



copy

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).
- * Apply rear seat restraints (if fitted) 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.

THE VOLKSWAGEN VISION

Welcome to your Richard Holdsworth VOLKSWAGEN VISION 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 1987

VISION

CONTENTS

PAGE NO

4	The Driving Compartment
5	Seating/Dining/Sleeping
8	Toilet Compartment
9	Kitchen Unit - Water & Gas Supply
11	Gas & Water System Diagrams
12	Electrical Systems & Fittings
16	Wiring Diagram - 240 Volts
17	Wiring Diagram - 12 Volts
18	Care & Maintenance of your Motorcaravan
19	Clubs & Organizations
20	Optional Equipment - Propex Heater
22	Wiring Diagram - Propex Heater
23	Technical Data

THE DRIVING COMPARTMENT

We design our own 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 knurled knobs at the base of each seat. Furthermore, each seat is provided with a pneumatic cushion within the base of each back-rest, and this can be expanded or deflated by means of rubber bellows to suit the curvature of the individual's back. To inflate, first screw up the small control valve and pump up the bellows to the required amount when driving. To deflate, when a flat bed is required, unscrew the air control valve.

Both the cab driving and passenger seats can be moved forwards and backwards by means of TWO sets of seat slides. The first moves the seats forwards as in a normal car, while the second gives enough additional forward movement for the back rest to be reclined fully to make a bed. Both levers can be found beneath the front edges of each seat.

The front, near-side (passenger) seat can be rotated through 360° , (rotation for the driver's seat is available as an optional extra on the Vision). The passenger seat can best be rotated by sitting on the driver's seat or by standing outside the vehicle with the passenger door open. First push the floor mounted 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 front of the seat. Hold up 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 full rearwards position, (after rotating through 180°). Ensure that the seat belt is not fouled as the seat is rotated. When the seat has been put at the desired position, adjust the seat fore and aft and back-rest position as necessary.



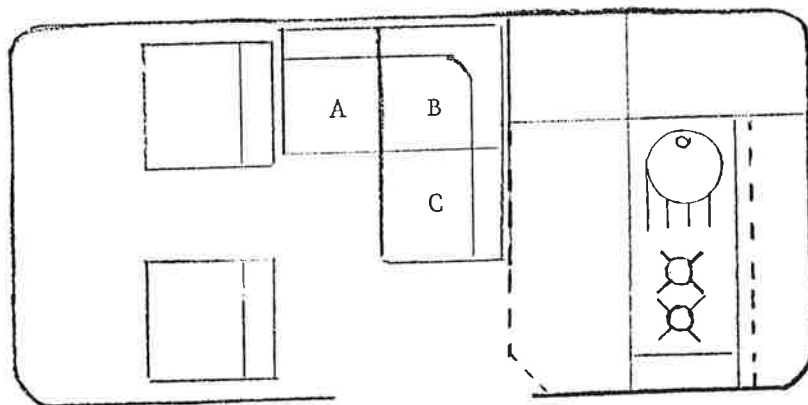
WARNING: Do not drive or use your motor caravan without first reading and implementing the instructions throughout this manual. The INSTRUCTIONS are for the safety of YOU, YOUR PASSENGERS, and for OTHER ROAD USERS!

SEATING/DINING/SLEEPING arrangements

The caravan seating in your Richard Holdsworth Vision motor caravan is probably the most versatile of any model on the market. For travelling, the rear seat can be arranged to form either two face-forwards seats or a face-forwards bench for two; at night they will comfortably make into two single beds, a two-thirds width double or a full width double. And - in the arrangement you will probably receive your Vision in - is the 'L' shaped lounge for day-time relaxing.

Finally, the near-side seat will slide completely out of the vehicle side door to provide free floor area. It is extremely useful if you operate a small business as it provides space to carry goods; it may also be suitable for carrying a wheel chair.

Necessarily, to provide this wide variety of functions the seating arrangement is relatively complex and requires a degree of understanding if you are to get the maximum from it.



FOR TRAVELLING. To make a straightforward face-forwards bench seat, the portion of the seat immediately behind the driver's seat, (part A) must be folded away. This part of the seat is constructed in either of two ways: the fold-over top of the seat will be supported on a slide-out chrome leg or it will be supported on a wooden 'gate' which swings away through 90° to fold flat against the battery box housing at the rear of the driver's seat.

Fold over the top part of 'A' and then fold away it's support. Store the cushions that are not required so that you have a bench seat for face-forwards travelling. The part of the bench seat that is nearest the vehicle side door (part C) is retained by a sliding bolt at the rear of the seat and which locates into a striking plate on the floor of the vehicle. Lift the bolt and slide the seat across the vehicle to form two separate face-forwards seats. Please note: always locate the seat in either of the two positions using the sliding bolt to prevent it moving unnecessarily and dangerously when on the road.

DAY-TIME LOUNGING: The Vision seats provide a really spacious 'L' shaped lounge for day-time relaxing. Slide the movable seat (part C) across the vehicle and retain it with the sliding bolt against fixed part 'B'. Bring into play the support for the fold-over top of part 'A' and locate this in position.

You already have a comfortable 'L' shaped dinette but you can make it even more spacious by sliding the driver's seat forwards and reclining it so that the backrest lines up with the rear caravan seats. The cab passenger seat can be swivelled around so that it faces the rear of the vehicle to further maximise the feeling of spaciousness. Take out the table from its storage position in the vehicle 'boot', (the space beneath the shelf over the engine deck). Slide the 'L' shaped table leg into its retaining brackets on the vehicle offside battery box. The table can be set up in many different positions and located firmly by using the clamping screws.

(You may wish to note that it is desirable to park the vehicle as level as possible, but the particular table used in the Vision - with its multitude of positions - may mean that a level table is not always possible, and you may well prefer to take meals on separate trays).

SLEEPING: The box bases to the rear seat behind the driver are designed to accommodate sleeping bags, pillows, bedding, etc. It is recommended that the van be parked on as level a surface as possible. Some caravanners use a block or blocks under the tyres to help to get the vehicle flat when the site is a sloping one.

Always pull the handbrake on and put the gear lever in one of the forward positions. The most comfortable sleeping positions is with the feet to the dashboard and head to the back of the vehicle. The beds may be used to form a double or two singles. Using both seat slides on each seat, move the front seats as forward as possible. Operate the knurled knob to make the front seats fully horizontal, (after having first removed head restraints if fitted). Remove the shaped corner cushion and place in the vehicle, as this does not form part of the bed. Lift up the rear seat cushions and get out the bedding, placing it temporarily in the rear of the vehicle.

TO FORM SINGLE BEDS: The smallest cushion and one of the medium sized cushions are not required. Move the sliding rear seat towards the door, (it may be found easier to do this whilst standing outside the vehicle) and locate with its bolt into the floor. Place both rear seat flaps down in the forward position and fit the cushions on to the bed.

TO FORM A DOUBLE BED: Push the seat belt holders down towards the floor and place the pneumatic bellows on the top of the seats. Bring the bed centre board from its storage place in the boot of the vehicle and pull down the two-leg supports which click in. Put the board between the front seats by inserting it, legs towards the gear lever, so that it rests between the seat slides. Slide the sliding rear seat towards the adjoining seat and locate with its bolt into the floor.

Place both rear seat flaps down into the forward position. The very smallest cushion fits nearest the gearstick with the pneumatic bellows deflated and tucked between it and the adjoining medium size cushion. Fit remainder of cushions on the bed. If the bed centre board fouls the handbrake lever this probably means the handbrake cable is slack and requires readjustment.

TO FORM FULL WIDTH DOUBLE BED: It is possible to make a double bed which occupies the full width of the vehicle by purchasing the appropriate optional kit. This consists of two extra cushions plus a board which drops between the two rear seats. The existing bed support which goes between the two cab seats is, of course, also used.

NIGHT-TIME PRIVACY AND SECURITY: The vehicle is fully curtained. The front sun visors should be pulled down before pulling the front curtains. The tailgate is locked when the key slot is vertical. The front doors can be locked internally by pressing down the locking knobs and the sliding door by pushing the locking catch, (below the inside door handle) into the 'down' position. Ventilation can be obtained via the sliding windows in the roof or the louvred windows which are opened by pulling the levers backwards. The louvres will be found particularly useful in wet weather or to reduce condensation.

REMOVING THE BED: This is the reverse of the above procedure for bed making. To retract the legs on the bed centre board, press the white plastic catches. When relocating the front seats on their slides ensure that the slide locking levers click into position.

TOILET COMPARTMENT

The seat box to the rear sliding seat is designed to accommodate a Porta Potti 235 caravan toilet manufactured by Thetford (Aqua) Products Ltd, Centrovell Estate, Caldwell Road, Nuneaton, Warwickshire, CV11 4UD. (Tel: 0203 341941). These toilets can be obtained from most good camping or caravan accessory shops who will also stock the necessary Aqua-Chem chemical and spare parts, etc. Full instructions are supplied with the toilet.

To obtain privacy in the rear compartment of the vehicle, close the sliding door and draw the appropriate curtains. If required, remove the portable toilet from its box via the flap provided in the back of the seat box. Open the tall thin door and slide out the divider curtain securing it on the turn button on the inside of the van sliding door. If desired, switch on the air extractor fan.

It is recommended that the toilet is returned into the box front first, so that it can be withdrawn using the carrying handle. When the toilet is to be emptied it is best to remove it from the vehicle before separating it into its two parts, in order to avoid the risk of any spillage within the vehicle. The Aqua-Chem chemical should be stored securely in a vertical position away from food-stuffs.

KITCHEN UNIT - WATER & GAS SUPPLY

The fresh water tank is located under the nearside of the vehicle and holds approximately 12 gallons. 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 nearside cab door pillar.

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).

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 replacement 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 at the bottom, rear part 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. It should be cleaned by rinsing thoroughly in clean water and as it is uni-directional it should be replaced the same way round as originally fitted.

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 on 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 and cooker flaps are held up by means of the chrome anti-splash guards. These flaps should not be allowed to drop backwards on the engine deck as this will tend to strain the piano hinge and may result in damage to the unit.

The electric water pump feeding water to the sink is operated by a foot switch on the floor thus leaving the hands free for other tasks. Treat the foot switch with care; it will give years of trouble free operation if looked after, but it is easily broken if kicked or heavy objects are dropped upon it.

The sink waste water drains to a point almost immediately below the sink and should be collected in a waste bucket. Alternatively, a waste tank can be fitted as original equipment during manufacture of your Villa or it can be fitted by most good supplying dealers. The waste tank can also be fitted at the Richard Holdsworth factory but there may be an additional charge over the cost of having the tank installed at the time of manufacture, and you are requested to give adequate warning as motor caravan workshops are usually extremely busy and waiting lists well in excess of one month are commonplace.

GAS SUPPLY AND COOKING: The vehicle is designed to carry two Camping Gaz containers, one on line and the other spare, located in a locker in the vehicle boot. 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.

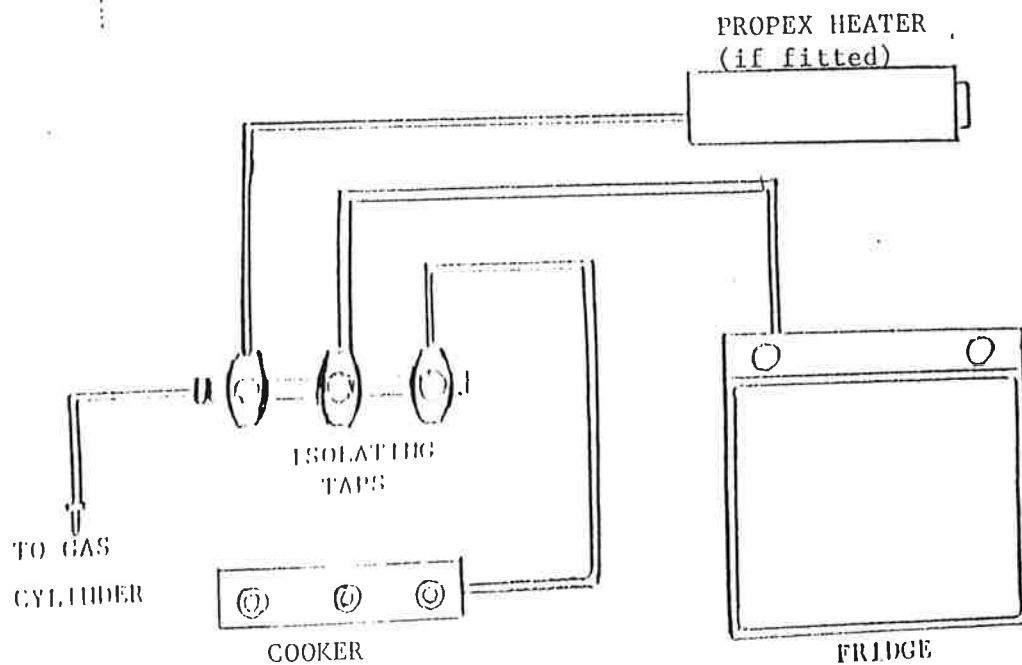
As a further safety measure a secondary gas tap is located inside the wardrobe. This controls the gas supply to all appliances in the vehicle and can be used to turn off the gas for short periods when on site.

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.

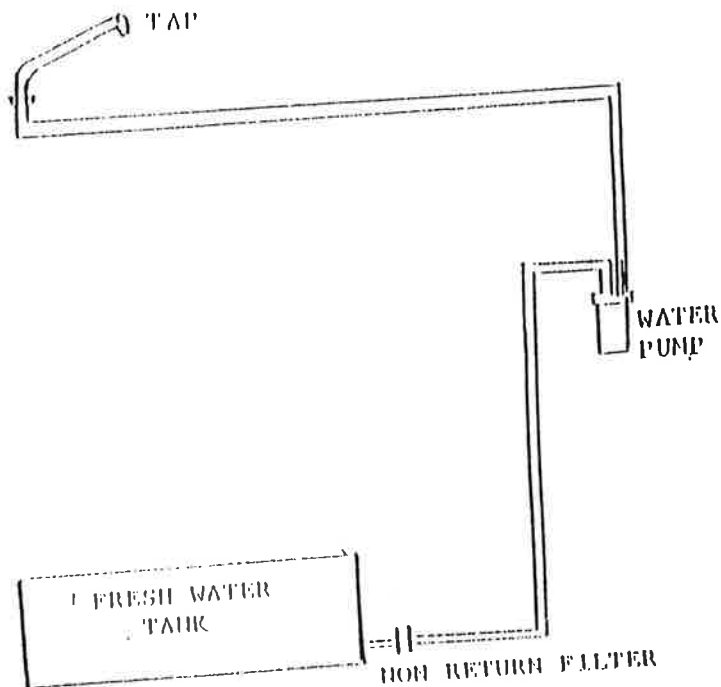
Full manufacturers instructions are supplied with the cooker. The cooker flap top is held up by the fold out chrome splash guard. The cooker should never be used without adequate ventilation in the van as otherwise there will be a build-up of fumes. Ventilation can be achieved by using the extractor fan or opening the sliding roof windows or in good weather, by opening other windows or doors.

In draughty situations, especially in windy weather, it may be found that the gas burners may blow out, particularly if they are set on 'simmer' and it is necessary to watch out for this.

GAS SYSTEM



WATER SYSTEM



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 as an optional extra if desired.

WARNING: Top cupboards should only be used for storing lightweight items such as cereals, tissues, etc. due to the risk of the cupboard contents flying out in the event of sharp breaking or an accident.

ELECTRICAL SYSTEMS & FITTINGS

CARAVAN 12 VOLT ELECTRICAL SYSTEM: This motor caravan is fitted with two batteries to provide the additional supply necessary for comfortable caravanning. The first battery (the vehicle battery) is the conventional one used on all vehicles and is located behind the driver's seat, under a flap. The second battery (the caravan battery) is located behind the passenger seat and is designed to power all of the caravan fittings, (except the refrigerator).

This vehicle is fitted with a Zig CF8 caravan battery charging and distribution system made by Zig Electronics Ltd, and separate instructions have been supplied by the manufacturers. This is designed to ensure that the caravan battery can be recharged either by the vehicle alternator when the engine is running, or by a mains electricity 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. In order to charge the caravan battery from the vehicle alternator when the vehicle is being driven, the centre switch of the top group of three switches should be set to 'touring'.

The fluorescent lights, reading light extractor fan, water pump to the sink and water level warning gauge are supplied by pressing the switch marked '12 volt' on the control panel followed by the switch to the fitting itself. These are supplied by the main vehicle battery when the 'touring/on site' switch on the control panel is set to 'touring' and by the caravan battery when it is set to 'on site'. In order to save a drain on the main vehicle battery and to keep both batteries well charged, it is best to set this switch to 'touring' when the engine is running and 'one site' when the vehicle is stationary or garaged.

The main vehicle battery is protected by the fuses in the Volkswagen box which is in the glove locker. The main battery compartment contains a black box with fuses fitted to the refrigerator circuit rated 25 amps, and the caravan control panel, rated 25 amps. The caravan battery is protected by fuses in two positions - firstly a 25 amp line fuse located in the caravan battery compartment and, secondly, by three 10 amp fuses in the panel controlling the circuits to the caravan fittings. To remove the line fuse, unscrew the white plastic bayonet fitting. To remove the 10 amp fuses, turn the black plastic caps on the control panel. It is desirable to carry spare fuses and if a fuse blows a search should be made for the reason as otherwise the replacement fuse may be wasted.

CARAVAN ELECTRICAL FITTINGS: These are operational when the 12 volt switch is 'on'. The roof ventilation fan can be used to draw air out of the van. When driving under conditions of limited headroom, please remember that the extractor fan casing forms a mushroom shaped hump in the roof approximately 3 inches high.

The water pump to the sink is foot operated.

The three fluorescent lights and the reading lamp can be switched on at the fittings. Alternatively, if the switches at the fittings are left depressed, all these lights can be operated from the lighting control panel beneath the reading lamp.

In addition to the above lights, there are two small courtesy lights using festoon bulbs, one over the driver's seat and one in the kitchen area. These can be used as courtesy lights which come on when the driver's door or the sliding door are opened, or they can be operated directly by switches at the fittings. When the black plastic switches are in the centre position, they are 'off' entirely.

These lights are supplied by the main vehicle battery and so will operate even when the 12 volt switch is 'off'.

CARAVAN MAINS ELECTRICAL SYSTEM-200-240 VOLT A.C. The caravan is equipped with mains electrical equipment for use with a main 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 T.V.'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 sink/cooker work unit.

The mains supply can also be used to re-charge the caravan battery through the Zig charging unit. Full protection is built in to the design to ensure that the mains supply is isolated from the 12 volt caravan and vehicle battery circuits. The control panel area contains an earth leakage circuit breaker as protection against faults, this being mounted on the lower left section of the panel under the water level gauge. 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 that 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 220 volt supply before you set off on your holiday (for example, you may wish to 'cool down' your refrigerator in advance). However, you will need to obtain the appropriate electrical lead for such a supply, these are usually available from your supplying motor caravan dealer or from most good caravan or motor caravan accessory shops. Please note that although the vehicle connector and flap provide 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) Switch on the left hand switch of the top group of three on the Zig control panel labelled 'mains' which will illuminate yellow.
- 5) Switch the 'on site/touring' switch to 'on site'.

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

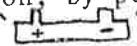

The Zig unit does not charge the main vehicle battery.

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 control panel. 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.

REFRIGERATOR: The vehicle is fitted with an Electrolux 212 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:

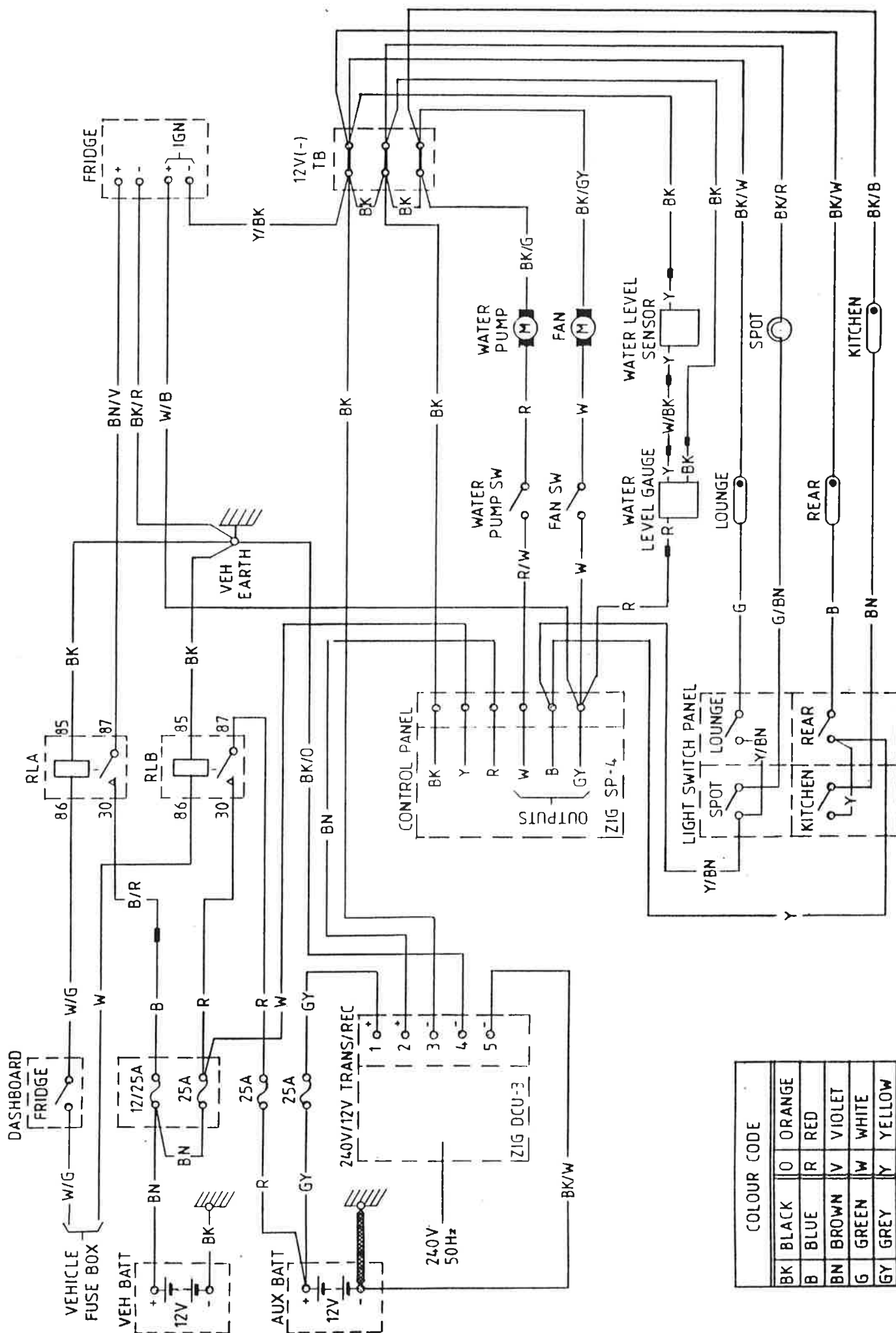
- a) Via the vehicle battery when in motion, by putting the 3 position switch on refrigerator to  and then operating the switch on the dashboard marked 'fridge'.
- b) The gas supply when the vehicle is stationary and the ignition switched off, by putting the 3 position switch on the refrigerator to '0' and then following the instruction manual.
- c) By mains, if the 3 position switch on the refrigerator is put to  and a caravan hook-up or other mains supply is available.

The 12 volt supply is from the main vehicle battery circuits and not from the caravan battery or the Zig unit. There is a 25 amp fuse on the refrigerator circuit which is located in the fuse box in the main vehicle battery compartment behind the driver's seat.

 * WARNING: It is essential that the vehicle battery is disconnected *
 * before working on 12 volt fitment. 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. *



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



VW VISION (DIESEL) WIRING DIAGRAM. (12V SYSTEM)

CARE AND MAINTENANCE OR 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. The hardwood edges to the timber units can be re-varnished every 12 months (or as required) using a clear polyurathene varnish.
- 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.
- ENAMELLED SURFACES: A non-abrasive cream cleanser is recommended.
- 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 rung cloth. There are also proprietary cleaners on the market, but the labels should be read with care.

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 the vehicle is on the move
- turn off regulator and secure gas cylinders for road travel
- keep curtains, seat covers and other inflammable items well away from cooker and other gas appliances.

CLUB & ORGANISATIONS

As you become interested in motor caravanning you may wish to join an organisation or club which cater for motor caravanners.

Some addresses which may be of interest are as follows:

The Camping and Caravanning Club
11 Lower Grosvenor Place
London
SW1W 0EY
Tel: 01-828.1021

The Caravan Club
East Grinstead House
East Grinstead
West Sussex, RH19 1UA
Tel: East Grinstead (0342) 26944

The Motor Caravanners Club Ltd
71 Cricklewood Broadway
London
NW2 3JR
Tel: 01-452.5824

Auto-Camping Club
1 South Bank
Westerham
Kent TN16 1EN
Tel: 0959 62067

We wish you happy motor caravanning and hope you will really enjoy your Holdsworth motor caravan. If you have any problems with the base vehicle itself the vehicle manufacturers agents will be able to help you.

If you have any problems with the caravan conversion please contact the dealer who supplied your vehicle or in case of difficulty write or telephone directly to Richard Holdsworth Conversions Ltd, as it is essential to make an appointment.

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

6th September, 1988.

PROPEX HEATEROPTIONAL EQUIPMENT

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 Limited
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 the fixed (oblong) vent, 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.



OPTIONAL EQUIPMENT CONTINUED...

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

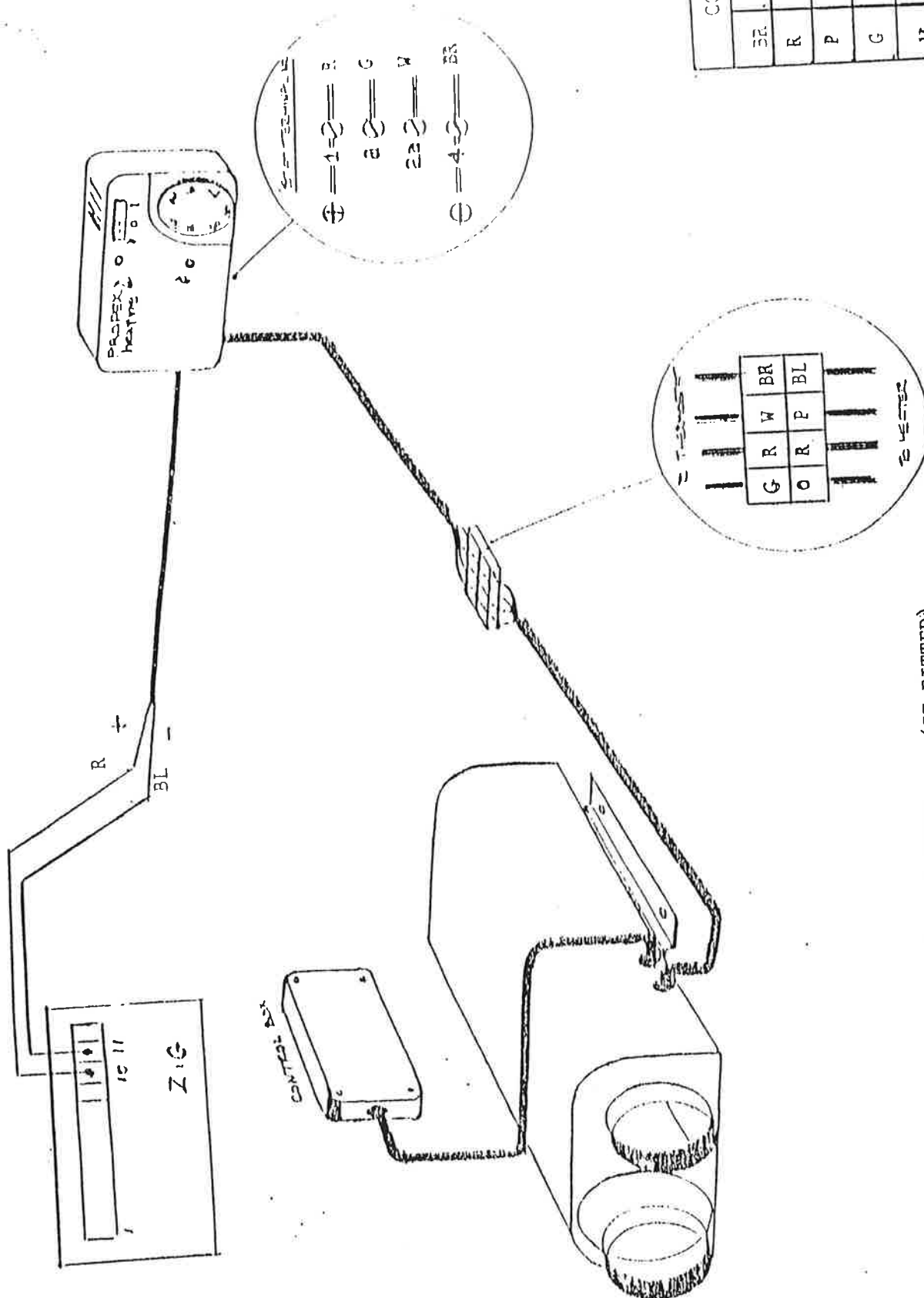
In the same way, periodic checks should be made to make sure the inlet and exhaust pipes beneath the vehicle have not become blocked and if the motor caravan is used in snow IT IS ESSENTIAL THAT THE PIPES BENEATH THE VEHICLE BE KEPT FREE FROM SNOW AT ALL TIMES; failure to do this could cause inefficient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

REMOVAL OF FLYSCREEN To remove flyscreen for cleaning purposes first prise out the grey rubber strip in the window channel from the inside of the vehicle. Then from outside the vehicle pull edge of flyscreen in the middle of window towards you, which will release the flyscreen from the top and bottom channels. Slide towards centre window.

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 passenger and other road users.





WIRING DIAGRAM - (IF FITTED)

PROPEX X2 SERIES (COMPACT) HEATER & PROPEX ELECTRONIC THERMOSTAT.

COLOUR CODE	
BR	BROWN
R	RED
P	PURPLE
G	GREEN
W	WHITE
BL	BLACK
O	ORANGE