Owner's Manual
Manuel du Proprietaire
Eigentuemer—Handbuch
Manuale del Proprietario
Handleiding voor de Gebruiker



## KAMPER/KARISMA OWNERS MANUAL

## LIST OF CONTENTS

		. 8	Page
Specifications			2
Options Available			3
Introduction			4-5
Internal Layout			6-10
Operating Instructions			11-21
Options			22-25
Maintenance			26

# **Specifications**

## LIPE TO

## KAMPER MARK 11 AND KARISMA

B 278 CCV

Based on the Volkswagen Transporter Kombi.

EXTERNAL DIMENSIONS:	KAMPER	KARISMA
Overall Length Overall Width Overall Height	4570mm (15' O") 1850mm (6' O¾") 2293mm (7' 6¾")	4570mm (15' O") 1850mm (6' O¾") 2464mm (8' 1")
INTERNAL DIMENSIONS:		
Height over usable floor area	2261mm (7' 5") (Roof Raised)	1878mm (6' 2")
Height over upper bed area	750MM (2' 5½")	N/A
WEIGHTS:		
Gross Vehicle Weight Unladen Weight* Load Capacity	2360kg (2.32 tons) 1779kg (1.75 tons) 581kg (0.57 tons)	236Okgs (2.32 tons)
BED SIZES:		
Lower Bed	1854mm x 1219mm 6'1" x 4'0"	1854mm x 1219mm 6' 1" x 4' 0"
Upper Bed	1829mm x 1219mm 6' O" x 4' O"	N/A
WATER SYSTEM:	54.5 litres (12 gallon) fresh water storage. Electrical pump with foot operated isolating switch.	64.5 litres (14.2 gallons) fresh water storage. 54.5 litres (12 gallon) waste tank. Electical pump with foot operated isolating switch

#### GAS SYSTEM:

Cupboard storage for two Camping Gas 907 cylinders - metric copper compression fittings and isolating taps for hotplate, refrigerator and water heater (Karisma only). Appliances take low pressure 280 (11") Butane, 356mm (14") Propane.

<sup>\*</sup> Unladen weight includes full petrol and fresh water tanks, two gas bottles, tools and spare wheel.

#### OPTIONS AVAILABLE

## Kamper

- 1. "Blown Air" heating system including second battery and control panel incorporating battery charger, fuses and battery condition indicator.
- 2. Porta Pottit 230 flushing toilet.
- 3. Front seat covers to match rear seat upholstery.
- 4. Childs cab bunk.

#### Karisma

- 1. "Blown Air" heating system.
- 2. Childs cab bunk.

#### SPECIFICATION OF MATERIAL TYPE AND COLOUR - KAMPER AND KARISMA

This section will assist in the correct identification of material when spares or replacement furnishing materials may become necessary.

Upholstery - Marseille design 20 colour C5

Mattress - Concord Mushroom

Curtains - Saville 29

Carpet - Monte Carlo - Auburn

Wall Fabric - Medium flax FMC 223

Furniture Board - Alkor PVC 882/02

Worktops - Tanini-Ecru - Preformed

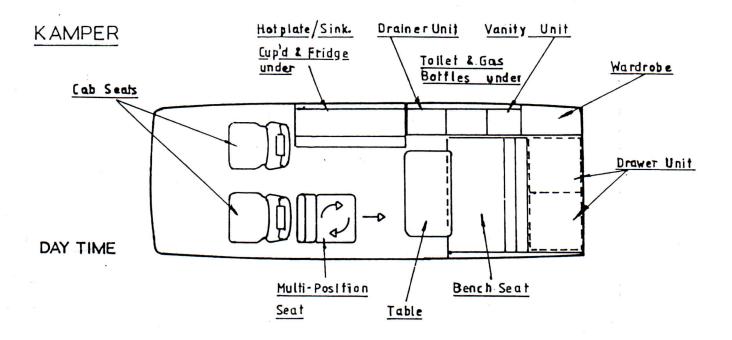
Roof Lining - Calico P2945 - Kamper Panasom - Karisma

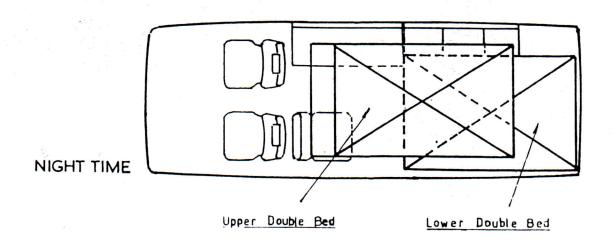
The policy of Autohomes (UK) Ltd is one of continuous improvement. We reserve the right to change prices, specification or equipment at any time without notice. All measurements and weights are approximate only,

Congratulations on choosing a Kamper Mk ll/Karisma.

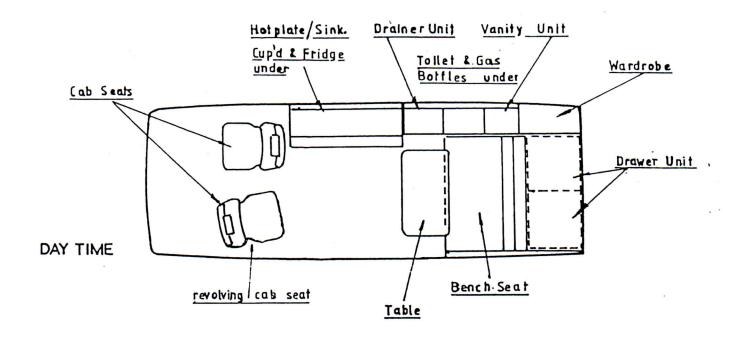
This Owner's Manual and Operating Guide gives all the necessary information to ensure that you get the most out of your conversion. Further information can be obtained from any Autohomes (UK) Limited dealer who can also provide information on Autohomes' aftersales service.

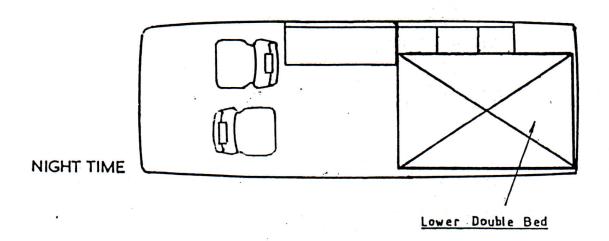
Please consult your Volkswagen manual for information on the Volkswagen Transporter Kombi on which the conversions are based.

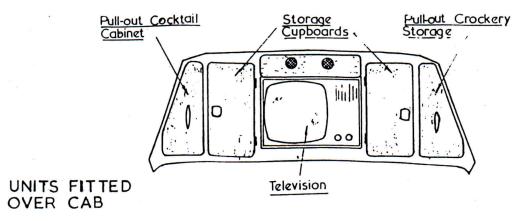




## KARISMA







# Internal layout

#### Kamper Elevating Roof 2.1

Once the vehicle is stationary the elevating roof can be raised. This will give a headroom of over 7ft over the usable floor area and 2'5½" over the bed area.

To raise the elevating roof it is just necessary to release the front catch. The release knd is located at the front on the left hand side.

To reduce the spring tension on the catch we suggest that you pull down on the forward handle of the roof at the same time as the release knob is pulled.

Having released the catch push the front of the roof up, the gas filled struts will take over and raise the roof to its fully elevated position.

The rear lock will automatically disengage as the front rises.

The side flaps can now be positioned. Stand on the stool/storage unit provided, release the shoot bolts and lower the top flaps, now raise the lower flaps ensuring the shoot bolts have been drawn back to release the side flap locking mechanism. Before pushing the lower flap fully home raise the arm of the locking mechanism to the fully up position, push the lower flap fully home and lock in position by lowering the arm of the locking mechanism to the stowed position and retain in place with the shoot bolt.

Should it be desired one or both of the top flaps may be left in the stowed position thereby greatly increasing the ventilation. The lower flaps can still be locked into the upright position as described above.

Lowering the roof is the reverse of raising, unlock and lower the bottom flaps, raise the top flaps and lock in the stowed position. Bring the roof cap down by pulling firmly on the handles provided, the front will come down first, followed by the rear. Should the roof not lock down first time, raise the front of the roof about 6 inches and lowersmartly, the lock should then engage. Both the front and rear locks will engage automatically.

#### WARNING

Do check that the roof is locked down at both the front and back before driving. This can be checked by trying to push the roof up.

NEVER DRIVE WITH THE ROOF RAISED AS THIS COULD RESULT IN DAMAGE AND WOULD INVALIDATE THE WARRANTY

## 2.2 Seating Arrangement

The Kamper can carry up to six people utilising the forward facing bench seat, the versatile multi-position sliding, revolving and reclining seat and the two cab seats.

The Karisma will carry up to five when travelling, when parked the swivelling passenger seat can be turned round so that the cab becomes part of the lounging area.

## 2.3 Table

The free standing table is normally stored behind the back of the bench seat.

The table may be lifted into the dinette area either over the top of the bench seat back or removed through the rear of the vehicle after raising the tailgate.

## 2.4 Dinette

The dinette will seat two people in the Karisma using the bench seat and four in the Kamper with the additional swivel seat.

The table is positioned in front of the bench seat and the swivel seat slides fully aft on the fore and aft slide, pivot the seat so it is facing the nearside and then lower the seat back to the horizontal position. It is important to position the stool/storage unit under the seat back to support the weight of the person sitting on it. (Kamper only).

## 2.5 Stool/Storage Unit + Kamper only

As described previously the stool/storage unit fulfills many roles. It is a stool when raising and lowering the roof, and a support for extending the dinette seating.

It has a hinged top so it can be used as a storage unit and when travelling it can be positioned between the cab seats to provide more room for all those items required near at hand.

It will also provide an extra small seat either inside or outside the vehicle.

## 2.6 Sleeping Layout

The Kamper has both a lower double bed and an upper double bed.

The Karism has just the lower double bed.

#### 2.6.1 Lower Double Bed

The lower bed is made by converting the bench seat. If carrying out the conversion for the first time, it would be advantageous to locate the position of items which will be referred to in the conversion instructions.

The support leg is located under the seat base just behind the front stiffening rail. It is held in its stowed position by a shoot bolt, when released the leg will pivot down to a vertical position where it provides support for the corner of the bed.

The handle loops are located on the top and bottom of the seat back, the one on the top of the cushion is visable but the bottom one is hidden by the seat base. The loops provide an easy method of moving the seat back.

Both the seat base and back are moved by means of pivot arms attached to the underside of the seat base and the back of the seat back.

To convert to a double bed proceed as follows. First release the two shoot bolts at the rear of the seat back, now lift front of seat base and release the shoot bolt retaining the support leg. Pull seat forward so that it swings on its pivot arms up and over into its bed position, ensure the leg is correctly positioned to support the bed.

By leaning over, or kneeling on the seat base, locate the bottom hand loop of the seat back, pull the bottom towards you and the cushion on its pivot arms will swing into position between the front and rear cushions, and locate on the support cleat protruding from the back of the seat base. Tuck the hand loops between the cushions and the bed is now ready.

To revert back to a bench seat reverse the above procedure. Locate the hand loop at the top (rear) of the seat back cushion lift and swing the seat back into its seat position ensuring its correct location against the two side stops. Swing the seat base back into almost its final position but before lowering the front down re-stow the support leg.

## 2.6.2 Upper Double Bed (Kamper Only)

The upper double bed large mattress is already in position. To complete the bed, release the shockbolt retaining the two extension panels stored over the cab, pull out the panels and position adjacent to the fixed part of the bed. Lock the panels in position with the shoot bolt on the forward face of the front panel.

To assist in gaining access to the upper bed we recommend the following procedure is adopted.

The two additional small mattresses and sleeping bags are placed on the main part of the bed. The two bed extension panels are pulled out only far enough to separate the two panels. This is achieved by lifting the front of the rear panel slightly to disengage the catches. Slide the rear panel up the main section of the bed and place one of the small mattresses on top. The front extension panel should be left protruding from its storage space.

By using the stool/storage unit and the top of the kitchen unit gain access to the bed. When in the upper bed the front panel is pulled across and rejoined to the rear panel and the second small mattress placed in position. The upper bed is now complete.

Should the front extension inadvertantly be pushed back into its storage space it can be retrieved by pushing the rear panel back into the storage area, the two catches will automatically engage and both panels pulled out again.

## 2.7 Kitchen Unit

The kitchen unit consists of a stainless steel combination sink and hotplate - the whole covered with a heat resistant worktop.

To gain access to the sink and hotplate lift the worktop to its vertical position, raise the hotplate headshield and retain in position with the small clip on the inside of the worktop, lower the front flap of the worktop so that it engages on the heatshield and this forms a shelf which can be used for cooking utensils and condiments.

The lower part of the kitchen unit houses a refrigerator and a cupboard. In the Karisma the water heater is located in the cupboard.

To the right of the sink unit is the storage unit, the top of which provides additional heat resistant worktop space.

Beneath the forward hinged top of the storage unit is the drainer tray, this is used in the same way as a draining board, it has its own waste outlet which carrys the waste water to the outside of the vehicle.

### 2.8 Storage Space

Storage is provided by the kitchen unit cupboard and refrigerator, the storage unit with separate cutlery storage, a vanity unit with mirror and large cupboards with sliding doors. Beneath the left hand cupboard is further storage for the in-use gas bottle and 230 Porta Potti if fitted.

To the rear of the storage unit is the wardrobe with access via the door or the vehicle tailgate.

Behind the bench seat, underneath the rear cushion, are a pair of drawers with access again via the tailgate. An alternative method of reaching the drawers contents is by removing the rear cushion and lifting the ply tops.

The overhead lockers with drop down doors are provided, one at the rear and one on the offside.

The Kamper also has additional storage in the base of the swivel seat and the stool storage unit, whilst the Karisma has the large roof storage area to the rear and the sliding storage racks, for bottles etc on the nearside and crockery in the offside with further storage cupboards each side of the television set. To remove the sliding storage racks, remove all the contents to reduce weight, pull the rack out as far as the stop. The stop consists of a shoot bolt located inside the rack at the rear, lift the shoot bolt and the rack can then be completely withdrawn.

## 2.9 Ventilation

Ventilation is provided for by the sliding window and the wind-up rooflight with built-in flyscreen in the elevating roof.

Additional ventilation on the Kamper can be achieved by leaving one or both of the top side panels in the stowed position as described in 2.1. The cab door windows can also be utilised to increase the ventilation on both conversions.

## 2.10 Insulation

The insulation gives protection from extremes of hot and cold and and minimises condensation. The body sides have insulating glass fibre fitted where access is available. Both the Kamper roof cap and side panels and the Karisma roof dome are of double skinned construction with insulating material between.

## 2.11 Engine Access

To gain access to the main engine cover at the rear of the vehicle, first remove the rear cushion, remove the top boards of the drawer unit to give access to the retaining wing nuts and bolts. Remove wing nuts and slide drawer assembly out complete.

## Operating Instructions

The appliances in your Kamper/Karisma are supplied by Europe's foremost manufacturers. Before using them you should study the information contained in this section, and any other accompanying operating instructions. All warranty certificates should be completed and returned (if required) to the relevant manufacturers.

## 3.1 Electrical Systems

#### 3.1.1 Kamper System

The electrical supply for the internal lighting, water pump, and the 12 volt circuit of the refrigerator is taken from the vehicle battery with the refrigerator wired separately and controlled by the ignition switch.

## 3.1.2 Karisma System

The electrical supply for the internal lighting, water pump, water heater and television can be taken from the car battery or the additional secondary battery. All these circuits are via the switch/fuse panel.

The refrigerator is wired direct into the car battery and is controlled by the ignition switch.

#### 3.1.3 Electrical Components

#### (a) Batteries

Located in seat boxes behind the cab seats. The car battery being behind the driver's seat.

### (b) Switch Panel (Karisma only)

Located at eye level on the offside. This panel consists of a battery selector switch, battery condition lights, switches for water pump, lights and the one marked 'AUX' is used for the television, three fuses, one for each circuit.

These 10 amp fuses are standard  $1\frac{1}{4}$ " glass quick blow fuses. Access to the fuses is by turning the holder  $\frac{1}{4}$  turn in the direction of the arrow and withdrawing holder and fuse. Under no circumstances sould a fuse of a different type or value be fitted.

The battery condition monitor is a device to warn that the battery selected is becoming discharged. The red light will glow when the battery voltage is below 11 volts and above this figure the green light will glow. No harm will come to the system or the batteries 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 appears.

A true indication will only be given when all the 12 volt equipment is turned off and no charging of batteries is taking place, either from the alternative or an outside source. The red light may come on when an appliance is switched on, these normal current surges cause momentary voltage drop. It must be understood that the green light does not indicate a fully charged battery.

The battery selector switch should under normal circumstances be switched to the secondary battery and the car battery only used for emergency.

## (c) Internal Lighting

Lighting is provided by transistorised fluorescent lights, one over the kitchen unit and in the Kamper there is also one in the upper bed area. One spot light on the forward face of the wardrobe, and a courtesy light that can be operated independently of the sliding door.

The fluoresent lights are extremely economical 12 volt units which use only { amp per hour. To change the fluorescent tubes unscrew the nut from the switch, remove the end cap and slide off the cover.

The spot light uses car type bulbs 12 volt 10 watt. To change the bulb in the courtesy light refer to the VW handbook.

## (d) Water Pump

Submersible type located in the fresh water tank. To gain access to the pump for servicing etc, hinge the bench seat forward clear of the tank, disconnect the electrical wires at the connect and earthing lug, remove the screw cap from the tank, feed the electrical wires through the cap and remove the pump.

When replacing the pump ensure the electrical wires are resealed in the cap.

## (e) <u>Television</u> (Karisma Only)

For operating and adjusting the set refer to the makers operating instructions.

Before viewing can commence it will be necessary to assemble and position outside the vehicle the aerial supplied.

Assembly instructions are included with the aerial.

When the television was fitted to your Karisma the built-in loop aerial was unpluged and replaced with an aerial extension lead which terminates externally with an enclosed aerial socket, this is located on the vehicle nearside adjacent to the front of the roof rack. Lift the spring loaded hinged flap and plug in the aerial socket. With the set switched on and tuned to the appropriate station position the aerial to give the strongest reception. The aerial can be attached to any smooth, flat part of the vehicle by means of the three

Should it be required to remove the set from it's built in location, for viewing at a lower level or away from the vehicle, proceed as follows. Lift up the hinged top flap above the set, behind the flap is the television retaining plate held in position by a shoot bolt at each end, release the shoot bolts and remove the retaining plate. The set can now be removed by means of the hand hold at the top of the set. Disconnect the aerial extension lead at the back of the set and plug in the set's own loop aerial lead. If it is still required to use the set in the vehicle leave the 12 volt lead connected.

When replacing the television in the aperture it is important that the shoot bolts on the retaining plate are pushed fully home and the bolts turned through 90° to lock them.

## 3.2 Water System

Both the Kamper and Karisma are fitted with a 54.5 litre (12 gallon) fresh water tank located under the bench seat with an external filler located on the offside of the vehicle. The water system will have been operated and checked before leaving the factory so there may be water in the system.

The large access cap on top of the tank provides access to the pump and the inside of the tank for cleaning.

#### 3.2.1 Kamper

Water is fed to the sink faucet by the submersible electric pump operated by depressing the foot switch located on the floor in front of the kitchen unit. The waste water from the sink is conducted to the outside of the vehicle via a plastic hose.

## 3.2.2 Karisma

The Karisma has the additional hot water system. Cold water is fed to the sink mixer faucet by the submersible pump operated by turning the cold control knob (colour coded blue) on the side of the faucet. Hot water is supplied via the water heater to the faucet by the pump by operating the control knob (colour coded red).

#### (a) Mixer Faucet

This faucet provides mixing facilities for the hot and cold water. The contrl knobs on their initial rotation operate built in micro-switches which in turn switch on the water pump, further rotation of the knobs increase the water flow as required. Always ensure the knobs are returned to the fully off position so that the pump is switched off.

#### (b) Waste Tank

The Karisma is also fitted with a waste water tank located underneath the vehicle floor adjacent to the

sliding side door. The tank is fitted with a drain tap and large access cap as fitted to the fresh water tank. To gain access to the cap it is necessary to remove the tank from its cradle. First remove the waste pipe from the tank, support the weight of the tank and undo the four nuts and bolts on each end of the two support straps.

## (c) Water Heater

The heater, located in the upper part of the sink unit cupboard is a storage type with a capacity of 10 litres (2.2 gallons). It is controlled electronically and the control box is located on the front face right hand side of the sink unit and is equipped with an on/off switch, thermostatic control ( $30^{\circ}$  -  $70^{\circ}$  C) and three illuminating indicator lights, green - switched on, green and yellow - boiler is heating, red - fail condition.

The heater also has a built in combined safety valve and drain tap located at floor level beneath the heater shelf. To operate lift the handle to the vertical position.

The unit is flued externally through the side wall cowl which also provides for the intake of combustion air for the burner, this makes for a very safe heater which can be left switched on at night if required.

To operate the water heater, turn on the gas at the bottle, open the appropriate gas tap, select caravan battery and switch on the water pump at the switch panel and switch on the water heater at the control box.

Should you be operating the water heater for the first time or after draining it is necessary to first fill the heater with water. First check that the safety/drain valve is closed (i.e. handle horizontal), select caravan battery and water pump switch on on the switch panel and open the hot (red) control on the mixer faucet, while the heater is filling with water, air will escape from the faucet and when water flows the heater is full.

## 3.3 Gas System

There is provision for the storage of two Camping Gas 907 bottles. The one in use is located in the cupboard under the storage unit, with the spare bottle alongside if no toilet is fitted, but in the rear end of the storage unit adjacent to the wardrobe if the toilet is fitted.

The gas taps controlling the hotplate, refrigerator and water heater are located in the sink unit cupboard by the water heater.

Gas containers and regulators are not supplied with the vehicle but we recommend the use of Camping Gas No 907 containers, and a Camping Gas horizontal regulator tap part no 080794.

To connect a cylinder to the vehicle gas line, a length of Neoprene hose 5/16" bore and 1/8" wall (British Standard 3212 Part 1) will be required.

GAS BOTTLES SHOULD BE TURNED OFF WHILST THE VEHICLE IS IN MOTION OR UNATTENDED. COOKING APPLIANCES SHOULD ONLY BE USED WHEN ADEQUATE VENTILATION IS PROVIDED AND NEVER FOR HEATING THE VEHICLE.

## 3.3.1 Gas Appliances

## (a) Hotplate

Both burners can be used for fast boiling or simmering and are controlled by safety taps of the self-locking type.

When lighting a burner, always make sure you apply a lighted match or taper before turning on the gas. With lighted match in position push in the tap and, keeping it depressed, turn it as far as possible in anticlockwise direction to the FULL ON position.

When turning a tap from the FULL ON to the simmer range, DO NOT PUSH THE TAP IN, slowly turn clockwise until the tap springs out, this indicates the top of the simmer range. This is an added aid which allows you to feel that a simmering range has been reached without looking at the flame on the burner. By turning further clockwise a smaller flame can be obtained when required. To turn OFF, push in tap and turn clockwise to OFF position, when a stop will be reached; then release and the tap will spring out.

#### (b) Grill

The operation of turning on the gas is the same as for the Boiling Burners (see above).

Whilst the grill is heating up, place the empty grill pan under the lighted burner to protect the lining. When the grill has heated up, remove the grill pan, load the pan and place in cooking position.

#### (c) Cleaning

To keep this appliance in good condition it should be cleaned as soon as possible after use.

The stainless steel sink unit and the burner heads should

be cleaned with warm water and detergent using a soft cloth, or a NON-abrasive liquid cleaner. Stubborn stains cam be removed by 'Duraglit' or similar products.

DO NOT use harsh abrasive cleaners, steel wool or cleaning powders.

#### (d) General Notes

- (i) When the grill is in use always ensure that the front of the grill compartment is not covered up, the hinged flap should always be in the down position.
- (ii) When the appliance is in use it is recommended that a window or rooflight is opened for ventilation purposes.

## 3.4 Dual Operation Unit - Refrigerator

#### 3.4.1 Operation

This unit can be operated from either the bottle gas or the vehicle 12 volt system. The 12 volts supply is automatically fed to the refrigerator when the vehicle ignition is switched on. Therefore, it is most important to turn off the gas supply to the refrigerator before starting the engine. Should it be required to disconnect the 12 volt supply, a plug and socket is located in the cupboard next to the refrigerator. It is also most important to change over to the gas supply when the vehicle is to be parked for more than a short time.

When the vehicle is at rest for more than about half an hour it must be levelled in both directions, so that the ice-tray shelf inside the frozen food storage compartment is level. (This can be checked with a small spirit level placed on the ice-tray shelf). If it is not convenient to level the vehicle and it is to stand out of level for more than half an hour, the refrigerator should be temporarily turned off.

## 3.4.2 Starting the Refrigerator

Before using your refrigerator for the first time, it is advisable to wash the interior and it accessories as described later under 'Cleaning'. The bottled gas equipment includes a Piezo crystal lighting device which creates a spark over the burner when the button is pushed in fully. No batteries or flints are required to operate the lighter.

Before starting the refrigerator, always check that the alternative method of operation is off as the refrigerator should not be operated by both means at the same time. If the caravan is to be stationary for a period, check that the refrigerator is level.

#### (a) Bottled Gas Operation - Lighting the Burner

(i) Ensure that gas is available from the bottle and turn on the tap in the supply line to the

- (ii) Turn the gas control knob so that MAX is opposite the indicator mark.
- (iii) Push in the gas control knob for about 5 to 15 seconds to clear air frim the pipe line. (When starting initially or after changing a gas bottle, it may be necessary to push in the knob appreciably longer to clear all the air).
- (iv) Still pressing in the knob push in the button which operates the Piezo igniter, several times in succession. (A click should be heard each time the button is pressed in). Continue to press in the gas control knob for a further 15 seconds to allow time for the thermocouple tip (over the burner) to heat up.
- (v) Release the gas control knob then check that the burner is alight by looking directly through the flame viewer located adjacent to the control knobs. If the burner has not lit, repeat the lighting procedure.
- NOTE: The refrigerator has a flame failure device which will automatically shut off the gas to the burner if the flame is blown out. When the knob is being pressed in this device is temporarily inoperative.

## (b) <u>Electrical Operation</u> (12 Volt Operation)

The refrigerator is wired through the ignition, so the unit can only be operated when the engine is running or the ignition switch is in the first 'on' position. However, it is important to understand that the 12 volt operation is only intended to be used while the engine is running and charging the battery, and for short periods at rest. The current drain at 12v is 8 amps.

## (c) Temperature Regulation

After starting up the refrigerator it will take about an hour before there are signs of cooling.

The 12v circuit is not thermostatically controlled and the cooling unit will operate all the time the refrigerator is connected to 12v and switched on. (As 12v is for use only when driving the vehicle, it is unlikely to result in over-freezing because of the comparatively short time involved. If over-freezing does occur, during long periods of travel, the refrigerator can be manually switched off and on periodically as experience proves necessary.

For operation on gas the refrigerator should be started off with the gas control set at MAX. This will provide suitable temperatures in the refrigerator in warm weather, but if the fresh food compartment becomes too cold, especially in cooler weather, turn the gas control knob to MID - MIN. Remember to return it to a higher setting when necessary - if the weather becomes warm again for instance

www.vwT25camper.info - a useful site for owners and enthusiasts of Volkswagen T25 camper yars.

## (d) Two-Position Travel Catch

The travel catch at the top of the door has two alternative positions. The first holds the door tightly closed and should be used when the unit is in use. The second position keeps the door slightly open and is intended to be engaged when the refrigerator is out of use so that air can circulate inside.

## (e) Defrosting

Frost will gradually form on and in the frozen food storage compartment and on the fins at the side of the compartiment. It is a mistake to assume that an accumulation of frost gives a colder cabinet therefore the refrigerator should be defrosted regularly - about once a week or ten days depending on the conditions of use.

To defrost turn the gas control knob to OFF, or the voltage selector switch to 'O' depending on which operation is being used. Remove the ice-tray, food, etc, wrap frozen foods in several layers of clean newspaper and place the package in a cool place.

To defrost as quickly as possible a small dish of hot water (not boiling) may be placed in the ice-tray shelf and a bowl of hot water on a cabinet shelf, changing the hot water as necessary until all frost has melted.

Do not place dishes of hot water on the bottom of the frozen food storage compartment, and do not attempt to defrost more quickly with an electric fire or other form of heat as this may damage the plastic surfaces.

Defrost water will run via a tube at the back into a drip collector fixed to the rear of the refrigerator, where it will evaporate into the circulating air.

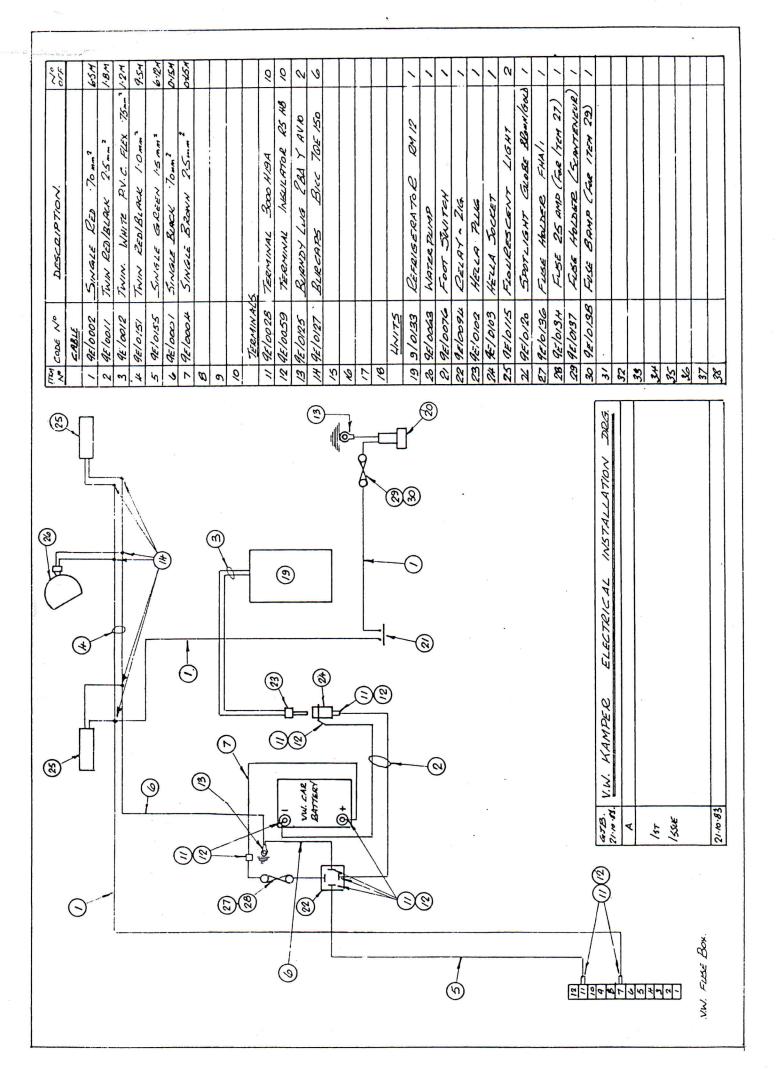
When all frost has melted wipe dry the frozen food storage compartment and cabinet interior, then re-start the refrigerator setting the gas control knob or voltage selector switch and thermostat knob to their respective positions.

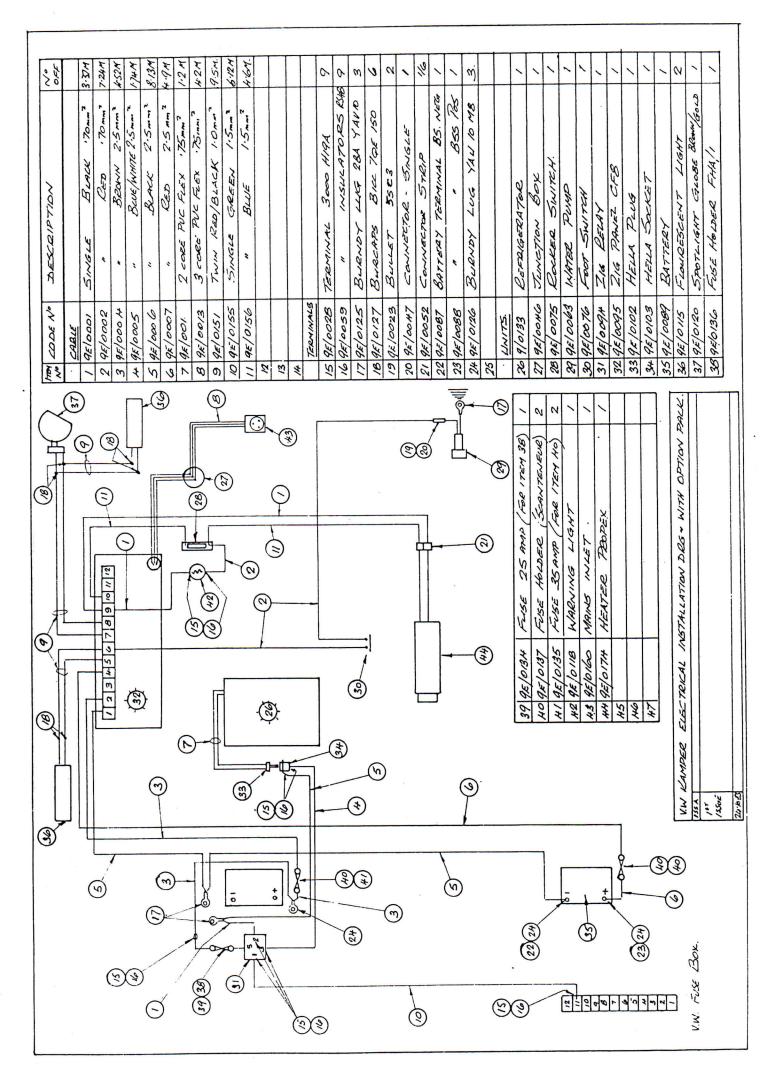
Replace the fresh and frozen food but wait until the cabinet has cooled down again before making ice.

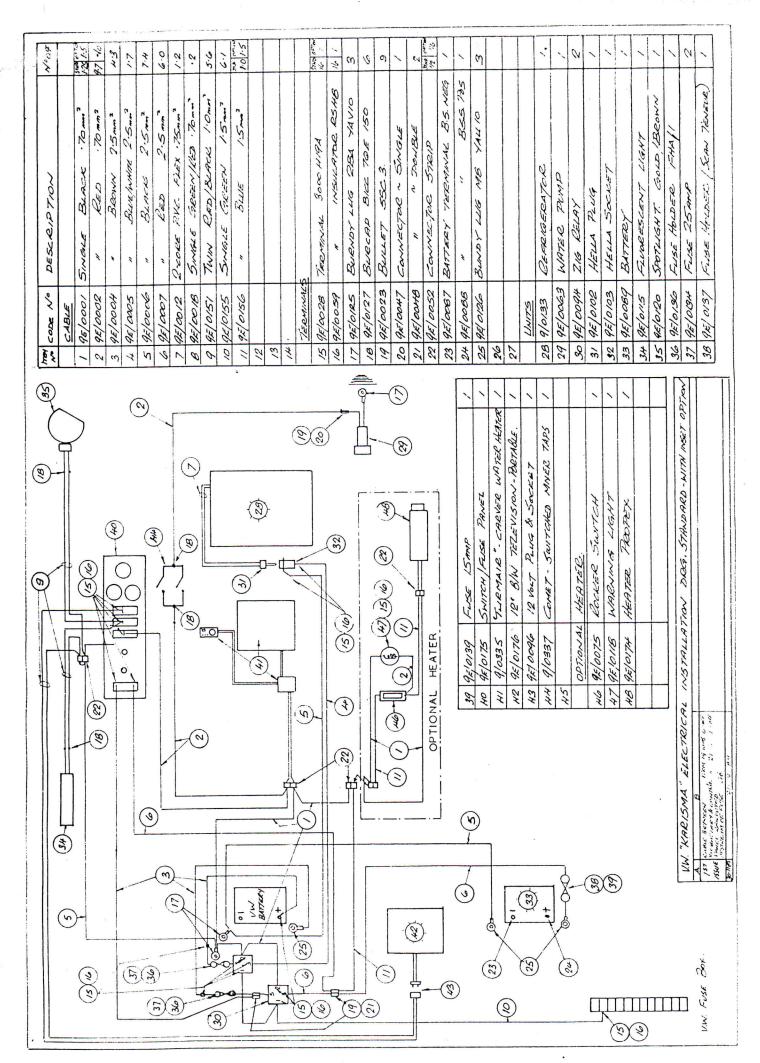
Remember that if the temperature of frozen food is allowed to rise unduly during defrosting, its storage life may be shortened.

## (f) When Not In Use

Whenever your refrigerator is to be out of use for a period turn off the gas. Empty the cabinet and defrost as described earlier. Clean and thoroughly dry the interior and accessories and leave the door slightly open by engaging the alternative position of the travel catch. If this is not done, the air inside may go stale giving rise to an unpleasant odour which could be difficult to remove at a later date. Empty and dry the ice-tray.







## **Options**

## 4.1 Kamper Options

## 4.1.1 Heater Pack

Comprising a safe blown air heater, secondary battery and an electrical panel incorporating a charger unit.

## (a) Blown Air Heater

The heater unit is fitted outside of the living area beneath the vehicle floor on the offside. The heater unit is ducted into the vehicle interior via ducting through the floor of the sink unit. with the outlet in the plinth under the cupboard door.

The air for both heating and combustion is taken from outside with the combustion exhaust discharging through the special outlet just forward of the offside rear wheel.

The heater gas control tap is located in the kitchen unit cupboard and the electrical on/off switch and indicator light to the right of the Zig control panel.

To start the heater turn on the gas supply, and put the electrical switch to 'ON', the indicator light will come on. The starting cycle is then completely automatic.

The heater unit and its air intake and exhaust are fitted outside the living area of the vehicle for safety and therefore fresh air ventilation is only necessary for personal comfort and to reduce condensation.

IMPORTANT - THIS HEATER MUST NEVER BE OPERATED WHEN THE VEHICLE IS IN MOTION

## (b) Second Battery

Located in the recess behind the passenger seat. To gain access slide the passenger seat forward and raise the hinged metal lid.

The second battery is used to operate the body electrics i.e. lights, water pump, and heater.

## (c) Control Unit

The incorporation of the control unit to the Kamper provides additional facilities, central control of 12 volt systems and the ability to charge the secondary battery from an outside 220/240 volt supply.

With the exception of the heater and refrigerator all other 12 volt units are fed via the control panel.

www.vwT25camper.info - a useful site for owners and enthusiasts of Volkswagen T25 camper

## When Travelling

Whilst travelling the control unit charging switch should be in the 'CAR' position. Both batteries will then be charged by the vehicle alternator.

The refrigerator will also be supplied with 12 volt via the ignition switch. It is therefore necessary for the refrigerator control to be set to 12 volt.

#### When Static

When 'On Site' the control unit charging switch should be switched to 'MAINS'. This will ensure that any 12 volt current will only be drawn from the secondary battery. if for any reason the secondary battery will not operate the 12 volt equipment then it is possible to run the equipment from the vehicle battery by switching the charging unit to 'CAR'. Use of the vehicle battery in this condition should be restricted to avoid flattening the battery below the level for starting the engine.

If the vehicle is connected to a 220/240 volt supply via the control unit the switches should be positioned as follows - Mains switch 'ON', charging switch to 'MAINS'. In this condition the secondary battery will automatically be charged as required. It is not possible to charge the vehicle battery through the control panel

The refrigerator should also be switched to LP Gas. should never be left on 12 volt supply when static as this will very quickly drain the battery.

## Using the 12 Volt Equipment

Turn on the 12 volt switch on the control unit. The battery condition indicator will light either red or green depending on the state of the battery (see below) and the 12 volt equipment will be operative.

#### The Battery Condition Monitor

The purpose of this device is to warn that the caravan battery is becoming discharged. 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 wil only be given when all the 12 volt equipment is switched off and when neither 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 either charging system is operating due to the high terminal voltage present at the battery.



NB: When using current from the vehicle when the charging switch is in the 'CAR' position, the red light may glow. This is due to voltage drop between the batteries.

#### The Fuses

There are four fu es fitted to the control unit. mains fuse is fitted in the smaller of four fuse holders on the front panel and is rated at 1 amp; it is a standard 20mm x 5mm glass quick blow fuse. This fuse holder can only be removed with a screwdriver (this is to comply with electrical safety regulations).

The three 10 amp fuses mounted on the right of the panel protect the various accessories connected to the control unit and are standard 1&1/4" glass quick blow fuses. Access to the fuses is by turning the hold 1/4 of a turn in the direction of the arrow.

All fuses are available world wide from electrical and radio dealers. Under no circumstances should a fuse of a different type of value be fitted.

Thre three 10 amp fuses protect the following items -

Heater Top Fuse

Fluorescent strip light over sink, water Centre Fuse

pump

Fluorescent strip light in roof, spot Bottom Fuse

light

Additional fuses to the above are fitted as follows -

2 x 35 amp fuses adjacent to the batteries to protect against incorrect polarity.

 $1 \times 25$  amp fuse in the battery box behind the drivers seat (Note - some of the early Mark 11 Kampers had this fuse fitted behind the Zig panel) to protect the refrigerator circuit.

#### WARNING:

In the event of a fuse blowing there exists a fault in the circuit protected by that fuse, and the cause should be ascertained before replacing the fuse. It is important to remember that a fuse is fitted for the progection of the circuit and is a safeguard against fire and injury. Never remove the front panel with mains, or batteries There are no user serviceable connected. parts inside

#### Porta Potti 4.1.2

Located in the cupboard under the storage unit aft of the sink unit.

For correct operation see the makers instruction leaflet.

## 4.1.3 Front Seat Covers

May be removed if required. They are retained in position by strips of velcro.

#### 4.1.4 Childs Cab Bunk

The bunk consists of two spring loaded stick poles and a canvas bunk.

Holes are provided in the front and rear cab door pillars at a suitable height to position the bunk above the steering wheel.

Put the two poles into the loops down each side of the canvas, position one end of a pole into one of the forward holes compress the pole and line up the other end with its hole and allow pole to enter the hole. Repeat with rear pole.

## 4.2 Karisma Options

## 4.2.1 Blown Air Heater

The description for this option is the same as 4.1.1 (a) with the exception of the position of the electrical on/off switch and indicator light which is on the front of the sink unit.

## 4.2.2 Childs Cab Bunk

As 4.1.4.

## Maintenance

## General

The working surfaces of the furniture should be cleaned with a damp cloth. The woodgrain surface should be cared for in the same way as household furniture and treated with furniture polish. Curtains should be dry cleaned rather than washed to minimise shrinkage.

Periodically check all hinges, catches and slide bolts for slack screws, tightening as required. A drop of oil on hinges and metal catches will help to keep your vehicle rattle free and in good working condition.

The exterior paintwork should be protected with normal quality car polish. It will retain its lustre providing dirt is removed by adequate washing followed by leathering before polish is applied.

If the vehicle is stored unused in a hot climate the curtains should be drawn to protect the interior from excessive heat.

We strongly advice owners to study the chassis manufacturers' handbook to carry out service and maintenance procedures according to the instructions.

