rear caravan windows and/or roof ventilators. Such ventilation is required even if the only gas jet operating is the one within the refrigerator and it is worth noting that at least one window or ventilator must be left open during the night for this purpose.

Care should be taken not to damage any exposed rubber gas piping when packing or using the vehicle. This piping should be inspected and exchanged every year and we would recommend this be done during the annual motor caravan check detailed at the front of this booklet.

For your further security, the gas supply to individual gas appliances within the Valentine is controlled by a bank of gas taps situated in the kitchen unit. These should be in the off position at all times except when operating the appliance.

Full manufacturers instructions are supplied with the cooker. The cooker should never be used without adequate ventilation in the van as otherwise there will be a build up of fumes.

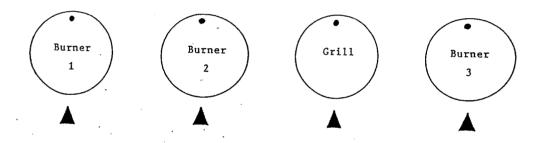
In draughty situations, especially in windy weather, it may be found that the gas burners may blow out, and although your Valentine cooker unit is fitted with a flame failure device (which automatically cuts off the gas supply to the burner in question should its flame be blown out), it is vital to check 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.

This system is very efficient, but it must be remembered that 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.

THE SPINFLO THREE BURNER AND GRILL COOKER: Your Valentine is fitted with the latest type of stainless steel three burner and grill cooker, which will prepare high quality meals quickly and efficiently. Read the manufacturer's instructions carefully and apply them at all times.

For Lighting the appliance: Turn on the gas supply at the gas regulator and at the appropriate gas tap in the kitchen unit. 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 area immediately above the cooker.

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.

Follow the above operation for the other burners and the grill. Under no circumstances should the glass 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 woodwork immediately adjacent to the cooker, as 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.

PROPEX HEATER

Your Richard 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 Richard 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 range of about 35°C starting at approximately 0°C. 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 a fixed (circular) vent, passed over the combustion chamber and returned into the vehicle via a second (circular) vent. The combustion chamber is fed from air drawn in beneath the vehicle and returned by another pipe also beneath the vehicle.



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

REFRIGERATOR: The vehicle is fitted with an Electrolux 212E refrigerator of 2 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 putting the switch on the refrigerator to postion marked 'Battery'.
- b) The gas supply when the vehicle is stationary and the ignition switched off, by putting the 3 position switch on the refrigerator to '0' and then following the instruction manual.
- c) By mains, if the 3 position switch on the refrigerator is put to 'Mains Plug' and a caravan hook-up or other mains supply is 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.



WARNING:

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

By removing the cover, air can pass across the rear of the refrigerator and keep it at the correct operating temperature. Replace the cover when the refrigerator is not operating - this prevents unnecessary draughts particularly during colder weather.



WARNING

Because of the close proximity of the refrigerator gas flue vent to the rear opening window (the window behind the kitchen unit) under certain circumstances it is possible for fumes to enter the vehicle with this window open. Therefore it is essential that this window be closed firmly when operating the refrigerator on gas.

WATER SUPPLY

Your Valentine coachbuilt is fitted with an out-board water tank containing approximately 15 gallons (68 litres) of water. While an in-board water tank and in-board water system is much less prone to freezing - particularly in a van as well insulated as the Valentine - it is still a very real threat and the whole water system MUST be drained down before frosty or winter weather sets in. In particular, we would draw your attention to the need to drain down the water heater: failure to do this will almost certainly result in costly damage to the heater for which the manufacturers and suppliers will not be held responsible.

The drain plug for the Cascade water heater is to be found on the outside cowl on the bottom, left hand corner - follow the manufacturer's instructions as per the booklet contained in your van.

In addition, water left in the fresh water tank and in the water pipes and water heater for any period of time may become tainted and unsuitable for drinking purposes - this can result in permanent tainting of the water system thus necessitating the stripping down and replacement of water system parts.

The fresh water tank is to be found underneath the vehicle beneath the nearside bench seat and it's drain tap at the rear, bottom corner. the system completely, operate the drain tap, open all taps both in the shower and adjacent to the sink, release the inspection cover to the water tank and operate the water pump until the pump runs 'light' indicating the fact that water has cleared from all pipes. Finally, an absorbent cloth can be used to mop up the last drop of water from within the water tank.

It is also recommended that the inspection cover for the water tank be left off during the winter so that air circulates within the tank, thus helping prevent stale smells building up.

Re-commissioning the water system: When purchased from new - or when recommissioning your motor caravan after a long lay-up - flush the water system through at least once by filling the water tank and allowing the pump to draw the water through the system via the sink and shower taps. In the event that the water still has a strange taste, you may find that this can be cured with the purchase of the propriety product known as Milton or Puritabs purchased from chemists. You may also care to note that many motor caravanners install a water filter within the water systems of these vans - these are obtainable from all good dealers and the most popular, the Safari filter, is obtainable direct from Associated Chemists Ltd, 61 Wicker, Sheffield S3 8HT.

Filling the water tank:

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. damaging the lock, never attempt to remove the cap with the key. Hold the cap firmly, press in and turn anti-clockwise.
www.vwl4camper.info - a useful website for owners and enthusiasts of VW T4 Transporter Campervans

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.

<u>Water Level Gauge</u>: The water level gauge is built into the Zig electrical control panel and will give a good indication of the amount of water in the fresh water tank. However, the gauge needs to be calibrated and this can be done by filling the water tank and adjusting the knurled knob on the panel.

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

The heater is a particularly simple on to operate and control is by means of the wall mounted control block with three lights showing. To operate - follow the instructions contained in the manufacturer's handbook: after some ten minutes warm water will be available while really hot water will take up to 30 minutes to appear from the hot water taps.

<u>Waste Water</u>: Waste water from the sink drains to a point on the nearside rear of the van and the shower to the offside. Both should be collected in a waste water bucket. Alternatively, a waste water tank can be installed by any good motor caravan dealer or at Richard Holdsworth factory (by appointment only)

SHOWER/TOILET:

The Valentine is fitted with a spacious shower/toilet room in the rear, off side of the van. It comes complete with a cassette type flushing toilet; there is a vanity unit and the small wash basin can be filled with either hot or cold water from the adjustable shower head.

The cassette type flushing toilet which is installed is the Thetford Cassette Porta Potti which comes complete with it's own comprehensive instructions for operation and for maintenance. These are summarised on a sticky-backed card which should be attached on the inside of the toilet access door for quick reference. In particular, make sure that the unit is prepared for winter properly (to avoid frost damage) while routine maintenance will enable the Cassette Porta Potti to give satisfactory service for years to come.

SHOWERING: There is adequate room for showering in the Valentine, but first, the motor caravanner should make sure that the shower curtain is drawn around the shower compartment so that it protects the door opening and prevents water seeping into the end grain of the timber. Do NOT drop heavy items into the hand basin nor the floor of the shower compartment as this will cause breakage; such damage will NOT be repaired under warranty. Keep the roof ventilator and/or window open during showering and for some time afterwards to help disperse steam and damp which if allowed to remain may affect the life expectancy of the wall lining.

ELECTRICAL SYSTEMS & FITTINGS

CARAVAN 12 VOLT ELECTRICAL SYSTEM: Your Valentine 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. However, if one is staying for along duration in one spot, it is wise to start the vehicle engine from time to time simply to make sure that there is enough reserve in the battery. Relatively short journeys in the vehicle will re-charge the battery.

The Valentine can be fitted with an OPTIONAL DCU/3 caravan battery charger unit which is connected to the SP-4 control panel by Peter Everard Limited, Cashes Green Road, Stroud, Glos GL5 4RA 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 SP-4 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

Heating systems (if fitted)

Water Heater ignition

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 glovebox on the dashboard, (see your vehicle manufacturer's 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.

To remove the 25 amp line fuse, unscrew the white plastic bayonet fitting. To replace the 15 amp fuse on the DCU/3 charging unit, turn the black plastic caps and the fuse will be exposed. Carry spare fuses at all times. However, if fuses continually blow, an auto electrician - or your Valentine supplier should be consulted for the root cause of the problem.

CARAVAN MAINS ELECTRICAL SYSTEM - 200-240 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 rear corner 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 side of fridge unit.

The mains supply can also be used to re-charge the optional 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 earth leakage circuit breaker 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': It is necessary to purchase a suitable made up lead incorporating a plug to fit the vehicle socket and one to fit 'hook-up' supply points. These will be moulded into the cable so that they are waterproof. Nevertheless they should be used with care and should always be clean and dry when connected as camp sites often provide wet conditions due to rain, mist and dew. Again the earth leakage circuit breaker should be tested before use. These made-up leads can be purchased from good caravan supply shops.

Supply cables should always be fully uncoiled when they are used!

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 earth leakage circuit breaker (ELCB), test as described above and switch on again.
- 3) Switch on the 15 amp switch (the centre one of the group of three on the ELCB 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 earth leakage circuit breaker and switch on again.
- 3) Switch on the 5 amp switch (the left one of the group of three on the ELCB 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, but 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.

The 240 volt mains battery charging circuit is protected by a 2 amp fuse on the charging unit. The supply must be 'off' before the fuse is removed and it is necessary to use a screw driver to remove the fuse cap - this is to comply with electrical safety regulations.

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.

FIRETRACE

If your vehicle is fitted with the Firetrace Automatic Fire Extinguisher System, it will provide fire protection around the clock.

Care must be taken, especially when replacing the tube, not to damage or squash the piping in any way, which could result in the system being discharged

For further information please refer to leaflet supplied.

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°C wash cycle.

WOODWORK:

Use of a normal household polish is recom mended, particularly to remove scuff marks.

WINDOWS:

It is recommended to clean these with soapy water and avoid using abrasive cleaners, as these will

damage the surface.

Extreme care should also be exercised when cleaning a heated rear window, and this should only be cleaned

using a damp wash leather.

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 and curtains,

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 careful ly before reassembly and ensure they are reseated 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.

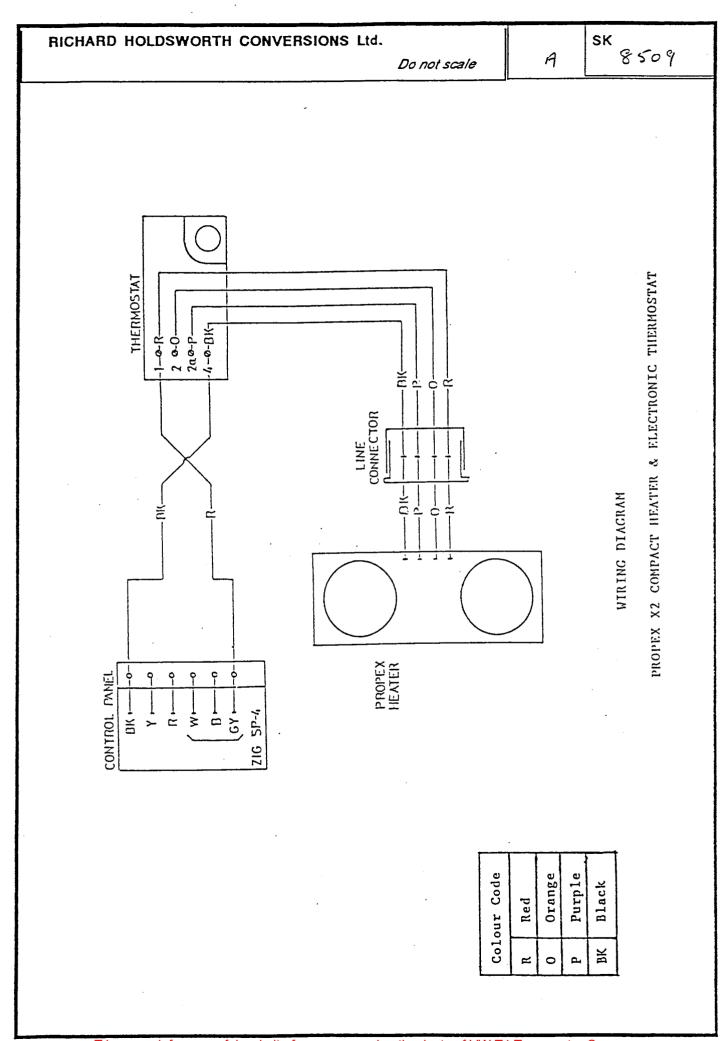
IMPORTANT: Do not use penetrating oil on gas taps. If in doubt, contact the manufacturers.

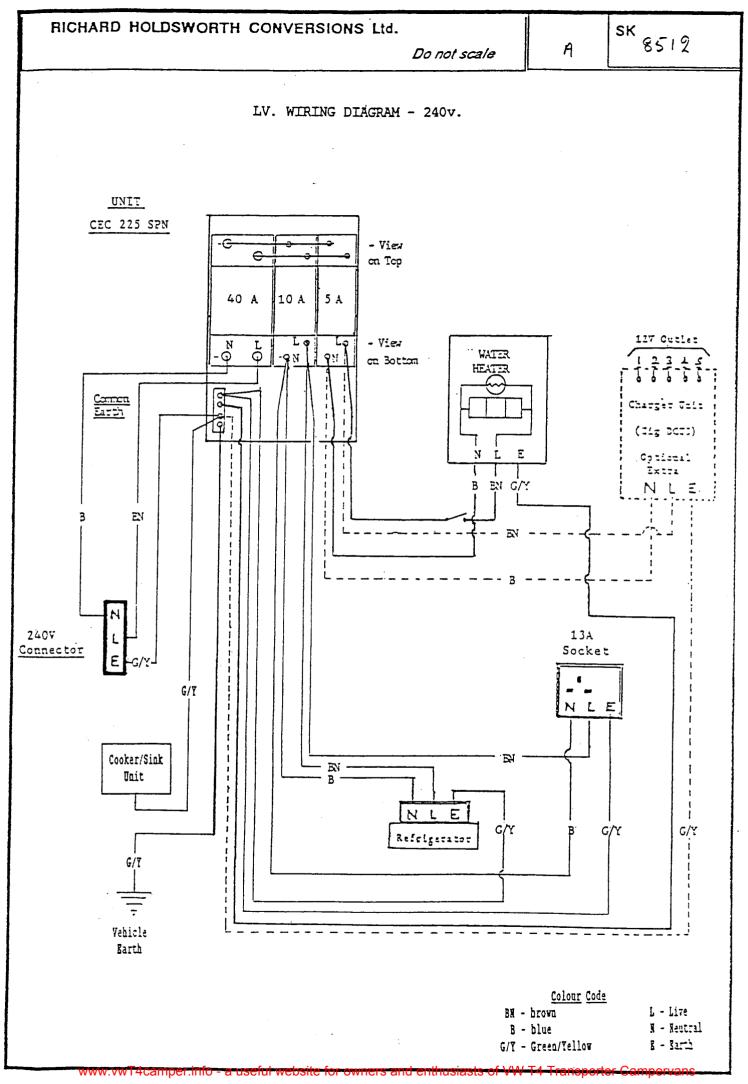
EXTERIOR STRIPES:

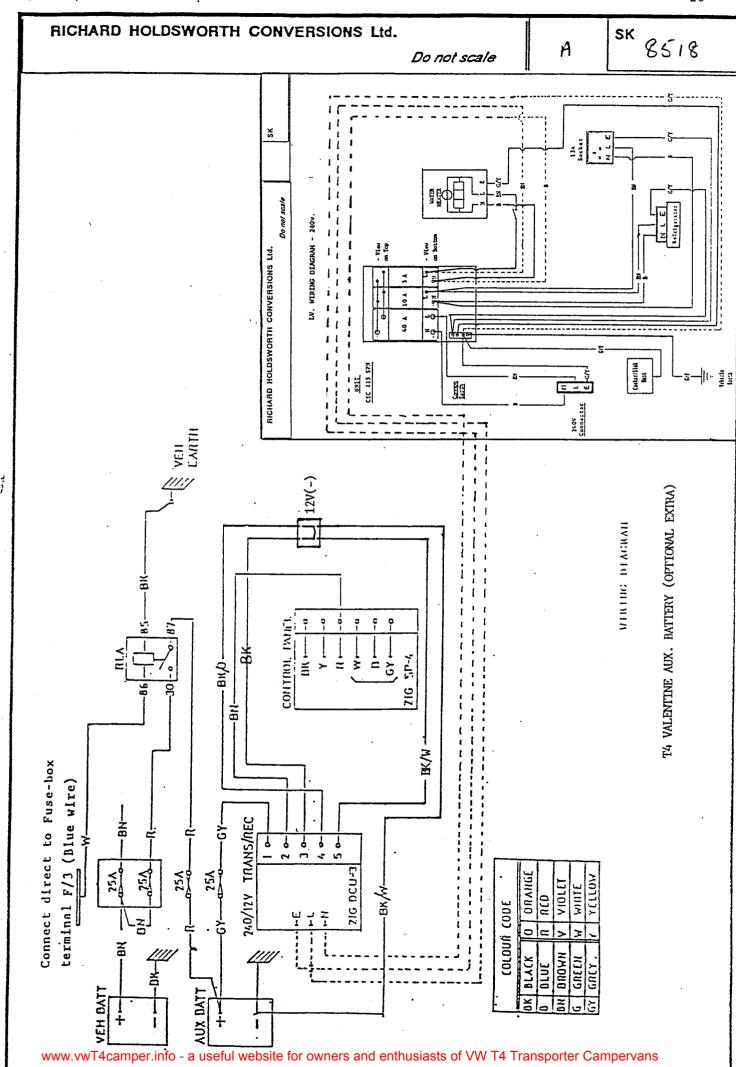
When cleaning the exterior of your motor caravan care should be exercised so that the vehicle stripes and Richard Holdsworth names and logos are not damaged. In particular, care should be shown when cleaning around the area of the stripes and logos to prevent them from 'lifting'. The manufacturer will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

IN GENERAL:

Every new Richard Holdsworth motor caravan is supplied with a copy of the S.M.M.T. booklet giving advice on annual service and checks for your motor caravan 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 Richard Holdsworth Conversion Ltd, at £1.20 each plus 50p handling charge.







Stroud, Glos. GL5 4RA

GUARANTEE

Thankyou for purchasing a ZIG product.

fallure due to faulty workmanship and/or material for a period of 12 months from the date of Peler Everard LId., and its subsidiary Zig Electronics LId., Guaranica this produci against

This Guarantes will be extended when the product is litted to a ceravan or motor-ceravan by an original equipment manufacturer, the term will then be 12 months from the date that the caravan lirst became the subject of a retail sale.

It shall be at the company's discretion to determine the method of rectifying the fault.

Ro the supplier from whom the product was purchased; (or to the dealer who supplied the This Guarantea is not transferable and any claims made under the Guarantee MUST be made caravan originally). It is important that proof of the date of purchase is supplied by the customer

In the event of a claim under this Guarantee please do one of the following things:

Return the product or the caravan to the original supplier together with proof of the date of purchasa. ·

Contact the dealer for information about repairs in situ.

Please check the section on "Fault Finding" before making any claim under the Guarantee.

MPORTANT

This guarantee will be invalidated if any attempt has been made to open, modify or repair by QunauthorIsed personnel.

Fuses and fuseholders are not covered for failure or damage by whatever cause.

What to do if a problem occurs outside the Guarantee period:

Ask your local caravan dealer If he can service the unit for you.

Contact a qualitied electrician (or if the problem is confined to the 12 volt circuits), a qualified auto-electrician. If I and 2 above are not practical or unsuccessful, you may return the product to the manulacturers: Peter Everard Ltd., al Cashes Green, Stroud, Glos. GLS 4RA subject to the following:

The product is packaged in accordance with Post Office requirements, i.e. a minimum of 2" (50mm) of packing material around the parcel. Peter Everard Lid., will not be responsible for any damage in transil. E

A letter describing full details of the fautt, Including how and when It occurred.

A cheque for £17.50 (incl. val) made payable to Peter Everard Ltd. This is to defray charges for checking and refurn postage. If any repairs required exceed his ligure you will be advised in writing before repairs commence. Should you decide not to proceed the above amount will be returned to you less the cost to relurn postage. ව ව

₹his Guaranlee does not in any way affect your statutory rights.

्रु।G ELECTRONICS LTD., CASHES GREEN, STROUD GLOS. GLS 4NA.

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CONTROL PANEL SERIES

83, Cashes Green Road, Zig Electronics Ltd.,

INSTRUCTIONS FOR USE

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 ballery/Car ballery)

This swilch does exactly as its name implies; it allows you to choose the source of 12 volts 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 fonger 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 struction 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 of condition indicator, it is similar to the main circuit breaker in your house, the one you turn of before you go away on holiday. N.B. Some caravans which are litted 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 a periods when the caravan is in use.

THE BATTERY CONDITION INDICATOR

This device is filted to all ZIG control panels, its purpose is to warn that the batteries are specification of the second processor of the second pro

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 wirling 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 lires, 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 litted on the towbar. It is very important that the proper cable is used, the MINIMUM recommended size of cable is 27 msq (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 sorket should he connected though the

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

with fineholder and ebookant the

TECHNICAL DATA

Conversion on SWB - 4 Cylinder Petrol

WEIGHT:

MODEL	G.V.W.	KERB WEIGHT	MAX PAYLOAD
Coachbuilt	2765 kg	2060 kg	705 kg (1553 lbs)

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

KERB WEIGHT does not include passengers, personal effects, camping equipment nor food stuffs.

DIMENSIONS:

BEDDING CAPACITY:

Overall Length:

5080 mm

Standard berth 2

Optional Extra 3

Overall Width:

2020 mm

Overall Height

2700 mm

CAPACITIES:

Fresh Water Tank:

54 litres

Gaz cylinder:

2.72kg Butane (x 3) or 7.50kg Butane (x 2) or

3.00kg Propane(x 2)