CONTENTS

WELCOME & INTRODUCTIONEnd Of Life Vehicle DirectiveErwin Hymer Group UK Technical	1-1 1-1
Approvals	1-2
GENERAL SAFETY Please read before using your new campervan Proper And Safe Use Of Storage	
Ventilation	2-2 2-2 2-2
Gas Dispersal Holes Fire Safety Fire Extinguishers In Case Of Fire Fire Retardant Foams	2-2 2-2 2-2 2-2
PREPARING FOR THE ROAD	3-1 3-1
User Payload	3-1 3-1 3-1 3-2
MOTORWAY HANDLING	4-1 4-1
ARRIVING ON SITE	5-1 5-1 5-1 5-1 5-1
GETTING STARTEDConnecting To Mains Supply On Arrival at Site	
Disconnecting Mains Supply When Leaving Site Overseas Electrical Connection	

Facts about LPG	0-3
Awning Spaces, LPG and Appliance	
Exhaust	
LPG Gas System	6-3
Guidelines for the Safe Refuelling of	
Autogas Vehicles	
Gas Supply	
Connection	
Gas Regulator	
Gas Operation	
Water System	6-7
Filling your fresh Water Tank	
Waste Water Tank	
Draining Down Your Water System	6-7
ELECTRICAL SYSTEM	7-1
230V System	
PDU	
12V System	
Mains Unit - Campervan	
Mains Unit – Campervan Pop Top	7-2
HOW TO USE YOUR CAMPERVAN'S	
HOW TO USE YOUR CAMPERVANS	5
EQUIPMENT	8-1
EQUIPMENTControl Panel	8-1 8-2
EQUIPMENTControl PanelVegas Button Control Panel	8-1 8-2 8-2
EQUIPMENTControl PanelVegas Button Control PanelWhale Heat Control	8-1 8-2 8-2 8-3
EQUIPMENT Control Panel Vegas Button Control Panel Whale Heat Control Troubleshooting - Whale Heat Control	8-1 8-2 8-2 8-3
EQUIPMENT Control Panel Vegas Button Control Panel Whale Heat Control Troubleshooting - Whale Heat Control Maintenance / Repairs	8-1 8-2 8-3 8-5 8-7
EQUIPMENT Control Panel Vegas Button Control Panel Whale Heat Control Troubleshooting - Whale Heat Control Maintenance / Repairs Whale Heat Control Panel Operation	8-1 8-2 8-3 8-5 8-7
EQUIPMENT Control Panel	8-1 8-2 8-3 8-5 8-7
EQUIPMENT	8-1 8-2 8-3 8-5 8-7 8-8
EQUIPMENT	8-1 8-2 8-2 8-3 8-5 8-7 8-8
EQUIPMENT	8-1 8-2 8-3 8-5 8-7 8-8 8-11
EQUIPMENT Control Panel	8-1 8-2 8-3 8-5 8-7 8-8 8-10 8-11 8-12
EQUIPMENT	8-1 8-2 8-3 8-5 8-7 8-8 8-11 8-11 8-13
EQUIPMENT	8-1 8-2 8-3 8-5 8-7 8-8 8-11 8-11 8-13 8-13
EQUIPMENT	8-18-28-38-58-78-88-108-118-128-138-14
EQUIPMENT	8-18-28-28-58-78-88-108-118-128-138-148-15
EQUIPMENT	8-18-28-38-58-78-88-108-118-138-138-158-15

CONTENTS

Triplex	8-17	Wing Omni-Directional TV Antenna	.8-51
Main Components	8-17	Operating Instructions	
Use of the Burners	8-18	Changing the slant of the Antenna	
Use of the Electric Hotplate		Wiring Connections	
(if applicable)	8-18	Thule Step	
Use of the Grill		Operation	
Use of the Oven		Safety Instructions	
Safe Cooking	8-20	Maintenance	
Temperature Control	8-21	Whale Easi-Slide Socket	
Refrigerator		Safety Information	
Main Components		Safety	
Control Panel		Mobile Internet (Option)	
Switching on the Refrigerator		ISOFIX Child Seat Restraint	
Selecting Cooling Level		Solar Panel Regulator	
Selecting Night Mode		Bike Rack	
Use of the Frozen Food Compartment		Back Rack	
While Driving		Roll Out Awning	.8-88
Troubleshooting		Tow Bar	
Microwave (Where Fitted)			
Smoke Alarm		SECURITY	
Carbon Monoxide Alarm		Tracker (Option)	
Rooflights		Campervan Theft	9-1
MPK Rooflight (Where Fitted)		CARE OF YOUR CAMPERVAN	10-1
Midi Heki Rooflight (Where Fitted)		Exterior Body Shell	
Door Flyscreen		Acrylic Windows	
Shower		Window Blinds & Flyscreens	
Taps		ABS - Components	
Kitchen Taps		Interior Walls	
Internal Doors		Furniture	
Toilet/Shower Room Doors		Taking Care of your Upholstery:	
Other Internal Doors		Washroom And Handbasin Fittings	
Magnetic Catches (Where Fitted)		Shower Trays	
Paddle Latch		Water Systems	
Concealed Latch		Water Containers	
Thetford C-260 Cassette Toilet Range		Internal Water Systems	
Introduction		Thetford Toilet	
Preparing for Use (Standard)		Changing a Wheel	
Using the Toilet (Standard)		Tyres & Tyre Pressures	
Emptying		Tyre Wear and Damage	
Emptying with Optional Features		Pre-season Water System Preparation	
		, ,	
Cleaning and Maintenance Toilet Bowl		Getting Ready for Winter	
		LPG System – Post Delivery Inspection,	
Waste Holding Tank	0-40	Replacement and Maintenance	10-
Cleaning and Maintenance for	0.44	STORAGE	. 11-1
Optional Features		Long Term & Winter Storage	
Winter Operation		Campervan Covers	
Storage		Battery Maintenance	
Toilet Unit Malfunctions		•	
How To Make Up Your Beds	ŏ-43	CAMPERVAN HABITATION	
How to use your Pop Top -	0.47	WARRANTY COVER	
(Where Applicable)		Non warranty repairs	
How to use your storage unit	გ-50	Remedial Work	. 12-4

CONTENTS

CAMPERVAN CONSTRUCTION - MAIN COMPONENTS Windows Insulation	13-1
ELECTRICAL DRAWINGS	14-1
GENERAL QUESTIONS	15-1
GLOSSARY	16-1
CAMPERVAN ANNUAL SERVICE RECORDAnnual Habitation Service Records	
NOTIFICATION OF CHANGE OF OWNERSHIP	18-1
NOTIFICATION OF CHANGE TO NAME AND ADDRESS	19-1
INDEX	20.4

WELCOME & INTRODUCTION

Thank you for selecting your new campervan.

Before you drive off, please familiarise yourself with the campervan and read this owners' handbook. This will help you to obtain the maximum pleasure from your vehicle and avoid endangering yourself and others

Additional information and detailed appliance instruction manuals are also contained in your Owner's Information Pack.

Your new campervan has been designed as a recreational vehicle and is intended for recreational use only. It is not intended for business use or for permanent habitation. Erwin Hymer Group UK accepts no liability if the campervan is used for any purpose other than recreational/holiday use. Any use other than recreational/holiday use will invalidate your warranty.

Please note: All Erwin Hymer Group UK campervans are thermal tested to ensure compliance with British and European standard BS EN 1646 part 1.

By following the instructions provided in this handbook and maintaining your campervan in a first class roadworthy condition, you are sure to have many years of carefree use. To ensure the very best quality and reliability all campervan designs and new developments are rigorously tested. Therefore Erwin Hymer Group UK will accept no liability or uphold the warranty if the campervan is altered or modified in any way.

IMPORTANT

The VIN number of your campervan must be quoted in all correspondence, it can be found on a plate fixed next to the chassis plate within the engine compartment.

There is also a VIN number on the chassis cab windscreen, which should be quoted in any communications with Fiat.

Changing market and supply situations may prevent us from maintaining the exact specification details in this guide and we therefore reserve the right to alter

specifications as materials and conditions demand and if necessary supply an alternative

Enjoy your new campervan.

www.elddis.co.uk www.buccaneer-rv.co.uk www.xplore-rv.co.uk

Please note – telephone numbers quoted in the following sections may incur charges

End Of Life Vehicle Directive

Your new campervan fully complies with the European Directive on the End of Life Vehicles. In order to obtain information on how to dispose of your campervan at the end of its life please visit the Fiat website. The Fiat website contains full details on all Fiat products together with details of their environmental and recycling policies. The site address is www.fiat.co.uk.

Erwin Hymer Group UK Technical Approvals

All Erwin Hymer Group UK campervans have been European Commission Whole Vehicle Type approved. In order to ensure your new campervan is safe to use Erwin Hymer Group UK are members of and have been inspected by the following bodies.

NCC who operate a certification scheme to ensure compliance with the European safety standards for campervans.

Erwin Hymer Group UK has also obtained ISO 9001:2015 accreditation and this is periodically audited.

Please note: All Campervans manufactured by Erwin Hymer Group UK are designated by their model year. For example, 2022 Model year runs from 1st September 2021 to 31st August 2022.

GENERAL SAFETY

Please read before using your new campervan.

In order for you to get the most out of your new campervan it is necessary for you to be aware of the following:

- (i) Do not obstruct ventilators (See Safety Section Ventilation)
- (ii) Inspect the flexible gas hose regularly for deterioration and renew as necessary, with approved type, as and in any case no later than the expiry date stated on the hose.
- (iii) Never use portable cooking or heating equipment inside your campervan. Do not use your fitted cooking equipment as heating at any time.
- (iv) Never allow modification to your gas or electrical system unless qualified persons carry them out. A Gas Safe Register™ approved gas fitter should carry out all modification to the gas system. Any modifications carried out on the electrical system should be carried out by a suitably qualified electrician.
- (v) Never exceed your campervan's Maximum Technical Permissible Laden Mass.
- (vi) Never exceed the front or rear axle maximum load as specified by the Fiat weight plate under the bonnet.
- (vii) Pull out/lift up worktop extensions, where fitted, are only designed to take maximum weight of 6kgs.
- (viii) Please ensure extra care when young children use high level bunks and always use the safety nets and lift up flaps provided.
- (ix) Do not leave children under 14 years of age unattended in your campervan.
- (x) Please ensure all gas appliances are turned off while you are travelling.
- (xi) If you suspect there is a gas leak please open all the windows then vacate the campervan. Switch off the gas supply if it is safe to do so. Then contact your nearest Erwin Hymer Group UK Retailer to arrange for them to check the gas system.
- (xii) Only those seats designated for travelling should be occupied when the campervan is in motion.

- (xiii) Please note that campervans are covered by the seat belt regulations. You must make sure that any children in the vehicle you're driving are:
 - in the correct car seat for their height or weight until they reach 135 cm tall or their 12th birthday, whichever is first
 - wearing a seat belt if they're 12 or 13 years old, or younger and over 135cm tall
- (xiv) Before travelling in your campervan: Ensure all the tables have been stored in their designated table storage position.
- (xv) Ensure you remove all items from the microwave before travelling.
- (xvi) It is essential that you have securely closed and locked the habitation door before setting off on any journey.
- (xvii) Care is to be taken when mounting and dismounting the toilet due to its elevated height.
- (xviii) Turning OFF the internally mounted gas taps is an accepted method of isolating the gas system whilst travelling.

Proper And Safe Use Of Storage Areas In Campervans

The storage areas provided in your campervan are designed solely for the purpose of carrying personal possessions; these areas must not be used:

- As a habitation area (e.g. living, sleeping or cooking).
- To carry passengers, animals or livestock.
- For the installation (or use) of any LPG gas operated appliances, (unless supplied fitted by the manufacturer).
- For carrying LPG gas bottle cylinders, (unless designated by the manufacturer).
- To carry any flammable liquids, (unless properly stored, sealed and secured).
- For the operation of an electrical generator.
- In such a way that the loading exceeds the payload limit, as defined by the manufacturer.
- Such that the weight distribution of the vehicle means non-compliance with the vehicle axle loads.

VENTILATION

All campervans manufactured by Erwin Hymer Group UK are ventilated at both high and low level in accordance with BS EN 721 Safety Ventilation. The fixed ventilation points fitted in your campervan must not be blocked under any circumstances as your safety may depend upon them. It is advisable that the fixed ventilation points are checked and cleaned (where necessary) on a regular basis.

High-Level Ventilation

This is mainly provided by fixed ventilation within the fitted roof skylight. These roof skylights should be cleaned annually by use of a small brush to remove any dust that may have accumulated around the mesh fitted. On some roof skylights the mesh can be easily removed to aid cleaning. On fan-assisted roof skylights it is essential that the fan is switched off prior to cleaning.

High level ventilation may also be provided by additional fitted mushroom vents.

Low-Level Ventilation

All Erwin Hymer Group UK campervans have fixed low level ventilation provided. These ventilators are covered with plastic covers designed to prevent them from being obstructed by items placed within the bed box. These covers can be removed by undoing the two screws in order to facilitate cleaning the ventilators, however these covers must be replaced once cleaning is completed.

It is essential for your safety that these ventilators are not blocked at any time.

Ventilation in Separate Bedrooms

In campervans with separated sleeping areas, separate ventilation is required and is provided via a roof skylight at high level and a ventilator at low level.

Gas Dispersal Holes

All appliances and gas unions have a gas dispersal hole within the same compartment. It is essential that these are not blocked or made ineffective

FIRE SAFETY

Fire Extinguishers

It is recommended that one dry powder fire extinguisher complying with EN 3-7 of at least 1kg capacity or equivalent is provided by the main door and a fire blanket next to the cooker. Familiarise yourself with the instruction on your fire extinguisher and the local fire precaution arrangements.

In Case Of Fire

- Get everyone out of the campervan as quickly as possible using whichever exit is quickest including windows. Do not stop to collect any personal items.
- (ii) Raise the alarm. Call the fire brigade.
- (iii) Turn off gas container valve if safe to do so.
- (iv) Retreat to a safe distance.

Fire Retardant Foams

All campervans are equipped with Polyurethane (PU) foam which are combustion modified foam cushions, sprung mattresses. All furnishings and fabrics used by Erwin Hymer Group UK comply with the Furniture and Furnishings (Fire Safety) Regulations.

PREPARING FOR THE ROAD

Before venturing out on to the road with your campervan, it is important that you prepare correctly.

CAMPERVAN WEIGHTS EXPLAINED

Mass in Running Order

The weight of your campervan as it leaves the factory, as new with standard fixtures and fittings, plus an allowance for the driver of 75kgs, the mass of the fuel (diesel) when the tank is 90% full and an allowance of 12kg for a full gas tank.

Maximum Technically Permissible Laden Mass

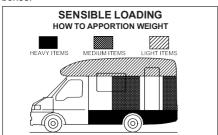
The maximum mass the vehicle can be when fully laden for use on the road.

User Payload

The load margin (payload), this represents the difference between the Mass in Running Order and the Maximum Technically Permissible Laden Mass. It shows the maximum weight that can be loaded into your campervan, covering items such as food, crockery, cutlery, clothing, bedding, etc.

Loading

It should be noted that even weight distribution is a major factor in making your campervan an easy and pleasant vehicle to drive. Care should therefore be taken in balancing the load, ensuring that heavy items are well spaced and are in as low a position as possible, for example, low cupboards and bed boxes.



Note: Light items are considered as clothing and bedding. It is not recommended to travel with tinned items in overhead lockers.

IMPORTANT: Do not exceed maximum technical permissible laden mass for your campervan.

BEFORE MOVING OFF

Whenever making a journey with your campervan, either setting off on holiday or returning home, it is good practice to run through this simple checklist.

- Close and secure all cupboards and drawers and secure any loose articles.
- (ii) Do not store tins, bottles, etc. in overhead lockers
- (iii) Close and secure all windows and roof lights.
- (iv) Leave all curtains and blinds open to aid visibility.
- (v) Turn off all gas appliances.
- (vi) Switch off 240volt supply at source; disconnect mains cable and store in an appropriate place.
- (vii) Check the battery is secure and that the vent pipe is firmly attached to the battery and exits outside of the vehicle.
- (viii) Ensure the fridge is on 12V operation and door lock is set. (Note: the electrical relays will allow the fridge to be run on the vehicle battery when the engine is running.)
- (ix) Remove any external fresh water connections etc.
- Make sure any heavy articles are stored in accordance with the loading procedure.
- (xi) Lock habitation doors when travelling We would recommend that all exterior doors, including the entrance door and access doors are firmly closed and locked prior to your departure.
- (xii) Check your external rear view mirrors and adjust if necessary.
- (xiii) If a step is used, ensure it is put away before moving off.
- (xiv) Your new Erwin Hymer Group UK campervan has been designed to carry passengers in designated passenger seats only. The fitting of a 3-point seat belt can identify these seats. Any seat not fitted with a 3 point seat belt is not designated as a passenger seat.

PREPARING FOR THE ROAD

- (xv) Ensure all tables have been stored in their designated table storage position.
- (xvi) Ensure you remove all items from the microwave (if fitted).
- (xvii) Check all the road lights are operational.
- (xviii) Ensure the hob lid is in the closed position.

Pulling Off

- Pull away smoothly.
- Avoid wear and tear on clutch and transmission by taking extra care.
- Change gears smoothly.
- · Try not to jerk the clutch.

Bicycle Racks

Fitting a bicycle rack to the rear of a campervan will affect how weight is distributed. There are restraints to be aware of with such fitments.

The maximum loading allowed on the rear is 35 kg.

Campervan Back Rack (Where fitted)

Fitting a campervan back rack to the rear of a campervan will affect how weight is distributed. There are restraints to be aware of with such fitments.

The maximum loading allowed on the ladder rack, per door is 56kg.

The campervan must be balanced to take into account the new weight distribution. Weight must be distributed evenly.

Erwin Hymer Group UK cannot be held responsible for problems related to a bicycle rack fitted by a third party.

MOTORWAY HANDLING

Best Practice

To gain the most enjoyment and ensure a long life for your campervan, the following should be observed:

- Do not bump kerbs with wheels.
- When overtaking ensure sufficient clearance is given to other vehicles.
- Your campervan will not accelerate as quickly as a car, so take this into account when attempting to overtake other vehicles
- Carry out all manoeuvers as smoothly as possible.
- Use the wing mirror to check your campervan has cleared the other vehicle.
- Slow down and take care when driving over raised speed bumps, 'sleeping policemen' or when embarking/ disembarking ferries.
- In high or cross winds, travelling downhill or in conditions of poor visibility reduce your speed.
- High-sided vehicles can cause air buffeting so extra care must be taken when passing or being passed. Leave as much space as possible when overtaking these types of vehicles

Speed Limits

Be sure to observe all statutory speed limits and adapt your speed to take account of prevailing weather and road conditions.

Towing Your Campervan

In the unlikely event that you have to tow your campervan. Please refer to the base vehicle information for details on where to find the tow point and tow hook.

ARRIVING ON SITE

CHECK SITE REGULATIONS

On arrival at a campsite, you should always check the site regulations. This will help avoid any unnecessary conflict with site management and other site users.

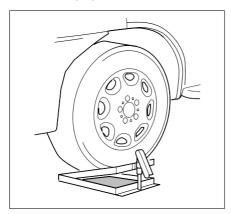
SELECTING A PITCH

Carefully select where you wish to place your campervan. The site should be as level as possible, preferably not under or near trees, well drained and away from possible boggy areas. Consider how you will move the campervan when it is time to leave the site. On sloping ground it is better to pitch facing downhill, especially during wet weather.

LATERAL LEVELLING (SIDE TO SIDE)

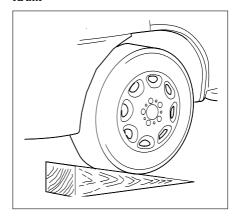
A quick glance at your pitch should tell you if you are likely to need side to side leveling i.e. levelling across the axle. On uneven ground lateral levelling is accomplished by the use of a leveler jack or ramp and a spirit level placed 'across' the campervan floor.

LEVELLER JACK



Place the leveller jack, folded flat, in front of the wheel that is to be raised to level the axle. Drive the campervan onto the leveler jack and adjust the height until the spirit level shows that the campervan is laterally level.

RAMP



Reverse onto your pitch about a foot further back than you wish to end up. Then place the levelling ramp in front of the wheel that needs to be raised

Place a spirit level parallel to the axle or just inside the campervan door. It helps to have two people at this point. One should drive the campervan very slowly forward moving the wheel up the ramp and the other should indicate when the spirit level bubble is in the middle.

Whichever method you use, once level, apply the campervan handbrake and chock the campervan wheel if necessary.

GETTING STARTED

You have arrived at your destination and now want to start to enjoy your new campervan. The following is a step by step guide to connecting your services and getting everything in your campervan working.

CONNECTING TO MAINS SUPPLY ON ARRIVAL AT SITE

Before connecting the campervan installation to the mains supply, check that:

- (i) The mains supply is suitable for your installation and appliances, i.e. whether it is AC or DC and whether it is at the correct voltage and frequency.
- (ii) Your campervan is properly earthed. Never accept a supply from a socket outlet or plug having only two pins, or from a lighting outlet.
- (iii) Any residual current device (earth leakage circuit breaker) in the mains supply to the campervan has been tested within the last month. In case of doubt, consult the site owner or their agent.
- (iv) Make sure that the switch at the site supply point is off and that all electrical equipment in the campervan is switched off by ensuring your campervan mains isolating switch on the RCD is in the 'OFF' position.

Once the above checks have been made:

(v) Remove any cover to the electricity inlet provided on the campervan and insert the female connector of the flexible orange supply cable as shown.

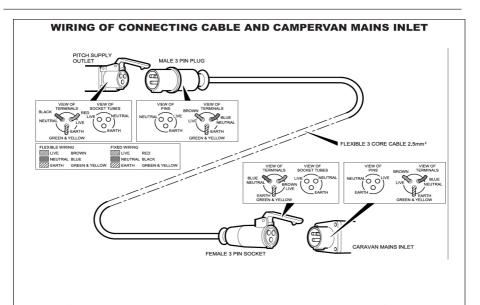


(vi) Locate the site supply and remove any cover from the socket outlet provided at the supply point. Insert the male plug at the other end of the flexible orange supply cable. Switch on the main switch at the site supply point (if appropriate).

(vii) Place any surplus cable under the campervan. Ensure that

the surplus cable is not coiled up as it could overheat.

- (viii) The MCB main electricity supply switch should be put in the 'ON' position.
- (ix) Check the RCD is working by pressing the test button. Once pressed all electrical lights and appliances should cease to operate. Reset and then check the electrical system is operational.



WARNING: It is essential that connections are made exactly as shown. If terminal markings are not in accordance with the above diagram they must be ignored.

- (vii) Place any surplus cable under the campervan. Ensure that the surplus cable is not coiled up as it could overheat.
- (viii) The MCB main electricity supply switch should be put in the 'ON' position.
- (ix) Check the RCD is working by pressing the test button. Once pressed all electrical lights and appliances should cease to operate. Reset, and then check the electrical system is operational.
- (x) Finally in order to get your 12V system operational, ensure the master 12V switch is in the 'ON' position.

DISCONNECTING MAINS SUPPLY WHEN LEAVING SITE

- Switch 'OFF' the RCD in the campervans distribution unit.
- (ii) Remove the male 3 pin plug from the site supply.
- (iii) Disconnect the female 3 pin plug from the campervan and store the cable in an appropriate locker.

OVERSEAS ELECTRICAL CONNECTION

Please Note: Connection to a mains voltage supply OVERSEAS requires particular attention

Care must be taken when connecting supplies abroad since the supplies can be of REVERSE POLARITY.

The significance of REVERSE POLARITY is that when equipment is switched off, it may not be electrically isolated. The only certain way of making equipment safe is to unplug it.

A means of checking the polarity of the mains supply when overseas is recommended. There are several available proprietary makes of equipment for the purpose.

If it can be achieved, it is preferable to connect live to live and neutral to neutral to maintain full electrical protection.

CHECK all campervan equipment is set-up to accept the site supply before actually switching on.

GAS SAFETY ADVICE

In the event of a suspected gas leak the gas must be turned off using the isolation valve on the LPG tank. A competent gas fitter should then check the system before it is used/reused.

Regularly check flexible gas hose, joints and connections for tightness. Finally, make sure that each gas appliance is working efficiently to the recommendations of the appliance manufacturers

See Index - Ventilation

FACTS ABOUT LPG

- LPG is not poisonous.
- Bi-products of incomplete combustion are harmful to health.
- LPG is dangerous if all air and oxygen is excluded.
- LPG has been given a smell by the manufacturers in order to identify leaks.
- The gas is heavier than air and therefore sinks to the lowest point.

AWNING SPACES, LPG AND APPLIANCE EXHAUST

Space and Water heaters may produce sufficient amounts of CO2 to pollute the awning space, if it is totally enclosed and therefore MUST NOT BE used on gas when an awning is attached.

Please note: Ventilation holes must be clear at all times.

LPG GAS SYSTEM

Erwin Hymer Group UK does not recommend the use of any external cylinders.

Please ensure that you have read the operating instructions for each gas appliance contained in your Owners Information Pack.

WARNINGS

- Fresh air circulation should be allowed below the campervan when appliances are in use and when flues terminate below the floor to allow free evacuation of the products of combustion. At least three sides of the underfloor space should always be kept open and unobstructed especially by snow. Do not make any additional openings in the floor.
- No appliance shall be used outside when connected to an internal outlet.
- Maintain adequate spacing of combustible materials from sources of heat or naked flame.
- Do not use additional independent gas appliances inside the campervan.

GUIDELINES FOR THE SAFE REFUELLING OF AUTOGAS VEHICLES

Health and Safety of Refuelling

The driver, when pulling up to the Autogas dispenser, is to apply their handbrake and switch off the engine.

No ignition sources should be present including no smoking, no naked flames or mobile phones.

General Filling Guidelines

This is a guide for filling your LPG tank fitted to your campervan.

Note: The vehicle's LPG tank is fitted with an automatic stop fill valve set at 80% of the tanks volume, which should prevent the vehicle from being overfilled. If an overfill does occur, put the nozzle out of action and call an engineer to inspect it. It is recommended that the driver of the vehicle should get their vehicle inspected by a recognised LPG servicer

The gas system in your campervan has been functionally tested at the factory using gas vapour not LPG. In some instances, this may cause the LED level display to show a false reading. To calibrate the display with the mechanical level switch in the tank, fill the tank with LPG as instructed here.

Filling Nozzles

There are two types of filling nozzles commonly used

- LG30 Gas Guard[™]
- V10 DeVisser[™]

Both types of filling nozzle use the Bayonet type nozzle connection, which should connect directly on to the vehicle filler point.

Adaptors and Portable LPG Cylinders

Adaptors are not recommended for use at Autogas tanks. Calor also complies with the UKLPG guidance and does not allow the filling of owner used portable refillable LPG cylinders at Autogas refuelling sites. A copy of this guidance can be found on the UKLPG website www.uklpg.org.

First Aid

If any product is released and comes into contact with you or the customer the following first aid measures should be used:

Inhalation: Remove the affected person to fresh air. Keep the patient warm and at rest. If breathing has stopped administer artificial respiration. Give external cardiac massage if necessary. If the person is breathing, but unconscious, place them in the recovery position. Obtain medical assistance immediately.

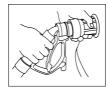
Skin: Burns should be flushed with tepid water to normalise temperature and until circulation returns. Cover the burns with sterile dressings. Do not apply ointments or powders. Obtain medial assistance immediately.

Eyes: Cold burns should be flushed immediately with water at normal temperature. Hold eyelids apart while flushing to rinse entire surface of the eye and lids with water. Cover the eye with a sterile dressing and obtain medial assistance immediately.

Filling Instructions

Always check that the nozzle is disconnected from the vehicle and replaced in the dispenser holder before the vehicle is driven away.

Gas Guard[™] nozzle filling instructions Connecting



1. Push nozzle over the lugs on the filler valve and turn barrel quarter turn clockwise to lock. Do not squeeze lever before nozzle is connected. From this

moment onwards ensure hands are away from the nozzle.



2. Pull back lever and latch into place. Ensure lever is latched securely.

Push the 'FILL' button dispenser and hold until the fill is complete or

desired amount reached.

Disconnecting

Ensure hands are away from the nozzle barrel



3. When dispensing has ended, squeeze back lever and release the latch, then release the lever fully. A small release of gas will occur as you release the

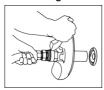
lever. This is normal! Do not place hands on barrel until after the gas has released.

4. Turn the barrel anti-clockwise a quarter turn to release nozzle from the vehicle. Replace nozzle in holder on dispenser.

De Visser[™] nozzle filling instructions

Ensure De Visser[™] nozzles are fitted with protective nozzle shields. Report to site staff if missing.

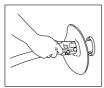
Connecting



1. Hold the hose behind the nozzle and the guard, keeping lever pushed forward with the handle at the 12 o'clock position.

Locate the nozzle over the lugs on the filler valve and turn the lever quarter turn clockwise to lock.

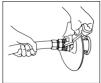
From this moment ensure hands are away from the nozzle barrel.



2. Pull back lever towards hose and latch into place. Ensure lever is latched securely.

Push button and hold until the fill is completed or desired amount reached.

Disconnecting



Ensure hands are away from the nozzle barrel.

3. Hold hose behind guard and release lever by pushing forward. (Do not place hands on the nozzle until after the

gas has been released.

A small release of gas will occur as you release the lever. This is normal!

4. Turn lever anti-clockwise quarter turn to release nozzle from vehicle. Replace nozzle in holder on dispenser.

GAS SUPPLY

Your campervan is designed to operate using either propane or butane liquefied petroleum gas at 30M/bar. Gas can be obtained from a LPG filling station. To locate your nearest station search www.mylpg.eu

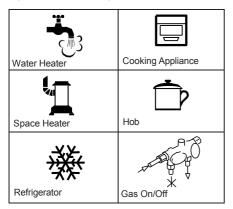
Connection

Make sure that heating and cooking appliances and gas tank are switched off.

Each gas appliance is connected to its own gas isolation valve. These are identified on the tap via a label. Below is a key to identify each label.

To operate the tap the arrow on the tap shows the direction of flow for the gas.

There will be a small label next to the bank of taps, which is also reproduced below.

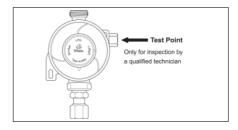


Gas Regulator

Your new campervan has been fitted with a fully approved gas regulator designed to operate with Propane gas at a pressure of 30mBar. Your regulator is fitted with a test point, which is accessed via the inlet at the side of the regulator. This access point is only for carrying out gas pressure tests and **must not** be used for any other purpose.

Please note: Only Gas Safe Register[™] or STGW approved gas fitters can carry out any work on your campervan gas installation.

This regulator is not designed for use when vehicle is in motion.



Gas Operation

In order to make all your campervan gas appliances operational it is necessary to open each appliance gas tap as detailed on the previous page. All your gas appliances should now be operational. Instructions on how to use each appliance are detailed later in your handbook.

WARNING: Aerosols and highly flammable liquids must not be stored in the compartment behind, or adjacent to, any gas appliance. Some industrial LPG appliances operate at high pressure and require a 'high pressure' regulator. This often has an adjusting handle on it.

NEVER use such a regulator on a campervan.

Ventilation holes must be clear at all times

WATER SYSTEM

Filling your fresh water tank

Your campervan is fitted with a standard water inlet which can be filled using a hose pipe connected to a tap placed into the water filler point.

Please take care not to over fill your tank it is advised that someone monitors the water level in the tank while filling is in progress.

Waste Water Tank

Your new campervan is also fitted with a 45 litre waste water tank. All waste water excluding the toilet waste will run into the waste water tank. The level of water in the tank can be monitored using the control panel. Opening the grey waste outlet provided on the outside of the campervan empties the tank. Open the tap when the outlet is over a drain and the water will run out of the tank

Draining Down Your Water System

- It is essential that you drain down your campervan water system when it is not in use. This is most important during winter months to protect against frost damage
- (ii) Disconnect the water pump and switch off power supply.
- (iii) Open the safety drain valve on the water heater located next to the water heater.
- (iv) Open all taps and remove all plugs from sinks and showers. Lever operated taps should have the lever put into the up and central position.
- (v) Open both the blue and grey drain outlets on the outside of your campervan.
- (vi) Adjust the level of the campervan to ensure that the drain outlet is at the lowest point of the campervan.

ELECTRICAL SYSTEM

Your campervans electrical system is comprised of both 230v circuits and 12v circuits. When connected to mains hook up your vehicle will take its power from this supply.

230v SYSTEM

ELECTRICITY MAINS SUPPLY

Your campervans main electrical installation is designed to run on 230V at 50 hertz AC supply.

WARNING: ALWAYS DISCONNECT THE MAINS SUPPLY BEFORE STARTING THE CAMPERVAN ENGINE!

Power Distribution Unit (PDU)

Your campervan is fitted with a power distribution unit (PDU) which is responsible for distributing power to the electrical outlets and appliances installed within the habitation area of the vehicle.

The individual 230V circuits are protected by means of Miniature Circuit Breakers (MCB) which provides overload protection to the relevant circuits. Additional protection for earth leakage is provided by the Residual Current Device (RCD), identified by the Main Isolation label.

For normal operation all switches on the unit need to be in the ON position.

In the event of an overload the MCB "trips" - automatically moves to the OFF position. After the overload has been removed the MCB can be re-set by switching to the ON position.

If an earth fault develops, or a person was to touch a live piece of equipment, the leakage of current to earth should immediately operate the RCD and "trip" the main switch, to the OFF position. This switch can only be re-set after elimination of the fault.

To reset, operate the switch as for MCBs. Whenever you connect to a site supply the RCD should be tested using the functional TEST button to ensure correct functionality.

NOTE: If a fault persists or in the event of difficulty consult an approved Electrical professional.

Simultaneous operation of all of the 230V mains electrical equipment may not be possible. A typical UK site mains hook-up point provides a maximum output of 16 amps and on some continental sites the available output may be as low as 5 amps. If your loading exceeds the site supply, it may trip the site circuit breaker. Please check the available mains output with your site operator. The following items need to be added together if used simultaneously.

230V mains equipment typical consumption figures:

Charger 2.2amps
Water heater 3.9amps
Blown air heaters 8.5amps
Colour TV 3.33amps

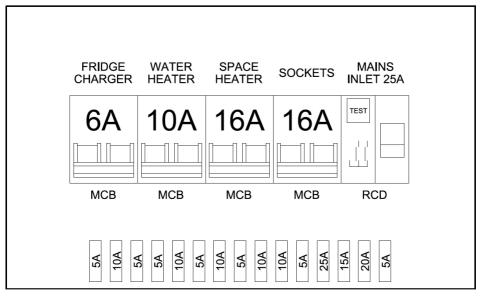
12v System:

The 12V system is powered by means of an installed leisure battery or from the charger unit installed within the PDU.

The 12V circuits are provided with fault protection by means of the standard ATC/ATO automotive blade fuses.

When the ignition is switched on the 12V system in the campervan is automatically switched off, and isolated. Meaning that the 12v system will not function.

MAINS UNIT - CAMPERVAN



SPARE
FRIDGE
PUMP / TOILET
SPACE HEATER
AERIAL / TANK PROBE

WATER HEATER / HOB / GAS

AUX

SPARE

VEHICLE BATTERY

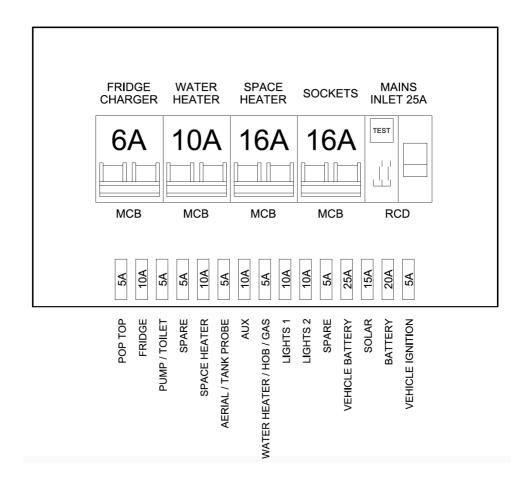
LIGHTS₂

SOLAR

BATTERY

VEHICLE IGNITION

MAINS UNIT - CAMPERVAN POP TOP



HOW TO USE YOUR CAMPERVAN'S EQUIPMENT

Within this section of your campervans handbook we will give you brief details on how to operate all of the campervans equipment from the gas cooking equipment to the window blinds. For further details on the major equipment within your campervan please read the individual appliance instructions contained with your user information pack.

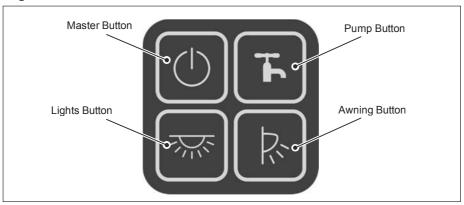
Please note: Before attempting to use any gas equipment please ensure that the LPG tank contains gas and the valve is in the on position. Also ensure the appliance isolation valves are in the on position.

Please note: Before attempting to use any electrical appliance please ensure that you have connected the mains connection cable to a mains hook up and that the mains isolation switch is in the on position. Ensure the 12V master switch is in the ON position. This is found in the side of the unit next to the entrance door.

CONTROL PANEL

Your new campervan is fitted with the control panel shown below.

Vegas Button Control Panel



Master Button

When the Master Button is pressed, the control panel will switch power to the 12v equipment within the habitation area. Most equipment and appliances require the master button to be switched on to work.

Note: Select accessories are supplied with a permanent power supply and work independent of the master button e.g. Thule electric step.

Pump Button

When the Pump Button is pressed, the control panel will switch power to the internal water pump. When the internal; water pump is running the 5th indicator on the display panel will be illuminated. (see display indicator).

The water pump features an automatic pressure cut out of approximately 2bar and should start and stop automatically when a tap/shower is open and closed.

CAUTION:

Pump not intended for continuous use. Maximum duty cycle < 33%

Lights Button

When the Lights Button is pressed, the control panel will switch power to all the interior lighting circuits.

Note: If the Master Button is switched off then this button will not function.

Whale Heat Control

Instructions for Use



Icon	Description
	Gas heating button
	Gas heating standby indicator
	Gas heating on
₩	Frost protection mode (approx 5°C)
0	Night time mode (approx 16°C)
+	Increase temperature button
\bigcirc	Decrease temperature button
!	Lockout indicator
	Electric heating button
•••	Electric heating standby indicator
•••	0.75kW electric
•••	1.50kW electric
•••	3.00kW electric
	External control from alternative source available*
	External control from alternative source active*
Č	Reset button

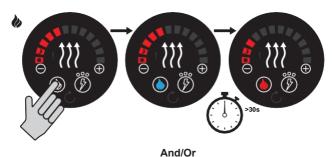
^{*}Not available on all models. External control will allow control of the heater via an alternative source.

Please refer to your vehicle handbook for more information.

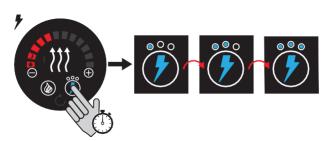
1. Select Temperature



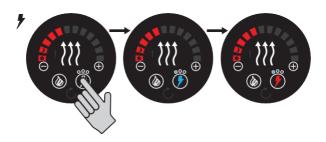
2. Activate Gas Power

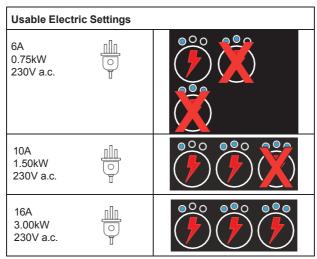


3a. Select Electric Setting



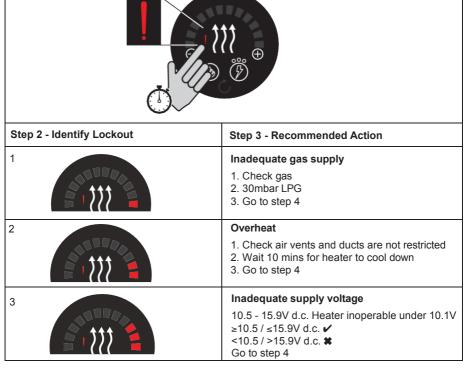
3b. Activate Electric Power





Troubleshooting - Whale Heat Control

Step 1 - Show Lockout



Troubleshooting - Whale Heat Control (continued)

Step 2 - Identify Lockout	Step 3 - Recommended Action
4	Flue blockage 1. Check flues for blockages 2. Go to step 4
5	Internal fault 1. Call Whale support +44 (0)345 9090 911 For Europe, please see enclosed Webasto-Service information. 2. Go to step 4.
6	Control panel fault 1. Power off 2. Power on
7	Multiple faults 1. Power off 2. Check heater for recurring faults 3. Power on 4. Go to step 4.
Step 4 - Clear Lockout	

If problems persist, please contact Whale Support on +44 $(0)345\,9090\,911$. For Europe, please see enclosed Webasto-Service Information.

HOW TO USE YOUR CAMPERVAN'S EQUIPMENT

Maintenance / Repairs

The vehicle owner must arrange for the appliance to be serviced at least every 2 years from date of purchase, including its gas supply and ducting for the products of combustion (BS EN 624).

All maintenance and repairs must be carried out by a registered gas engineer at a Whale Approved Service Centre of by a member of the Whale Service Engineer Network.

For installation or service information, contact Whale

Support. Tel: +44 (0)345 9090 911 Email: Info@whalepumps.com

For Europe, please see enclosed Webasto-Service information.

Guarantee claims, warranty claims and acceptance of liability will be ruled out in the event of the following:

- Modifications to the appliance (including accessories)
- · Modifications to the exhaust duct or combustion intake
- · Use of replacement and accessory parts other than original Whale parts
- Failure to follow the installation and operating instructions
- Use of the appliance for non-leisure purposes

The heat exchanger **must be** replaced with a Whale original spare part every 10 years from date of registration. See the data label on the heater for the first time it was put into service.

Disposal

This product must be disposed of in accordance with the regulations of the respective country in which it is used. National regulations and laws must be observed.

Please note: The appliance **must be** installed and serviced in accordance with any relevant regulations in the country where the appliance is installed.

If the electrical supply cord is damaged, it must be replaced by the manufacturer, its service agents or similarly qualified persons in order to avoid a hazard (BS EN 60335-1).

Whale Heat Control Panel Operation



lcon	Description
	Gas heating button
	Gas heating standby indicator
	Gas heating on
₩	Frost protection mode
	Eco mode
+	Increase temperature button
	Decrease temperature button
	Lockout indicator
٦	Electric heating button
•••	Electric heating standby indicator
•••	0.38kW electric
•••	0.75kW electric
•••	1.50kW electric
	External control from alternative source available*
	External control from alternative source active*
Ċ	Reset button

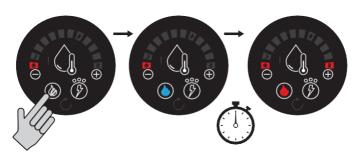
^{*}Not available on all models. External control will allow control of the heater via an alternative source.

Please refer to your vehicle handbook for more information.

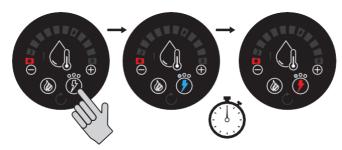
Select Temperature



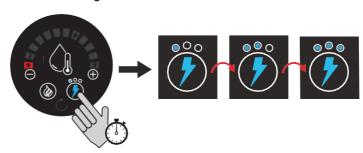
Activate Gas Power



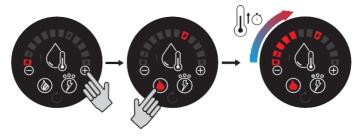
Activate Electric Power



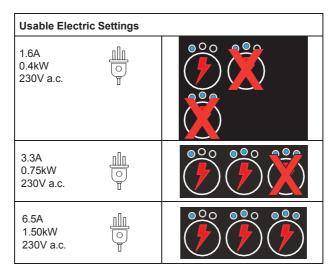
Select Electric Setting



Water Temperature Display



*Not available on all models. Electric settings only available on Gas & Electric Heat Control Panel models.

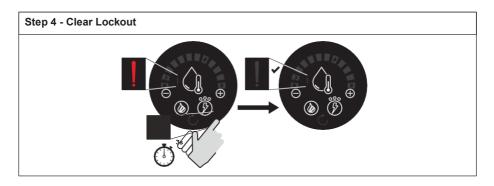


Electric Power Management

For dual Heat Control Panel variants, when selecting a high electric setting on the space or water heater, the control panel may automatically step down the other Heat Control Panel to a lower electric setting or turn off if at risk of exceeding 16A. The last heater selected has AC mains priority.

Troubleshooting - Whale Heat Control Panel

Step 1 - Show Lockout			
Step 2 – Identify Lockout	Step 3 - Recommended Action		
	Fault type #1 - Inadequate gas supply 1. Check gas 2. Temp <5°C, use Propane rather than Butane 3. Check flue for blockages 4. Go to step 4		
2-3	Fault type #2-3 - Overheat Fault		
	Check heater is completely full of water Run pump with one hot tap open until water flows smoothly Go to step 4		
4	Fault type #4 - Low Voltage Fault 10.5 - 15.9V d.c. Heater inoperable under 10.1V ≥10.5 / ≤15.9V d.c. □ <10.5 / >15.9V d.c. X Go to step 4		
5	Fault type #5 - Air Pressure Fault 1. Check flues for blockages 2. Go to step 4		
6-11	Fault type #6-11 - Internal Fault 3. Go to step 4 4. Call Whale Support +44 (0)345 9090 911		
12	Fault type #12 1. Power off 2. Check Heater for recurring faults 3. Power On 4. Go to step 4		



If problems persist, please contact Whale Support on +44 (0)345 9090 911. For Europe, please see enclosed Webasto-Service Information.

Maintenance / Repairs

To clean and sterilise inside the Water Heater use diluted sterilising fluid and fully rinse through with clean water afterwards. The outside of the appliance should not normally require cleaning. If it does, isolate the electrical supplies and wipe down with a soft, damp cloth only. Do not use abrasive cleaners. Allow to fully dry before reconnecting the electrical supplies. If de-scaling of this appliance is required, this can be done using a domestic liquid de-scaling product and fully rinse through with clean water afterwards. Cleaning and user maintenance must not be carried out by children without supervision.

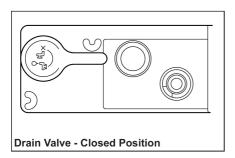
The Whale Water Heater **must be** checked periodically by a Whale Approved Service Centre/ Technician, or competent person, at least annually. This **must be** completed according to the practice in the country where it is used and according to the Whale instructions. Whale recommends annual testing of gas soundness and combustion by an accredited LPG engineer. The appliance contains ESD sensitive components and therefore **must only** be opened by a Whale Approved Service Centre/Technician.

To contact Whale support telephone: +44 (0)345 9090 911.

Operating Instructions - Drain Valve

The Water Heater must be drained before travelling or if it is not being used for a period of more than 3 days, or if there is a danger of freezing (unless Frost Protection setting is active). Check the heater has fully drained if there is a risk of freezing. The drain valve is located at the top of the water heater, beside the cold and hot water inlet. To operate the drain valve, turn the yellow lever clockwise 90 degrees.

If the plumbing system in the vehicle causes air locking preventing the water heater from draining, consideration should be given to fitting a vacuum relief valve, Whale Part # AK1228.



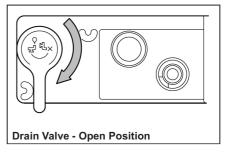
Winterising

If the Water Heater is not going to be used for more than 3 days, disable the Water Heater on the control panel, isolate the gas supply by ensuring the gas shut off valve to the Water Heater is closed and that the gas supply is turned off (if no other gas appliances require a continued supply). The Water Heater must be fully drained to avoid risk of freezing.

General Safety Note: The operating pressure of the gas supply to the Water Heater must be either 28-30mBar Butane or Propane.

Maintenance

To clean and sterilise inside the Water Heater use diluted sterilising fluid and fully rinse through with clean water afterwards. The outside of the appliance should not normally require cleaning. If it does, isolate the electrical supplies and wipe down with a soft, damp cloth only. Do not use abrasive cleaners. Allow to fully dry before reconnecting the electrical supplies. If descaling of this appliance is required, this can be done using a domestic liquid descaling product and fully rinse through with clean water afterwards. Cleaning and user maintenance must not be carried out by children without supervision.



Please Note: Water will drip from the discharge pipe of the pressure-relief valve during heating up. The pressure relief valve must be operated regularly (at least twice a year) by turning the yellow lever in the anticlockwise direction, to remove lime deposits and to ensure that it is not blocked.

The Whale Heater must be checked periodically by a Whale Approved Service Centre/Technician, or a competent person, at least annually. This must be completed according to the practice in the country where it is used and according to the Whale instructions. Whale recommends annual testing of gas soundness and combustion by an accredited LPG engineer. The appliance contains ESD sensitive components and therefore must only be opened by a Whale Approved Service Centre/Technician.

OVEN

Safety

- This appliance may be used by children aged 8 years or older and persons with reduced physical, sensory or mental capabilities and/or lack of experience and knowledge only if they are supervised or have been given instructions on the safe use of this appliance and understand the potential hazards.
- Keep children younger than 8 years away from the appliance, except under constant supervision.
- Do not allow children to play with the appliance.
- Do not allow children to clean or maintain this equipment unattended.
- Use only parts supplied by the manufacturer.
- Do not change or adjust anything on the appliance, unless the change is authorised by the manufacturer or its representative.
- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Use the appliance for cooking only and not for anything else, for example room heating. This can lead to carbon monoxide poisoning and overheating. The manufacturer cannot be held liable for damage resulting from improper use or incorrect setting of the controls.
- This appliance is not intended to be operated by means of an external timer or separate remote-control system.
- The use of this gas cooking appliance results in the production of heat, moisture and products of combustion in the room in which it is installed. Ensure the room has sufficient ventilation when the appliance is in use. During prolonged use, additional ventilation may be needed by opening a window or increasing the extraction force of the hood.
- Never extinguish a cooking fire with water. Turn the burner off and cover the flame with a lid or a fire blanket.

- The appliance and its accessible parts become hot during use. Care should be taken to avoid touching heating elements.
- The cooking process must be supervised. A short term cooking process must be supervised continuously. Unattended cooking on a hob with fat or oil can result in fire. Do not leave the appliance unattended when in use.
- The use of inappropriate hob guards can cause accidents.
- Danger of fire, do not store items on the cooking surface of the hob.
- The burners and pan supports are hot during and after use. Allow all parts to cool before touching them, as this can cause serious injury.
- The food shelves and trays in the appliance are hot during and after use.
 Allow all parts to cool before touching them, as this can cause serious injury.
 Always use oven gloves when removing the shelves and trays.
- Do not store items in the appliance.
- Do not put heavy objects on the open appliance door.
- The appliance and accessible parts become hot when the grill is in use. Young children should be kept away.
- CAUTION: hot surfaces. Door must be open when grill is in use.



- In the event that abnormal drift in cooking temperature of the oven is observed, have the thermostat checked by a qualified service engineer.
- Care should be taken not to overload the oven, allowing adequate spacing to ensure free circulation of heat.
- Do not use steam cleaners or pressure washers to clean the appliance. See Maintenance and cleaning for instructions.

- Do not allow oil or fat to build up on the appliance. Clean the appliance after each use.
- Before cleaning or maintenance work, the appliance must be left to cool and be disconnected from the gas and electrical supplies.
- The glass lid may snap shut towards the end of lowering due to the travellock action of the hinges. Make sure all fingers are clear of the appliance when closing the lid.
- Do not use harsh abrasive cleaners or sharp metal scrapers to clean the surface of the glass, since they can scratch the glass surface which may result in shattering of the glass.
- Remove any spillage from the glass lid before opening the lid.
- Do not shut the glass lid when the burners are lit or still warm.



Before use

Before using the appliance:

- Ensure that all packaging materials have been removed.
- Clean the appliance with warm water and household detergent and dry carefully with a soft cloth.
- Ensure that the gas supply is connected and turned on.
- Ensure that the appliance is connected to the 12V DC battery for the spark ignition.
- Ensure that the pan supports are positioned properly.
- Ignite the gas burners and let them burn to expel odours and vapours first.
- Ignite the burner and heat the grill for about 20 minutes to eliminate any residual factory lubricants that might impart unpleasant smells to the food being cooked. Smoke may occur during this procedure. Open any windows and turn on mechanical ventilators to help remove the smoke

Ignite the burner and heat the oven for about 30 minutes at 200°C to eliminate any residual factory lubricants that might impart unpleasant smells to cooked food. Smoke may occur during this procedure. Open any windows and turn on mechanical ventilators to help remove the smoke

Dual Fuel only:

- Ensure the electricity is connected and switched on.
- Prime the hotplate by switching on the hotplate for a short period, without a pan, to harden and burn off the coating. Use a medium to high setting for 3-5 minutes. Allow adequate ventilation to disperse any smoke that occurs during this process.
 Allow the hotplate to cool.
- Season the hotplate by heating the hotplate for 30 seconds on a medium setting and then switching off. Pour a minimal amount of unsalted vegetable oil onto a clean dry cloth or paper towel and apply a thin coat of oil to the hotplate surface. Wipe off any excess oil, then heat the hotplate on a medium setting for 1 minute. Occasional seasoning will help to maintain the hotplate's appearance.

 Only use LPG (Liquefied Petroleum Gas). The appliance operates on propane or

The appliance operates on propane or butane. Propane is preferred over butane, because butane provides poor performance at an ambient temperature below 10°C and cannot be used at an ambient temperature below 5°C.



Maintenance and cleaning

Thetford recommends an annual inspection service by an approved service centre. Between annual servicing, clean the appliance regularly after use. Before any cleaning work is started, the appliance should have been left to cool and be disconnected from the gas and/or electrical supplies.

- Always remove any spills or contamination immediately after use with soap and hot water. Towel dry the surface with a soft cloth.
- Use a non-abrasive multi-purpose cream cleaner and a nylon scourer pad to clean more stubborn dirt or grease.
- Use a proprietary stainless steel cleaner or polish to remove superficial surface scratching.
- Do not use abrasive cleaners, metal scouring pads or hard brushes. They could damage the appliance.
- If you clean the burner rings, ensure that the holes are not clogged.

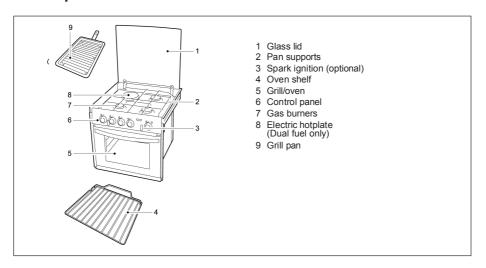
- Do not use harsh abrasive cleaners or sharp metal scrapers to clean the glass surface, since they can scratch the glass surface which may result in shattering of the glass.
- Do not leave wet cloths, cleaning pads, residues of food or cleaning products or other dirt to dry on the surface. It can cause pitting, marking or even rusting.
- Always clean in the direction of the brushed finish and not across the grain.
- Cleaning agents containing bleach should not be left in contact with stainless steel
- Mineral content in water (such as iron or limescale) can affect the appearance of the metal
- Remove any spillage from the glass lid before opening the lid.
- The control knobs can be removed for cleaning. The knobs are easy to replace.

Troubleshooting

Problem	Possible cause	Solution
Burners do not burn of burn unevenly	Gas bottle is empty Gas tap is closed Burner caps are not correctly positioned Burners are wet or clogged	Change gas bottle Open tap Allow caps to cool, then reposition them Dry or clean burners
Spark ignition does not spark	12V DC battery is discharged Connections are loose Ignition points are wet or dirty	Charge battery Secure connections Dry or clean ignition points
Control knobs do not function	Knobs are mounted incorrectly	Install knobs correctly

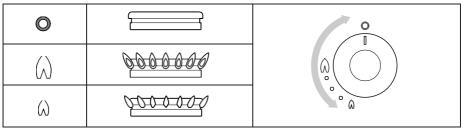
If you cannot solve a problem, contact the authorised local Service Centre or Thetford Customer Service in your country.

Triplex Main components



The types of burners may vary depending on the type of appliance. Refer to Technical specifications for further details.

Use of the burners



For the exact location of the control knob, see Main components.

Turning on:

- Push and turn the control knob
- Turn the control knob anti-clockwise to the full rate position.
 - For spark ignition models: Push the ignition button.
 - For non-ignition models: Hold a lit match or gas match to the burners.
- Keep the control knob pressed for about 10-15 seconds and then release it.
- · Adjust the height of the flame.



If the burner accidentally extinguishes turn the control knob to the 0 position and wait at least 1 minute before reigniting the burner.



If the burner has not lit within 15 seconds turn the control knob back to the 0 position and release it. Wait at least 1 minute and repeat the steps above to turn on the appliance.

Turning off:

Turn the control knob clockwise to the 0 position to turn off the burner.

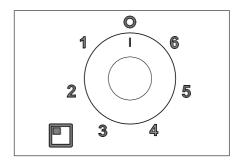


Always make sure the control knob is in the 0 position when you have finished using the gas burners.



Do not shut the glass lid when the burners are lit or still warm.

Use of the electric hotplate (if applicable)



For the exact location of the control knob, see Main components.

Turning on:

 Rotate the control knob either clockwise or anti-clockwise to the required position (1-6)

For maximum efficiency, a correctly sized pan with a flat heavy gauge base should be used. The pan size should be the same or slightly larger than the hotplate (up to 1"/2.5cm oversize).

Turning off:

 Turn the control knob to the 0 position to turn off the hotplate.

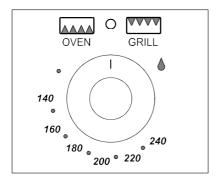


Always make sure the control knob is in the off position when you have finished using the hotplate.



Do not shut the glass lid when the hotplate is turned on or still warm.

Use of the grill



For the exact location of the control knob, see Main components.

Turning on:

- · Open the door and push the control knob.
- Continue pressing the control knob and turn it anti-clockwise to the full rate position.
- For spark ignition models: Push the ignition button.
- For non-ignition models: Hold a lit match or gas match to the burner.
- Keep the control knob pressed for about 10-15 seconds and then release it.
- · Adjust the required heat setting.

The grill is only to be used at its nominal heat setting.

- Depending on the food to be cooked, the correct grilling height can be achieved by inverting the pan trivet into either the high or low position.
- The grill pan supplied is multi-functional, for use in grill or oven and the handle design allows removal or insertion whilst the pan is in use. Always remove the handle when the pan is in use.
- · Place the shelf in the required position.

The grill door must remain open when lighting and using the grill.

If the burner accidentally extinguishes turn the control knob to the 0 position and wait at least 1 minute before re-igniting the burner If the burner has not lit within 15 seconds turn the control knob back to the 0 position and release it. Wait at least 1 minute and repeat the steps above to turn on the appliance.

- Although the grill heats up quickly, it is recommended that a few minutes preheat be allowed. A 12V cooling fan operates automatically above the grill cavity.
- It is normal for the flames on this burner to develop yellow tips as the grill heats up.

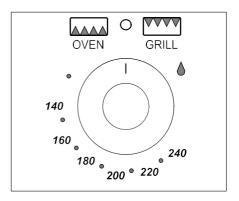
Turning off:

Turn the control knob clockwise to the 0 position to turn off the burner.



Always make sure the control knob is in the 0 position when you have finished using the grill.

Use of the oven



For the exact location of the control knob, see:

Turning on:

- Open the door and push in the control knob
- Continue pressing the knob and turn it anti-clockwise to the full rate position. (240°C gas mark 9).
 - For spark ignition models: Push the ignition button.
 - For non-ignition models: Hold a lit match or gas match to the burner.

8-19

- Keep the control knob pressed for about 10-15 seconds and then release it.
- Adjust the required heat setting.
- Place the oven shelf in the required position and close the door.

Ignition must always be carried out with the oven door open.

If the burner accidentally extinguishes turn the control knob to the 0 position and wait at least 1 minute before re-igniting the burner.

If the burner was not lit within 15 seconds turn the control knob back to the 0 position and release it. Wait at least 1 minute and repeat the steps above to turn on the appliance.

Although the oven heats up quickly, a 10-minute preheat is recommended. The oven should reach full temperature in about 15-20 minutes.

Turning off:

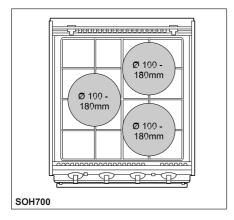
Turn the control knob clockwise to the 0 position to turn off the burner.

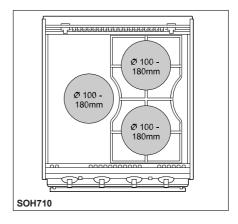


Always make sure the control knob is in the 0 position when you have finished using the oven.

Safe cooking

 Do not allow cooking vessels to overlap the edges of the appliance - use the correct sizes of pans and position them centrally over the burners.





- Ensure that there is at least a 10mm gap between the pans and the edges of the hob.
- Turn the pans so that the handles do not overhang the front of the appliance.
- Ensure that the flame of the gas burner heats the bottom of the pan, not the sides
- The pans and trays supplied with this appliance are the maximum sizes. Do not use larger pans and trays. They may restrict good circulation of heat, which may increase cooking times.
- The oven shelf allows good circulation at the rear of the oven
- A raised bar at the rear of the shelf prevents trays or dishes making contact with the back of the oven.
- To remove a shelf, pull it forward until it stops, raise at the front and remove.
- To place a shelf in the oven, lower it at the front and slide it backward until it stops.
- Do not leave the appliance unattended when in use.
- Do not use the appliance while the vehicle is moving.
- Turn the control knob back to the 0 position after cooking.
- Keep the appliance clean and prevent accumulation of grease and food scraps.

A

Never cover slots or holes in the appliance and never cover a shelf with materials such as aluminium foil. That restricts the airflow and may cause carbon monoxide poisoning.



The food shelves and trays in the appliance are hot during and after use. Allow all parts to cool before touching them, as this can cause serious injury. Always use oven gloves when removing the shelves and trays.

Temperature control

The temperature in the oven is controlled by a thermostatic gas tap and is variable over the range 130°C to 220°C.

The table overleaf provides a guide to the approximate temperatures at each of the shelf positions with respect to the gas mark setting. Good use can be made of the temperature variation between the shelf positions, as several dishes requiring different temperatures may be cooked at the same time. In this way maximum benefit can be obtained from the gas used to heat the oven.

Temperature Zones

Gas Mark				Dish	
1/4 - 1/2	90°C	110°C	130°C	Meringues	
1	110°C	130°C	150°C	Stewed fruit	
2	120°C	140°C	160°C	Rich fruit cake, rice pudding	
3	130°C	150°C	170°C	Baked custard, shortbread finger	
4	140°C	160°C	185°C	Victoria sponge	
5	155°C	180°C	200°C	Whisked sponges, ginger nuts	
6	170°C	190°C	215°C	Short crust pastry	
7	185°C	210°C	220°C	Bread, scones, flaky pastry	
8	200°C	220°C	220°C	Puff pastry	



Care should be taken not to overload the oven, allow adequate spacing to ensure free circulation of heat.



When roasting with aluminium foil ensure the foil does not impair circulation of heat or block any oven flue outlet.

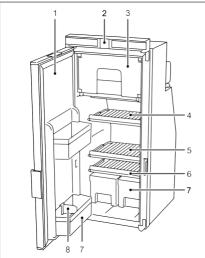
REFRIGERATOR

Safety

- This appliance may be used by children aged 8 years or older and persons with reduced physical, sensory or mental capabilities and/or lack of experience and knowledge only if they are supervised or have been given instructions on the safe use of this appliance and understand the
 potential hazards.
- Keep children younger than 8 years away from the appliance, except under constant supervision.
- Do not allow children to play with the appliance. Children can become trapped and suffocate.
- Do not allow children to clean or maintain this equipment unattended.
- Use only parts supplied by the manufacturer.
- Do not change or adjust anything on the appliance, unless the change is authorised by the manufacturer or its representative.
- Use the appliance for cooling and freezing only and not for anything else.
 Follow the instructions in this manual.
 The manufacturer cannot be held liable for damage resulting from improper use or incorrect setting of the controls. If the instructions have not been followed, warranty claims will not be accepted.
- This appliance is designed for 12V DC supply voltage. Do not attempt to run the refrigerator on any other voltage or means of supply.
- Build-up of dust on the condenser will reduce the performance of the appliance and increase the risk of overheating of the cooling system. Have the condenser and cooling fan cleaned by qualified service personnel if you suspect poor performance.
- Never open or damage the refrigerant circuit of the cooling system at the back or on the inside of your appliance. The cooling system is pressurised and contains flammable substances.

- Do not use electrical appliances in the appliance.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- The maximum load of the large shelf is 12kg and the maximum load of the small shelf is 6kg.
- Never expose the appliance to moisture.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer
- This refrigerator is intended for use in mobile leisure vehicles.

Main Components



- 1 Refrigerator door
- 2 Control panel
- 3 Frozen food compartment
- 4 Storage shelves
- 5 Shelf food retainer
- 6 Vegetable bins
- 7 Door bins
- 8 Bottle retainer

Control panel



- 1 On/off button
- 2 Temperature settings fresh food compartment
- 3 Temperature settings frozen food compartment (dependent on model)
- 4 Night mode button

Before use

Before using the appliance:

- Ensure that all packaging materials have been removed.
- Clean the inside of the refrigerator properly with warm water and household detergent and dry carefully with a soft cloth
- Ensure that the DC electricity supply is connected and turned on.

Switching on the refrigerator

To switch on the refrigerator:

 Push the on/off button and hold it for a few seconds.



- After a few seconds the control panel will change to stand-by and locked mode.
 The blue on/off button indicates the refrigerator is still in function.
- To switch off the refrigerator, push and hold the on/off button for a few seconds.
- For optimal performance, switch on the refrigerator 4 hours before placing food.

Selecting cooling level

To select:

- Unlock the control panel.
- Press the fresh food or frozen food area and hold it for a few seconds until the icons start blinking.



 Slide or press the icons to select the desired level



- After a few seconds, the control panel will save the settings and go to the locked stand-by mode.
- When display is locked, the icons will turn off, only on/off and night mode will stay illuminated.
- Active running time of the refrigerator depends on the temperature, size and state of the battery, electrical load of other devices in the vehicle, content of the refrigerator and frequency of use.

 When the vehicle is exposed to full sun light, it is strongly recommended to apply proper ventilation in the vehicle.

Selecting night mode

The refrigerator will select the lowest noise setting where possible. When the refrigerator needs to run harder (due to higher ambient temperatures and/or warm products), it may result in an increase of noise. You can switch on the night mode to reduce the noise to a minimum. The cooling down time might take longer. The blue light indicates the night mode is activated

- First unlock the control panel.
- Push the night mode button.



Use night mode only when temperatures in the vehicle are below 30°C. The night mode will switch off automatically after 12 hours. When switching off the night mode manually, it will go to automatic temperature control.

Use of the frozen food compartment

For model T2090 only: the frozen food compartment can be used to store perishable foodstuffs or frozen foods.

Refer to Selecting cooling level for more information on the regulated frozen food compartment for the other models.

Never keep carbonated liquids in the frozen food compartment.

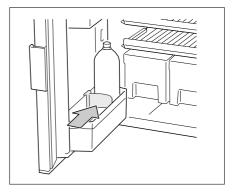
Never eat ice-cubes or popsicles directly out of the frozen food compartment. This can cause burns.

For model T2090 only: the temperature in the frozen food compartment cannot be guaranteed if the refrigerator performs in a vehicle interior temperature below 16°C. Food might defrost. Raise the temperature setting to minimal level 3 if you expect vehicle interior temperatures below 20°C and want to maintain freezing temperature in the frozen food

compartment. As a consequence the temperature of the fresh food compartment will become lower. Raising the vehicle interior temperature will also contribute to a lower temperature in the frozen food compartment.

While driving

 Make sure no products in your refrigerator can move while driving.
 Secure the bottles in the door and/or the drawer with the bottle retainer and drawer dividers. The shelf food retainers hold products on the shelves while driving.

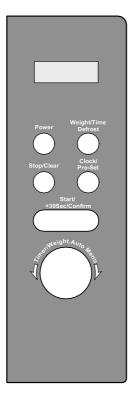


 When you push to close the door of the refrigerator, the door locks automatically. The door lock will prevent the door from opening while driving.

Troubleshooting

Problem	Possible cause	Solution	
	Battery voltage too low	Recharge battery	
Refrigerator is not cooling, compressor	Start delay of 1 minute (no issue)	Wait 1 minute	
will not run at all	Overheat due to high ambient	Turn off refrigerator for 1 hour, vent the vehicle, switch to day mode	
	Vehicle fuse has blown	Check fuse rating, replace with 15A	
Frozen food compartment not freezing	Interior temperature in vehicle is lower than 16°C	Raise the temperature of the vehicle inside and/or select a higher cooling level to minimal level 4	
Refrigerator is not cooling, compressor starts but switches off directly	Overheat due to high ambient temperature	Turn off refrigerator for 1 hour, vent the vehicle, switch to day mode	
Refrigerator is overcooling	Temperature setting too high	Choose a lower temperature setting	
Refrigerator is not cooling, compressor runs continuously	Go to a service centre		
	Overheat due to high ambient temperature	Turn off fridge for 1 hour, vent the vehicle, switch to day mode	
Refrigerator has	Ventilation openings, complete or partially blocked	Clean or remove blockage	
insufficient cooling	Door is not properly closed	Close door, make sure door seal is in good order	
	Too much ice on evaporator (more than 3mm)	Defrost evaporator, make sure door seal is in good order	
	High ambient temperature (more than 30°C)		
Refrigerator makes more noise in night	Warm products have been placed inside the refrigerator placed inside the refrigerator was reached the selected temperature		
mode	Refrigerator is turned on after it has been off for a long time		
	A low temperature setting is selected.		

MICROWAVE (Where Fitted)



MENU ACTION SCREEN Cooking time, power, auto and the clock time are displayed.

POWER Press to select the power level for microwave cooking.

WEIGHT/TIME DEFROST Press this button to input weight for defrosting.

CLOCK/PRE-SET Press this button to input weight for defrosting.

STOP/CLEAR Press to stop the cooking process.

TIMER/WEIGHT . AUTO MENU Rotate to select the cooking time and the auto menus.

START/+30SEC/CONFIRM Press this button to start the cooking process and confirm when programming.

DOOR OPEN Pull the handle to open the door

Microwave cooking

- 1 Press the "POWER" button once and "P100" will display and flash.
- 2 Turn the "TIMER/WEIGHT" to select the microwave power. "P100", "P90", "P80", "P70", "P60", "P50", "P40", "P30", "P20",
 - "P10" and "P00" will display in order.
- 3 Press "START/+30 SEC" to confirm.
- 4 Turn the "TIMER/WEIGHT" dial to adjust the cooking time. (The time setting should be between 0:05-95:00).
- 5 Press "START/+30 SEC" to start the cooking process.

Press power button	Cooking power
P100	100%
P90	90%
P80	80%
P70	70%
P60	60%
P50	50%
P40	40%
P30	30%
P20	20%
P10	10%
P00	0%

To stop the cooking process at any time press the "STOP/CLEAR" button.

For further appliance information please refer to microwave user manual.

SMOKE ALARM

Operation

Normal Condition

The red LED on the front should flash every 40 seconds to show that the alarm is active.

Lower Power Pack Condition

IMPORTANT: Your smoke alarm requires the power pack to have sufficient capacity of power to operate correctly.

Should your smoke alarm enter a low power pack condition, the unit will emit an audible 'chirp' once every 40 seconds. When this occurs, we recommend you replace the alarm immediately. Your smoke alarm will continue to warn of this low power pack for at least 7 days, however, failure to change the alarm after this time would mean your smoke alarm may have insufficient power to alert you in a real fire situation. When the alarm is removed from the base plate the power pack will automatically deactivate and the low power warning chirp should stop, allowing you to dispose of the alarm.

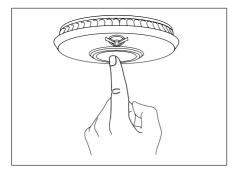
Low Battery Warning Silence

This feature can temporarily silence the low battery chirp for 8 hours which is particularly useful if the warning begins during the night. This feature may be repeated up to 10 times, but is not a substitute for replacing the smoke alarm.

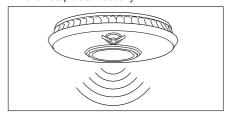
Alarm Test

The alarm must be properly attached to the base plate before it can be tested.

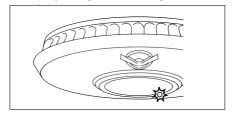
• Press the test button in the centre and release.



 The unit will give an audible alarm consisting of 2 cycles of 3 loud beeps, then stop automatically.



 The red LED on your alarm will flash rapidly during the audible signal.



Note: The test button accurately tests the alarm's smoke sensing circuit, there is no need to test your alarm with smoke. If your smoke alarm fails to give an audible test signal, please refer immediately to the trouble shooting guide at the end of this manual.

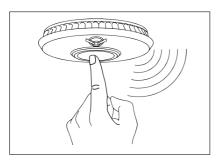
WARNING: You should test your smoke alarm every week.

ALARM SMART SILENCE™

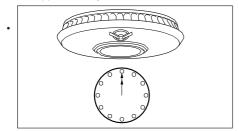
DANGER: If your smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no ongoing fire emergency situation. Do not block the vents on the alarm or disable the smoke alarm in any way, as this will remove your protection. Smoke alarms can sometimes react to cooking fumes or other non emergency situations. Your smoke alarm features "Smart Silence" technology. In the event of a known false alarm your smoke alarm can be temporarily silenced by pressing the central test button. Your alarm will automatically return to full sensitivity within 10 minutes.

Note: If the level of smoke reaching the alarm is very high, the alarm silence will be overridden and the alarm will continue to sound

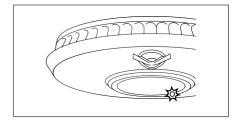
 Press and release the silence button, the alarm sound will shortly stop.



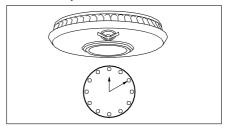
 Your alarm will silence and enter into a reduced sensitivity reset cycle for approximately 10 minutes.



During the reduced sensitivity reset cycle, the red LED on your alarm will continue to flash more rapidly than normal, approximately once every second.



 Your alarm will automatically return to full sensitivity on completion of the reset cycle and the red LED will revert to flashing once every 40 seconds.



DANGER: Never ignore any alarm. Ignoring the alarm may result in injury or death. If your smoke alarm activates and alarms and you are not absolutely certain of the source of the smoke, get everyone out of the caravan immediately.

LOW BATTERY WARNING SILENCE

Low battery warnings often start at night or when it maybe inconvenient to replace your alarm. You can silence the audible chirp for a period of 8 hours by pressing the test button. Your smoke alarm will still detect smoke during this time of low battery warning silence. However, it is recommended that you replace your alarm immediately and certainly within 7 days, as your alarm may then have insufficient power to warn you of a real fire situation after this time

WARNING: Your smoke alarm cannot be silenced if the chirp is indicating a fault. In this instance, the unit should be replaced immediately to ensure protection in the event of a fire.

MAINTENANCE

Your smoke alarm has been designed to be as maintenance-free as possible, however there are several things you must do to keep it working properly.

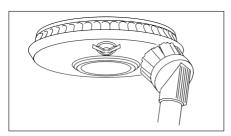
CAUTION: Your smoke alarm is a sealed electrical device and no attempt should be made to open the case. Attempting to open the case will invalidate your warranty.

Testing

Test your smoke alarm once every week see 'Alarm Test'. Any test failures should be reported to the Technical Support Team.

Cleaning

As a minimum your smoke alarm should be cleaned once every 3 months using your vacuum cleaner fitted with the soft brush attachment



WARNING: Your smoke alarm may false alarm when it is being cleaned using a vacuum cleaner.

IMPORTANT: Do not use solvents or cleaners on your smoke alarm, as they may cause damage to the sensor or circuitry. The unit can be wiped with a slightly damp cloth.

CAUTION: Do not paint the smoke alarm as this may block the openings and prevent smoke from entering the sensor.

CARBON MONOXIDE ALARM

Carbon monoxide and how it can affect you and your family

Carbon monoxide is a dangerous poisonous gas that kills hundreds of people each year and injures many more. It is often referred to as the silent killer because it has no odour or taste and cannot be seen. Like oxygen, CO enters the body through the lungs during the normal breathing process. It competes with oxygen by replacing it in the red blood cells, thereby reducing the flow of oxygen to the heart, brain and other vital organs. In high concentrations, CO can kill in minutes.

Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not feeling well, they become disorientated and unable to save themselves by either exiting the building or calling for assistance. Exposure during sleep is particularly dangerous because the victim does not wake up.

Symptoms of CO poisoning

The following symptoms may be related to CO poisoning which all household members should be made aware of:

- Mild Exposure: Slight headache, nausea, vomiting, fatigue (often described as 'flulike' symptoms).
- Medium Exposure: Severe throbbing headache, drowsiness, confusion, fast heart rate
- Extreme Exposure: Unconsciousness, convulsions, cardiorespiratory failure, death

Your CO detector monitors the level of CO as parts per million (ppm) in the atmosphere surrounding the detector.

35ppm The maximum allowable concentration for continuous exposure for healthy adults in any 8 hour period, as recommended by the Occupational Safety and Health Administration (OSHA).

200ppm Slight headache, fatigue, dizziness, nausea after 2-3 hours.

400ppm Frontal headaches within 1-2 hours, life threatening after 3 hours.

800ppm Dizziness, nausea and convulsions within 45 minutes.

Unconsciousness within 2 hours. Death within 2-3 hours.

Should you suspect CO may be affecting you or your family, open the doors and windows of your caravan to ventilate, turn off your appliances and evacuate the premises. At this time the authorities should be contacted to locate the source of the carbon monoxide before re-entering the caravan. Medical attention should be sought for anyone suffering the effects of CO poisoning.

Common sources of CO

- Oil and gas boilers
- Portable generators
- · Oil or solid fuel cookers
- Barbecues
- Clogged chimneys
- · Wood or gas fireplaces
- Cigarette smoke
- Gas appliances
- · Any fossil fuel-burning appliance

WARNING: This carbon monoxide detector is not a combustible gas detector, nor a smoke detector. Please install the proper detectors to detect combustible gases, or smoke.

This CO detector should not be seen as a substitute for the proper installation, use and maintenance of fuel-burning appliances (including appropriate ventilation and exhaust systems), nor the sweeping of chimneys.

WARNING: Variables relating to your fuelburning appliances can change at any point eg. the flue or chimney could suddenly become blocked or damaged, appliances may stop running correctly or circumstances in neighbouring properties may change resulting in the presence of carbon monoxide. For this and other reasons do not use this carbon monoxide detector on an intermittent basis, or as a portable detector or an intermittent basis, or as a portable detector for trying to trace one source of the spillage of combustion products from fuel-burning appliances or from chimneys.

Do not:

- IGNORE ANY WARNING FROM YOUR CO DETECTOR!
- Burn charcoal inside your home, caravan, tent or cabin.
- Install, convert or service fuel-burning appliances without proper knowledge, skill and expertise.
- · Use a gas cooker for heating a room.
- Operate unvented gas burning appliances using paraffin or natural gas in closed rooms.
- Operate petrol-powered engines indoors or in confined areas.
- Barbecue indoors, or in an attached garage.
- Ignore a safety device when it shuts an appliance off.

Always:

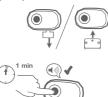
- Buy appliances accepted by a recognised testing laboratory.
- Install appliances according to the manufacturer's instructions.
- Have appliance installations carried out by professionals (for gas appliances engineers should be registered on the Gas Safe register).
- Have your appliances checked regularly by a qualified service engineer.
- Have your chimneys and flues cleaned professionally every year.
- Make regular visual inspections of all fuel-burning appliances.
- Open windows when a fireplace or oil/ solid fuel cooker is in use.
- Only install CO detectors that meet the requirements of EN 50291-1:2018 and EN 50291-2:2019 in your home.
- Be aware of CO poisoning symptoms.
- Educate yourself and your family on the sources and symptoms of CO poisoning and how to use your carbon monoxide detector.

ALARM ACTIVATION

To activate your CO alarm, pull the disabling tab out of the device.

Wait up to 1 minute for the green LED to flash to confirm the device is active.

Press the Test/¶ × button to test the alarm. The alarm will sound. (The alarm will not sound before the 1 minute activation period is complete).



ALARM SILENCE

WARNING: If the cause of an alarm is unknown, ventilate and evacuate your property before using this feature.

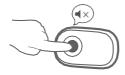
The sounder will stop and enter into Silence mode for 5 minutes.

Note: The alarm will not silence if more than 150ppm has been detected.

Silence mode can only be activated once (until CO returns to negligible levels).

Once the Silence mode is enabled, if the CO level rises above 150ppm the device will exit Silence mode and continue to sound

After 5 minutes if the CO level is still high, the device will continue to sound.



Understanding the products indicators

The higher the concentration of carbon monoxide detected by the detector, the quicker it will respond. When sufficient carbon monoxide is detected a loud audible signal (85 dB at 3m) will be emitted and the Alarm LED will flash red once every second.

The alarm will sound:

- Between 60 and 90 minutes when exposed to 50ppm of CO.
- Between 10 and 40 minutes when exposed to 100ppm of CO.
- Within 3 minutes when exposed to 300ppm or more of CO.

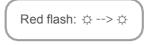
ALARM IN ABSENCE

When a CO alarm has occured in your absence, your device will notify you so that you can take appropriate action at the earliest opportunity.

If the device is not silenced during an alarm, it will continue to sound until the CO level has reduced to below 50ppm.

After which, the device will flash the red warning light twice every 20 seconds to indicate that dangerous CO levels have been detected in your absence.

The red warning light will continue to flash for 7 days if the Test/ ◀ × button is not used to cancel it.



MAINTENANCE

Test the alarm every month. Press the Test button. The alarm will sound.

If the alarm does not sound. Contact Technical Support.

Note: The above method fully tests all elements of the alarm. Additional, but not essential testing may be conducted using the Sense-CO Test mode and CO gas.

To ensure your alarm is tested correctly using low concentrations of test CO gas, please follow these instructions.

- To activate Sense CO testing, triple press your alarm test button. Please note: The request to enter Sense CO mode will timeout after two minutes if no further action is taken.
- Once Sense CO is activated, the CO acquisition task is performed constantly.
 The yellow 'ventilate' LED light will flash once per second and the unit will provide indications if the CO level is >30ppm during the following two minutes.

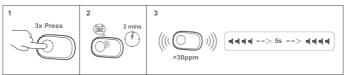
If levels of CO are detected, the alarm will sound four loud beeps, with a five second gap between each beep, before another four loud beeps.

As campervans have an increased risk of carbon monoxide ingress through air vents due to the nearby presence of other vehicles, engines, generators or barbecues, this method of testing is highly recommended for the industry.

Please do not use any other test method than what is detailed in the product manual.

Do not tamper with the alarm as this could cause electric shock or malfunction.

CAUTION: Sensor testing should only be performed by a responsible adult. This test should only be performed annually.



Vaccum your alarm every 3 months. Do not use cleaners or solvents.

Do not paint the alarm.

Replace the alarm every 10 years.

The replacement date can be found next the 'REPLACE BY' marking on the alarm.

SYSTEM STATUS INDICATORS

Your CO alarm constantly checks the accuracy of its sensor and circuitry. All alarms must indicate when there is a fault or if the battery power is low (identified by the ! icon).

If any of the settings are found to be incorrect or if the batteries become low, the device will sound an audible chirp and display an amber flash pattern for up to 30 days.

IMPORTANT: This does not mean that the alarm has detected carbon monoxide. If there is a fault, your CO alarm will display the following fault indication patterns.

	Audible pattern	Amber LED/LCD	Action required
Low battery	1 beep/min	1 amber flash/min	Replace the batteries
Fault	2 rapid beeps/min	2 rapid amber flashes/min	May not detect CO - replace immediately
End of life	3 rapid beeps/min	3 rapid amber flashes/min	May not detect CO - replace immediately

If your alarm is within warranty, contact Technical Support.

Your CO alarm must be replaced immediately if there is a fault or the device indicates End of Life. An alarm with a fault or signalling End of Life may not detect a CO leak.

SLEEP EASY™ SILENCE FEATURE

If a low battery warning 'chirp' occurs at night, it may be inconvenient to replace the batteries or alarm. You can silence the 'chirp' by pressing the Test/ 🗐 x button. The alarm will silence for 8 hours and the amber LED will continue to flash

Note: You can silence your device a maximum of 10 times.

If your alarm is an FA3313 and is signalling low batteries, replace the batteries as soon as possible

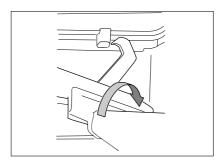
Once the batteries have been replaced, the Sleep Easy feature will be disabled for 30 days.

Note: During Sleep Easy mode the unit still detects CO and will alert you to any new faults.



ROOFLIGHTS

MPK Rooflight (Where Fitted)



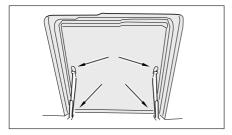
Operation

To open the rooflight, both pleated blinds must be open.

Grip the crossbar in the middle and turn it towards the opening side. Now the rooflight can be opened by pushing the crossbar. As soon as you release the crossbar, the opening mechanism snaps into this position.

To close the rooflight, turn it again and push it back in the opposite direction. When the end position is reached, the rooflight is locked automatically.

- Keep the pleated blinds open when driving to avoid driving noise and damage from the airstream.
- To avoid heat accumulation do not close blind completely during the day.
 Open both pleats when not using the vehicle



Cleaning

For easier cleaning, the dome can be removed from the inner frame by releasing the four plastic split pins.

Do not loosen any screws that are used to fasten the dome or the opening mechanism.

Use only clear water and a soft sponge.

Solvents may attack the plastic and make it brittle.

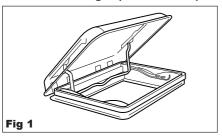
After cleaning, maintain the sliding surfaces with a thin layer of Vaseline or WD40. This makes the extension mechanism glide more easily. The rubber seals can be maintained with talcum powder.

Pay attention that the pins positively click into the locked position when reinstalling the dome. The lever arm pins should be re-installed with the flat side towards the dome

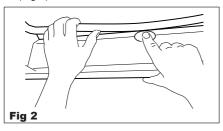
Clean the pleated blinds with a soft brush, dry cloth or feather duster.

We strongly advise against wet cleaning, as this can damage the insect screen and blackout pleated blind.

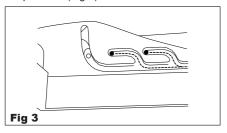
Midi Heki Rooflight (Where Fitted)



(i) To open, push the large central button (Fig 2).



(ii) Whilst depressed, slide the bar to the desired position and locate into the stops provided (Fig 3).



Door Flyscreen

The exterior door flyscreen can be opened or closed from both inside and outside of the Campervan and does not restrict door openings.

When opening or closing the door flyscreen use the finger grip provided.

WINDOWS

Your new Campervan will be fitted with Polyplastic opening windows.

Polyplastic Window Opening

- In order to open the Polyplastic window it is only necessary to move the catch upwards and release the catch from the backing plate.
- (ii) The Polyplastic window should remain in the open position once opened, however if it does not then tighten the friction control on the window stays to increase the holding force.
- (iii) The Polyplastic window is also fitted with a night ventilation position where the catch is set to the centre position on the backing plate; in this position it may be possible for rain to enter the campervan in adverse conditions.

SHOWER

Using your Campervan Shower

To safely enjoy showering in your new campervan, the following guidelines should be used.

- Advise others that you are planning to have a shower and that they should not use other taps whilst you are showering.
- Ensure there is a sufficient supply of cold water available.
- Divert the shower head or move to the side, turn on the shower, carefully test the temperature with your hand and regulate the temperature as necessary before standing underneath the shower.
- Supervise closely the young, elderly and those with reduced mentally or sensory impairment.

CAUTION: Water may be very hot.

TAPS

Kitchen Taps

Your new campervan will be fitted with a mixer tap.

CAUTION: The water temperature could be very high so do not lift the lever with the tap turned to the full left position. For winter storage and to prevent frost damage the tap swivel must be left in the centre up position.

Washroom Taps And Showers

Your campervan is supplied with a combined mixer tap with retractable shower head.

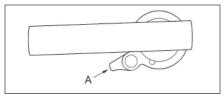
Note:

- The water temperature could be very high so do not lift the lever with the tap turned to the full left position.
- For winter storage and to prevent frost damage the tap swivel must be left in the centre up position.

INTERNAL DOORS

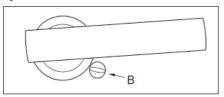
Toilet/Shower Room Doors

Operation from within the shower room



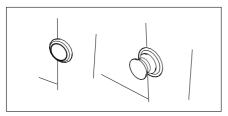
To lock the door, push the small lever down (identified in the drawing as A) then to unlock, push this lever back to the original position.

Operation from outside the shower room



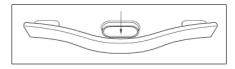
To open and close the door, push the lever down. If the door is locked and needs to be opened, it can be opened by inserting a coin into the lower slot (identified in the drawing B) and turning the slot.

Other Internal Doors



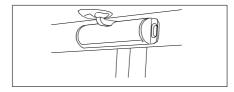
Other internal doors such as the wardrobe and table storage locker are fitted with a 2- position button lock. Push the button to lock the door and the button should remain flush with the door. Push the button again to release and the button should then protrude from the door surface.

Paddle Latch



To open the locker, push the paddle downwards and pull the handle towards you.

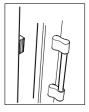
Concealed Latch



To open the locker, press the latch and pull the door towards you.

Magnetic Catches (Where Fitted)

Magnetic catches work on contact with the metal plate on the rear of the door. Simply close the door until the magnet engages and holds the metal plate. Pulling the door towards you with a moderate force will be sufficient to



disengage the magnetic catch and open the door.

THETFORD C-260 CASSETTE TOILET RANGE

Introduction

The Thetford Cassette Toilet is a high quality product. The toilet forms an integral part of your campervan bathroom, thanks to its functional design which combines modern styling and ease of use. The C-260 Cassette Toilet is manufactured from high quality synthetic materials which makes it a durable, user and maintenance friendly toilet.

The toilet is made up of two parts: a permanently fixed part and a Waste Holding Tank that is accessible from the outside. The removable Waste Holding Tank is located under the toilet bowl and can be removed via a door on the outside of the campervan. The Thetford Cassette Toilet is the solution to the sanitary problem in your campervan!

The operating instructions cover Thetford Cassette Toilet models C-260S, C-260CS (models connected to the vehicle's central water tank) and C-260CWE (model with its own flush-water tank). There are differences in the use of these models. Please ensure that you follow the instructions that apply to your toilet model.

Preparing for use (standard)

- Open the access door on the outside of your campervan.
- Remove the Waste Holding Tank by pulling the safety catch (which holds the tank in place) upwards.
- Pull the Waste Holding Tank outward to the stop. Tip it slightly and take the tank fully out.
- Place the tank upright and turn the rotating emptying spout upwards. The emptying spout ensures that the tank can be easily and hygienically emptied.
- 5. Remove the cap, with the measuring cup inside, from the emptying spout and pour the correct dosage of Thetford toilet fluid (see product label) into the holding tank. This avoids unpleasant smells and keeps the inside of the tank clean. Next add approximately 2 litres of water enough to ensure that the bottom of the Waste Holding Tank is covered. Far more information on Thetford toilet fluids, see

last page of this manual. Screw the cap back onto the emptying spout and turn back to its original position.

Note: The Emptying Spout Measuring Cap is supplied in the same packaging as this manual

WARNING: Never add toilet fluid directly via the blade or the toilet bowl as this could damage the lip seal of the Waste Holding Tank. Always pour the fluids via the emptying spout.

 Slide the Waste Holding Tank back into its original position via the access door. Make sure that it is secured with the safety catch. Close the access door and lock it. Your Thetford toilet is now ready to use

WARNING: Never use force if you cannot get the tank back into place easily. This may cause serious damage. If blockage occurs, always check if the blade handle is in the correct (closed) position.

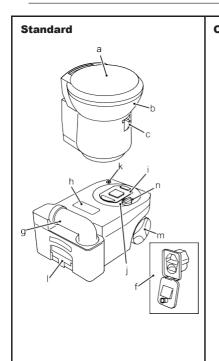
7. For toilets with own Flush-Water Tank: Open the water filling door and fill the flush-water tank with the correct dosage of Aqua Rinse. This Thetford toilet fluid keeps the flush water fresh and improves the flushing. Next, fill up the flush-water tank with clean water (approximately 8 litres) using a ferry can or hose. Your toilet is now ready to use.

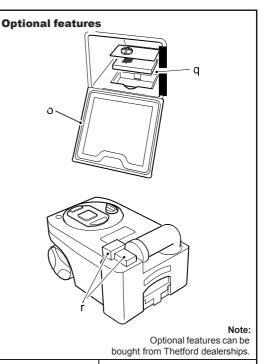
Preparing for use with Optional Features

- Automatic Ventilator: Open the access door on the outside of your campervan and remove the Waste Holding Tank (as described above).
- Remove the filter housing cover and if no filter is present, place a new filter into the filter housing. Peel off the sticker lids on the filter. Place back the cover of the filter housing.

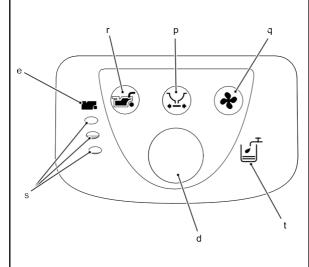
Using the toilet (standard)

- 10. Turn the bowl to the desired position with the lid closed and using both hands.
- 11. To activate the control panel, press the flush-button once. The control panel display will stay activated for approximately 5 minutes. Run some





Control panel (with optional features)



PARTS

- a) Removable Seat and Lid
- Swivelling Toilet Bowl
- c) Blade Handle
 - d) Flush Button
- e) Waste Holding Tank Level Indicator
- f) Water Filling Door (only if toilet has own flush-water tank)
- g) Rotating Emptying Spout
- h) Automatic Pressure Release Vent
- i) Sliding Cover
- i) Removable Mechanism
- k) Vent Plunger
- I) Pull-out Handle
- m) Wheels
- n) Blade Openener
- o) Access Door to Waste Holding Tank

Optional Features

- p) Electric Blade
 - Automatic Ventilator
- r) Waste Pump-Out System
- s) Waste Holding Tank Multi-Level Indicator
- t) Flush-Water Tank Level Indicator (only if toilet has its own flush-water tank)

- water into the bowl by pressing the flush button again briefly.
- 12. The toilet may be used with the blade open or closed. To open the blade, slide the blade handle under the toilet bowl sideways. After use, open the blade (if still closed) and flush the toilet by pressing the flush button for several seconds (if necessary re-activate the control panel). Close the blade after use.

WARNING: If your toilet has its own flush-water tank, please make sure that you do not travel with a flush-water tank that is too full. Do not travel with water in the toilet bowl. Failure to adhere to this notice may result in water damage to your campervan.

Using the toilet with Optional Features

- 13. Electric Blade: Push the electric blade button on the control display to electrically open or close the blade. In the case of failure, you can manually open or close the blade by sliding the small handle under the toilet bowl sideways.
- 14. Automatic Ventilator: The ventilator automatically starts when the control panel is activated (by pressing the flush button) and will automatically shut off after approximately 5 minutes. The Automatic Ventilator Indicator will flash until automatic shut-off occurs. If you want to stop the ventilator, press the Automatic Ventilator button. If you want to re-start the ventilator, press the button again (the LED will start flashing again).
- 15. Flush Water Tank Level Indicator (only for toilets with own flush-water tank): When the Flush Water Tank Level Indicator lights up, refill the flush-water tank, as only about 1.5 litres of water is left in the tank, which is sufficient for approximately 2 flushes.

Emptying

The Waste Holding Tank has a capacity of 18 litres and requires emptying when the red light (LED) on the toilet control display lights up, when the Waste Holding Tank only has capacity for approximately 2 more litres,

which is no more than two to three further uses.

Make sure that the blade is closed. Open the access door located outside the vehicle, pull the safety catch upwards and remove the Waste Holding Tank.

- 16. Place the Waste Holding Tank in an upright position (Pull-Out Handle at the top, Wheels at the bottom). Slide the handle sideways to the front of the tank until it snaps out of its locked position.
- Pull the handle up and wheel the Waste Holding Tank to an authorised waste disposal point.
- 18. Push the handle back into its locked position. Turn the emptying spout upwards and remove the cap from the spout. Hold the Waste Holding Tank in such a way that during emptying you can operate the vent plunger with your thumb. To empty the tank without splashing, depress the vent plunger while emptying the tank. After emptying, rinse the tank and blade thoroughly with water.

WARNING: Do not seriously shake the tank or use high pressure water cleaners. This may cause damage to the tank's interior.

Note: The vent plunger should only be depressed once the emptying spout is pointing downwards. Prepare the toilet for reuse if required. Slide the Waste Holding Tank into the toilet and close the access door.

Emptying with Optional Features

19. Waste Holding Tank Multi-Level Indicator: The lower lamp indicates that the Waste Holding Tank is almost empty; the middle lamp indicates that it is more than half full; when the upper lamp lights up, the tank needs emptying as it can only take 2 - 3 further uses.

Note: The Waste Holding Tank Level Indicator will flash when the holding tank is not present. In this case the toilet will not flush.

20. Waste Pump-Out System: When

activating the control panel this feature automatically lights up. When the Waste Holding Tank Level Indicator illuminates. press the Waste Pump-Out button to pump out the waste from the holding tank into the vehicle's waste tank. The button will flash while the waste is being pumped and will stop automatically (after approximately 5 minutes) when all waste has been transferred. If the vehicle's waste tank is full, the Waste Pump-Out light will flash rapidly and no pump-out will be possible until the central tank is emptied. (Check the level of the vehicle's waste tank on the vehicle's central console). After the Waste Holding Tank has been emptied, there will be approximately 1.5 litres of waste left in the tank. This is normal. Add 2 litres of water and a correct dosage of Thetford toilet fluids to the Waste Holding Tank.

CAUTION: It is vital that the correct amount of toilet fluid is added to ensure the proper breakdown of the waste in the holding tank. Only use the system when the tank is full. Using the system too often on an empty tank can cause damage to the pump, which could cause the system to fail.

Cleaning and Maintenance

The toilet should be cleaned and maintained regularly, depending on the amount of use. To clean Thetford toilets, we advise using water and Thetford Bathroom Cleaner.

Note: Never use bleach, vinegar or other powerful household cleaners that contain these substances. These may cause permanent damage to the seals and other toilet components.

Toilet Bowl

- Squirt Thetford Bathroom Cleaner into the toilet bowl.
- Flush the toilet bowl with water and wipe down the rest of the toilet with a damp cloth.
- Clean seat and lid The seat and lid can easily be removed: Lift the seat and lid assembly and pull the round pins (inside the assembly) outwards from the pin holes. After cleaning, replace the seat

- and lid by positioning the round pins in front of the pin holes and push the lid and seat downwards
- To keep your flush water fresh and to prevent deposits from forming in your toilet bowl, add a correct dosage of Aqua Rinse in your flush water tank, if present, on your toilet.

Tip! For a really shining toilet, dry with a soft dry cloth after cleaning.

Waste Holding Tank

To keep your Waste Holding Tank fresh and clean, Thetford has developed a number of different toilet fluids. Thetford toilet fluids suppress smells, reduce formation of gas, promote breakdown of toilet waste and increase the life span of a mobile toilet. We advise a thorough cleaning of the Waste Holding Tank once each season. Next to using Thetford's Cassette Tank Cleaner, the powerful cleaning agent for the periodical cleaning of the Waste Holding Tank of your toilet, we suggest the following: -

- Remove the removable mechanism from the Waste Holding Tank by turning it anti-clockwise and rinse it under a tap.
- Remove the cover plate from the Automatic Pressure Release Vent by prising it up using a small screwdriver. Use one hand to push the Automatic Pressure Release Vent open while holding the float of the Automatic Pressure Release Vent on the inside of the tank with the other hand. Push the float upwards, turn it 180 degrees and remove it from below. Remove the rubber seal underneath the float. Rinse the float and rubber seal under a tap. Replace the rubber seal and float for the Automatic Pressure Release Vent using the same method in reverse.

The rubber seals in the toilet (the lip seal, the mechanism seal, the automatic pressure release vent seal and the cap seal) should be regularly cleaned with water and treated with Thetford High Grade Seal Lubricant. This will ensure that the seals remain flexible and in good condition. If the toilet is not to be used for any length of time, it is important to treat

the seals with Thetford High Grade Seal Lubricant after cleaning.

Note: Never use Vaseline or any vegetable oil except olive oil. These may cause leakage or malfunction. The lip seal is a part of the toilet that is subject to wear. Depending upon the extent and manner of use, the seals will become less effective and will need replacing periodically.

Cleaning and Maintenance for Optional Features

- Automatic Ventilation: The filter of the Automatic Ventilation needs to be renewed periodically. After approximately 4 full weeks of use, the filter loses its absorption power.
- Pump-Out Waste System: To ensure optimal functionality of the Pump-Out Waste System, periodical maintenance of the tube and pump is recommended. After emptying the Waste Holding Tank completely, fill it with clean water and empty it again. This will clean the pump and the hose. Do this once every 3 weeks when on holiday. This should ensure proper operation of the system.

Winter operation

You can use your Thetford Cassette Toilet as normal in cold weather as long as the toilet is situated in a heated location. If there is a risk of freezing we advise that the toilet is drained by following the instructions under 'Storage'. For environmental reasons the use of antifreeze, such as that used in car radiators, is not recommended

Storage

It is important that you follow the instructions below if you do not expect to use your Thetford toilet for a long (winter) period.

- Activate the Control Panel by pressing the flush button. Open the blade and press the flush button until water stops flowing into the bowl. Close the blade. Open the access door on the outside of your campervan and empty the Waste Holding Tank at an authorised waste dump. Follow the instructions for cleaning and maintenance. To allow the Waste

Holding Tank to dry, do not place the cap back on the emptying spout of the tank.

21. If the toilet has its own flush-water tank. place a sufficiently large bowl under the drain tube to catch the remaining water from the flush-water tank and remove the drain plug. When no more water exits. put the drain plug on the drain tube, put it back in its original position and close the access door. If the toilet is connected to the vehicle's water tank, please follow your vehicle's instructions for draining the central water system. If your toilet is optionally featured with a Waste Pump-Out System, take out the Waste Holding Tank and completely clean it (see Cleaning and Maintenance). After cleaning, fill it with water, put it back and empty it via the waste pump-out system. Repeat this twice.

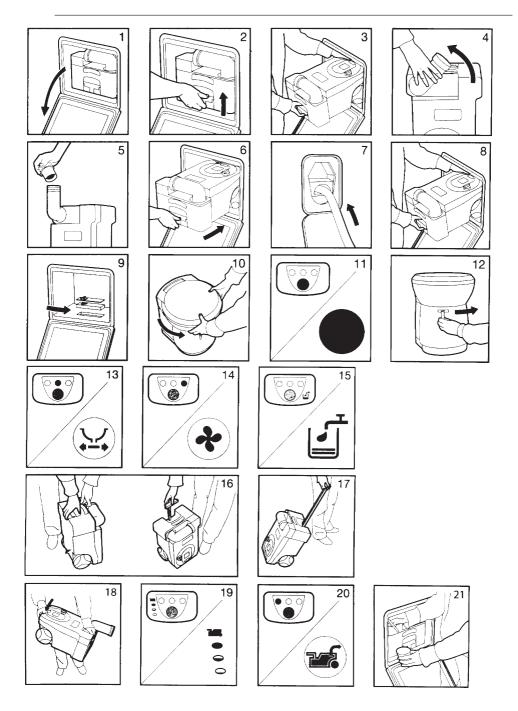
Toilet unit malfunctions

Contact your dealer or a Thetford Service Centre.

We advise draining the fresh water tank prior to travelling. Antifreeze should not be required if the campervan is heated. If you do wish to use antifreeze, brands containing the following properties may be used in the fresh water tank:

- · Ethylene glycol
- Mono-Ethylene glycol
- · Propane-diol
- Glycerol
- · Ethane-diol
- Glycol

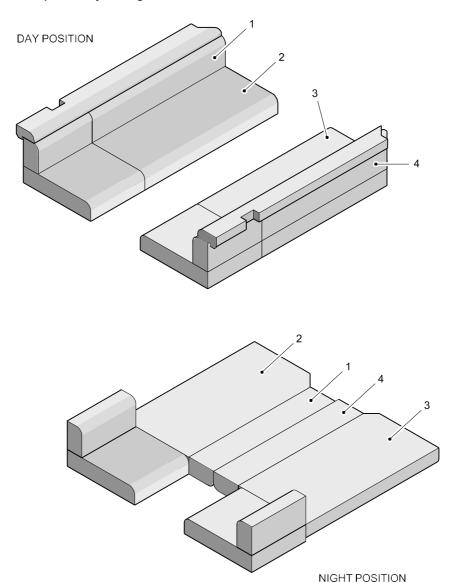
Never use alcohol based antifreeze, i.e. Methanol, Ethanol, and Iso-propanol.



HOW TO MAKE UP YOUR BEDS

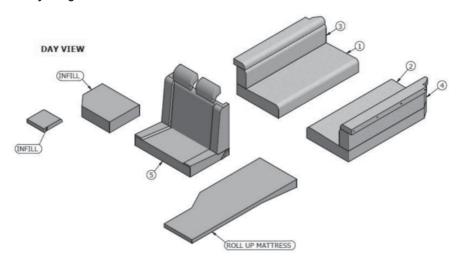
The double bed is made up by lifting the two side beds up and pulling them together to meet in the centre.

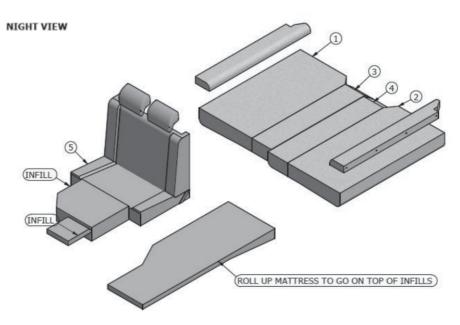
Campervan Day and Night



HOW TO MAKE UP YOUR BEDS

Day & Night - CV40

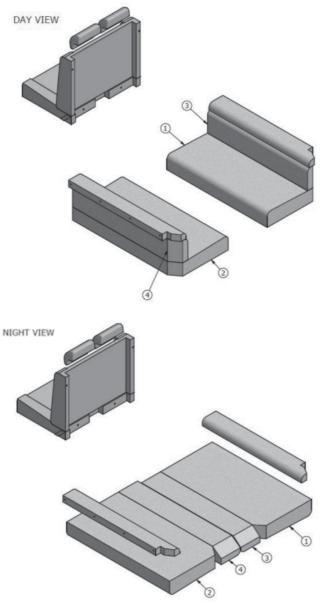




N.B. Turn driver seat 90 degrees anti-clockwise to make up front bed

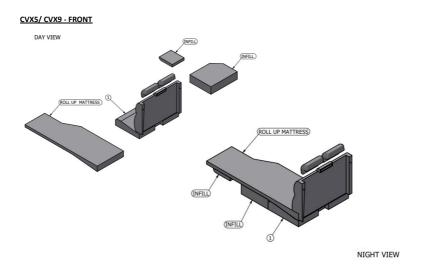
HOW TO MAKE UP YOUR BEDS

Day and Night - CV80

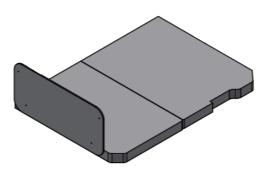


HOW TO MAKE UP YOUR BEDS

Day and Night – CVX5/9



CVX5/ CVX9 - NIGHT VIEW (REAR CABIN)



How to use your Pop Top - (Where Applicable)

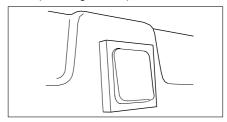
- Danger to life due to lightning.
 Do not sleep in the pop top roof during a thunderstorm. With a lightning strike people in the pop top roof can be fatally injured.
 - Do not use your pop top in severe weather conditions.
- Before each journey, check that the pop top roof is fully closed, secured, and locked against automatic opening. An incorrectly closed or unsecured roof could in worse case re-open causing damage during a journey. The top could be torn off and cause severe damage to the vehicle and to third party property.
- Close the pop top roof only when the tent fabric is dry.
 - If the roof must be closed with a damp tent fabric the roof should be re-opened as soon as possible so that the tent fabric can dry out.
- Before closing the pop top roof, always close the zips and the velcro straps at the ventilation openings.
- When opening and closing the roof make sure there is a window open or the entrance door is open. This prevents the build-up of air. If there is an air jam, the tent material could be damaged by the mechanics or the roof will not open in the correct manner.
- Make sure that the tent fabric is not trapped between the roof and the vehicle roof when closing.
- If the vehicle is not used for a long period of time:
 - Open every 3 weeks to ventilate well when the vehicle is not in use.
 - Use Dehumidifier (granules).
 - If the humidity in the interior is increased over a long period of time stains and mould can form.
- For additional ventilation, openings in the tent fabric of the roof can be opened by using the zips and velcro.
- When the roof is closed, it is held to the left and right by an additional belt lock.

Opening The Pop-Top Roof

• Open the belt locks on both sides by pressing the red button.

Firstly release the electrical locks triggering via buttons:

- Push-button must be pressed for a minimum of 2s so that the locks are unlocked
- Time window of 5s, during this time the roof can be opened by hand, use the handles on the roof to push to roof in an upward manner. An additional pole is also supplied to aid the opening of the roof. Use this to push the roof open when you cannot reach by hand.
- If you do not open the roof within 5s the closures snap back in and will be locked again.
- Lock the opening when D+ is active (vehicle ignition on).



Signalling Alarm:

- If ignition is active and a lock is open: Alarm beeps every 2s.
- After 30s of the initial alarm:
 Alarm beeps every 0.5s.
- Signalling is switched off when the ignition becomes inactive again or both locks are closed.
- Push the roof evenly on both handles until it moves upwards on its own.
- When opening and closing the roof make sure there is a window open or the entrance door is open. This prevents the build-up of air. If there is an air jam, the tent material could be damaged by the mechanics, or trapped preventing the roof from opening and closing in the correct manner

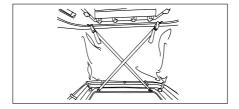
Emergency Release of Electrical Locks

- Open the zip in the fabric surround at the bottom.
- Pull on both the side cables (red button), located on the locks and push roof slightly upwards until released.

Wind Protection

The additional straps can be used to provide additional support in stronger winds, with the following procedure:

- Pull out the belts completely
- Hang the locks diagonally
- Fully open the roof
- Tighten straps until they are slightly tensioned



Ladder

The bed area in the pop top roof is only accessible via the ladder supplied. The ladder is foldable and must be unfolded/extended before use.

Ladder use:

- Unfold the ladder.
- Hook the ladders into the hanging blocks on the moulding of the pop top roof.
- Turn the 'locking' mechanisms which will secure the ladders in place when in use.
- Reverse the procedure when not in use.
- Store away under the fixed rear bunks to prevent accidental damage or injury whilst the vehicle is in motion.

Ventilation

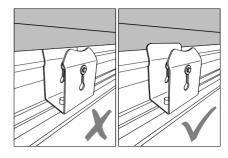
When the roof is open, the fabric can be dropped for ventilation.

Open ventilation:

- Loosen the velcro on the fabric surround, roll up and fasten with the velcro straps.
- A mesh fabric will still be in place as a protection against insects.

Close ventilation:

- If for any reason the fabric surround has been unzipped around the bottom, zip this back up closing the front centre.
- When closing the zip make sure that the fabric flap that protects the zip does not hang over into the lock receiver bracket.



- Loosen the velcro straps, unroll the fabric and push back in place using the velcro.
- In addition, the rooflight permanently fitted in the pop top provides fixed ventilation, this not only provides the pop top with ventilation but also the full vehicle.

Closing The Pop Top Roof

WARNING: It is important to ensure that no items (including bed covers, pillows and cushions) are stored inside Pop Top bed area when closing.

Items left in-situ can compromise the closing of the roof and may result in damage of the fabric surround and/or roof mechanisms.

 Slowly pull down the roof using the fabric belt provided so the roof remains independently in this position. In doing so, ensure that the left and right sides of the roof are led down parallel.

CAUTION – Please ensure hands are clear of the closing areas.

- The fabric surround will fold. Ensure the tent fabric is not trapped between the pop top roof and the vehicle roof when closing.
- If the fabric is not pulled inwards then the roof should be reopened and closed slower
- With the roof half closed, pull the tent fabric inwards using the tabs.
- Pull down on both sides using the handle until the lateral locks snap in place.
- Maintain control of the roof throughout the closing process using the handles provided.
- CAUTION: the final part of the closing the roof will shut with significant force due to the weight of the pop top roof unless suitably controlled.
- Click the two parts of the fastening strap together.
- Tighten the straps once clicked together.

Fall Protection

Please ensure the net protection provided is always in use when using the pop top bunk area.

Pull the net from under the mattress and attach it to the brackets provided. Ensure the net if firmly in position and cannot accidentally be moved from that position.

Additional Safety Advice

Children from 0-6 years old are only allowed to use the roof under supervision.

HOW TO OPERATE REAR STORAGE UNIT

CVX5/9



WING OMNI-DIRECTIONAL TV ANTENNA

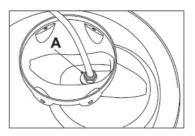
Operating Instructions

- Switch on the amplifier using the on/off switch
- Turn the dB dial of the amplifier clockwise to increase the gain of the TV signal received.
- Tune your television to a channel available in the area where you are located.

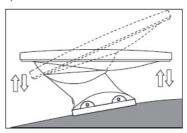
Changing the slant of the antenna

Should the roof of the vehicle not be flat, we suggest you change the slant of the antenna so that it is parallel to the ground when installed. In fact, in order to give its best performance, the la antenna must be:

- Far from any obstacles which can hinder the passage of TV signals (for example trunk holders, air conditioners, etc.)
- In a horizontal position. One should also bear in mind that TV signals diminish considerably beneath trees and reception can be poor or even non existent.



Loosen the nut (A) slightly (by one quarter of a turn).



:au the antenna on the roof and slant it until it becomes horizontal. Tighten the screws (A) again and fasten the antenna to the base.

Wiring connections

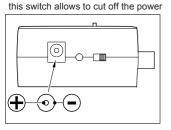
Band: 40-780 MHz

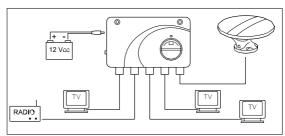
Max. Gain FM + DAB 25 dB/UHF 25 dB

Power supply: 12-24 Vdc

- 1) Cut the antenna cable to the proper length and apply the connector. Make sure no wire of the braiding touches the core of the cable.
- Fit the antenna connector into the relevant input of the amplifier and then connect the TV sets using two pieces of cable.
- Connect the AT 412 LTE to a 12 (or 24) Volt battery. Make sure you do not mix up the + and clamps.
- 4) Look at the TV set and adjust the sensitivity of the antenna by turning the "dB+" handle until you get the best image.

If the amplifier is connected to the battery,





THULE STEP

Read this installation instruction and the safety instructions in appendix thoroughly. No guarantee will be allowed for damages caused by wrong installation or operation.

Operation

- The Thule Step is operated by the lever switch
- Maximum static load is 200kg.
 Note: Hold the switch until the step is fully extended
- Never use the step when retracted or not fully extended, or the blocking will not work and the motor can be damaged.
- Always check that the step is fully retracted before departure.

Safety instructions

Read this safety instructions thoroughly, before starting up the device and store it in a safe place. If the device is handed over to another person, this manual is to be handed over along with it.

CAUTION: Safety Instruction: failure to observe this instruction can cause material damage or personal injury and impair the proper functioning of the device.

CAUTION: Safety Instruction relating to danger emanating from electrical currents or voltage: failure to observe this instruction can cause material damage or personal injury and impair the proper functioning of the device.

The manufacturer will not be held liable for claims for damage resulting from the following:

- Faulty assembly or connection
- Damage to the appliance resulting from mechanical influences and excess voltage
- Alterations to the device without express permission from the manufacturer
- Use for purposes other than those described in the operating manual

WARNING: To prevent short circuits, always disconnect the negative terminal of the electrical system before working on the vehicle. If the vehicle has an additional battery, its negative terminal should also be disconnected.

WARNING: Inadequate supply cable connections could result in short circuits with the consequence that:

- cable fires occur
- the airbag is triggered
- · electronic control devices are damaged
- electric functions fail (indicators, brake light, horn, ignition, lights)

CAUTION: Installing the wrong fuse can cause cable fire in case of a short circuit or malfunction!

Maintenance

Dirt and frost can prevent the Thule Step from operating properly. In this case the moving parts should be cleaned or defrosted. Keep the footboard clean and check the operation of the switch regularly.

It's possible to take out the footboard in order to clean the step inside.

- Retract the footboard by the lever switch, when possible not fully. Disconnect the power to the step.
- Disconnect the 2 drive rods from the footboard by removing the clips at the bottomside of the footboard.
- Take away the 2 black stops with the screws at the outside
- · Take out the footboard and clean.
- Brush the inside of the step and remove the dirt with a vacuum cleaner. Never use a high pressure cleaner or water.
- First reconnect the driving rods. Followed by fixing the endstops.

In case of electrical failure

If the step does not retract by motor: it's possible to take out the footboard: see maintenance. **Note:** Never retract or extend the step by hand without this mechanical disconnection.

Current drawn

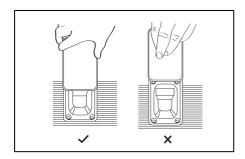
The Thule Step motor uses 2A during operation. **Note:** If the switch is kept pushed when fully extended or retracted, it uses 9A.

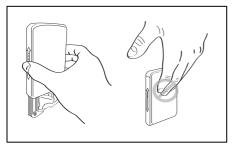
Accessories

- Electronic control unit (308812) for automatic extension and extraction when opening or closing the door.
- Relay for automatic retraction (x10) (308200) that prevents operation of the Thule Step and keeps it retracted whilst driving.

Whale Easi-Slide Socket

How to open the socket lid





Safety Information

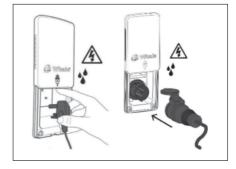
This appliance is **not** intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- Children must be supervised to ensure that they do not play with the appliance.
- Any alteration to the appliance, misuse or use of non-original Whale parts may invalidate the warranty. Non observation of the installation and operating instructions will lead to cancellation of the warranty and exclusion of liability claims. It also becomes illegal to use the appliance if incorrectly installed, and in some countries may make it illegal to use the vehicle

Additional Safety Information for Main In, Mains Out and Multimedia 3 in 1 Sockets (Where Applicable)

All work must be carried out by a competent person as defined by BS7671 Part 2/IEC 60364

Safety



- If the mains in or out supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- · For use in recreational vehicles only.

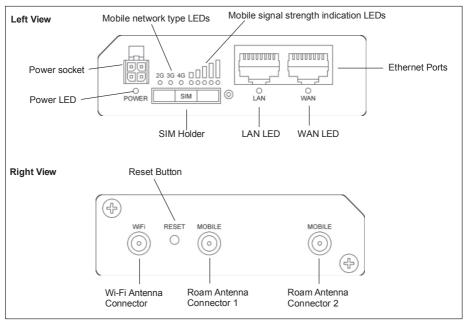
Additional Safety Information for Onboard Tank Fill, On Board Tank Fill +12v and Water In / Out Sockets (Where Applicable)

- For use in recreational vehicles with a typical water system pressurised up to 3 bar.
- When using the Water In Socket, Whale recommends that you keep the o-rings lubricated for easy and secure connection/removal of the plug to socket. Use a water-based lubricant such as silicone grease. Please note: Do not use vaseline or vegetable oil to lubricate o-rings.

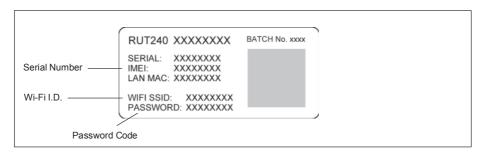
Mobile Internet (Option)

If this option is applicable, your router has already been installed in the optimum position within your vehicle. The location of the internal router may vary depending on vehicle layout. The information below outlines the basic setup and how to get online. For more detailed information, please refer to the manufacturers operating instructions supplied with your vehicle.

Get to know your Router



Credential Router Sticker (located on the reverse of the Router)



Getting Online

Now your Roam is installed and you have inserted the SIM card, its time to get connected. To do this, you will need to be using a device which can connect to a Wi-Fi network such as a smart phone, Smart TV, tablet or laptop.

1. Turn on router and allow 2 to 3 minutes for the router to boot.

When ready, the router name will be visible in your devices Wi-Fi settings.

09:26 4

Device Settings



- Enter the password for "RUT240,5CD"

 Cancel Enter Password Joint

 Password

 Visu can also across that Whi-I network by bringing your Physics research Phone, they are the that has connected to this network and has you in its contacts.
- Wi-Fi

 Wi-Fi

 ✓ RUT240_8CD7

 © 14 ♥ ①

 Other Networks

 Ask to Join Networks

 Auto-Join Hotspot

 Ask to Join 3

 Actor Bist divice in automatically discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots when no Wi-Fi naturality discover was by personal hotspots.

4 4G

- Navigate to your devices Wi-Fi settings and view available Wi-Fi networks.
- The Roam router will be displayed as RUT240_XXXX. The last 4 characters will be unique to your Roam router.
 If more than one Roam is being used within close proximity, the Wi-Fi network name is displayed on the back of the router.
- Once you select this network, you must enter the password. This is also printed on the back of the router.

Note: Password is case sensitive

 You are now connected and can begin using your Roam.

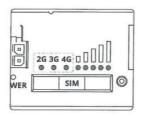
Factory Reset

At any time, the Roam router can be reset to its factory settings using the reset button on the side of the router. This will restore all settings on the router, including:

- Router SSID (network name) and password to those listed on the back of the router.
- Web User Interface to the username and password listed on the front of the router.
- All custom settings will be deleted, including any Wi-Fi connections you may have added.



 To complete the factory reset, press and hold down the reset button with the supplied pin needle.



2. Hold for 6 seconds, until all of the green LEDs on the side of the router are on

Once released all 5 signal strength LEDs will flash together.

This indicates the start of the reset process.

Note: If you don't hold long enough, the router will restart but not reset.



 Allow 3 minutes for the router to reset.
 Once reset the Wi-Fi network will be visible and available to connect to.

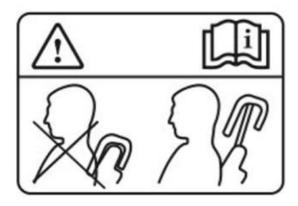
ISOFIX Child Seat Restraint (Where fitted)

Your vehicle is fitted with ISOFIX anchor points that accommodate universally provided ISOFIX child seats. These points are located on the forward facing travel seats & seat frame.

The ISOFIX system compromises of two rigid attachment arms on the child seat that attach to anchor points on the rear of seat frames. Located where the cushion and backrest meet.

For ISOFIX child seat installation please refer to child seat manufactures fitting instructions.

Fixed travel seat headrest (Where fitted)



The headrest must be locked in a user – position while driving.

Solar Panel Regulator (Where fitted)

Safety Instructions

To protect you from electrical shocks, injury or burns the following basic safety principles must be observed when using electrical devices. Please read and follow these instructions before using the device.

Installation

Ensure that the devices are fixed with all 4 mounting holes safely and cannot fall. Always position the cables to ensure they do not pose a tripping hazard. Do not expose electrical devices to rain. Do not operate electrical devices in damp or wet environments. Do not operate electrical devices close to flammable liquids or gasses.

Protection against electrical shocks

Only operate devices with undamaged casings and cables. Ensure the cables are installed safely. Do not pull on the cables.

The solar panel generates power when light is cast on it. The full voltage is also available even if there is little light. The open circuit voltage may be twice as high. Do not touch any live parts. Cover solar modules with e.g., cardboard, before mounting and installing, or disconnecting.

Use

This device has not been designed for use by people (including children) who have restricted physical, sensory, or mental abilities or a lack of experience and/or knowledge, unless they are supervised by a person responsible for their safety or have received instructions from that person as to how the device is to be used.

Children should be supervised to ensure they do not play with the device.

Do not use electrical devices for purposes other than those stated by the manufacture. The ventilation slits in the housing must be free and may not be covered by luggage, towels, or clothing etc.

Caution

Batteries may generate explosive gases during charging and operation. Keep away from flames and ignition sources. Ensure these is sufficient ventilation in the battery chamber.

Repairs

Do not repair or modify the device. Please contact your dealer or the Truma Service see www.truma.com or 01283 587960

Accessories

Only use accessories and additional device that are supplied or recommended by the manufacture.

Intended use

Increased capacity with manufacture's written approval. The solar dual battery charger controller only serves to charge 12vDC lead accumulators comprising 6 single cells (for example leisure battery) with a capacity of 80 – 110* Ah (SDC12) or 80 – 200** Ah (SDC25). The device was developed for connection to solar modules. Only use suitable modules for example Truma SM 25, 40, 65, 80, 100, 120, 150 or 180. Observe the maximum voltage and power draw values. The preferred application fields for the automatic charger are batteries with gel, AGM or liquid electrolyte.

The device is designed for installation a dry indoor environment.

Improper use

 $oldsymbol{\Lambda}^{\scriptscriptstyle\mathsf{T}}$

The device is not suitable for charging.

- 6 V batteries or 6 V Lead accumulators
- non-chargeable batteries
- nickel-cadmium batteries

If batteries with a rated voltage of 6 V are charged with the device, gassing occurs immediately. An explosive gas can be created.

The device is only suitable for regulating solar modules. Do not connect any other voltage sources (for example main voltage 230vAC or 24vDC) to the device. This may destroy the device and/or sources. If any other voltage sources are used together with the device, please ask your dealer.

Battery care (also, maintenance-free batteries)

The following points should be observed to extend the battery life:

- Batteries should be fully charged before and after being used.
- In the case of longer standstills (without sunshine), disconnect the battery and charge separately for 24 hours at the latest every 12 weeks.
- Note: before disconnecting a leisure battery or vehicle battery, a competent person must first switch off any central control (power distribution) devise and remove the charge controller supply fuse OR cover the solar panels to prevent power generation.



Store fully charged batteries in a cool but frost-free place during the winter and recharge regularly (every 12 weeks).

Device elements

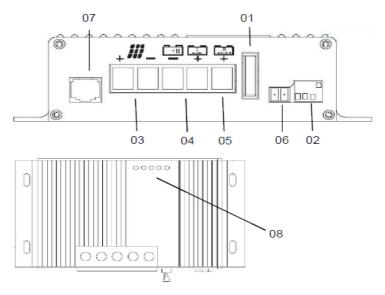


Fig 1: Device elements

- 01 Main Fuse 20amp SDC12 40amp SDC25
- 02 DIP switches for battery type selection
- 03 Solar input terminals positive & negative
- **04** Main battery output terminals positive & negative
- **05** Starter battery output terminal positive only
- 06 Temperature sensor socket (sensor optional)
- 07 LCD meter socket (LCD meter optional)
- 08 Status indication LED's

Function

The device is a MPPT, or maximum power point tracker, an electronic DC to DC convertor that optimizes the match between the solar panels (PV panels) and battery. This allows high performance combined with a light weight and small dimensions. By virtue of the high-quality electronics, it works highly efficiently. The automatic charging process preserves the device and does not overcharge the batteries. This in turn extends the service. life of the batteries. This in turn extends the service life of the batteries significantly. It is suitable for batteries with liquid, gel or AGM technology and has settable charging current distribution for two separate battery connections.

The device is capable of continuous operation and parallel mode. Consumers can be continuously connected, switched on or disconnected. Consumers are supplied and the batteries are charged at the same time via the battery. The consumer current here should be smaller than the solar charging current as otherwise the battery will not charge.

If the device is operated in conjunction with an external temperature sensor for the supply battery (battery 1), the device regulates the charging voltage automatically depending on the battery temperature. This ensures particularly effective and gentle charging of the battery. If an external temperature sensor is not used, the device regulates the charging process based on the internal temperature sensor

The supply and starter batteries can be charged by connecting one or several solar modules. Please observe the maximum voltage and power consumption values detailed on the controller reverse. This type of connection should be completed in parallel.

Charging process

The device has an electronic reverse input voltage, reverse current and solar short-circuit protection. The charging current is only released (see "charging diagram") if the battery is connected correctly and there is enough power available from sunlight. When a temperature sensor is used, charging takes place in a temperature-dependent basis.

Boost phase

Charging with maximum available solar charging current until the charging end voltage is reached.

Float phase

The charging voltage is set to 13.8v for GEL type, see battery charging table for other types. The charging current drops to the value necessary to compensate the self-consumption of the battery. Power is still supplied to the consumers via the battery. If the consumed current exceeds the available solar charging current, the charging process can no longer be maintained.

If the battery voltage drops below the selected battery type voltage, the device automatically switches to the boost phase, if there is adequate solar charging current.

Partially Discharged Batteries

(only for AGM and liquid electrolyte battery type)

In contrast to other battery types, batteries on lead basis do not have any harmful memory effect. Consequently: In case of doubt, partially discharged batteries must be charged fully as soon as possible.

Always store only fully charged lead batteries. Recharge them periodically, partially in case of used (older) batteries and higher temperatures.

- Liquid electrolyte batteries can create explosive gases, so ensure there is adequate ventilation. Check the liquid level at regular intervals. Over charging can damage your battery; check the technical data for your battery.

In case insufficient solar power and/or high current consumption, the battery should be subject to occasional full charging by means of a mains supply charger.

Overvoltage Protection

The 12v solar controllers protect themselves against connection of excessive battery voltage rates or will be switched-off in case of defective additional charging systems, switching threshold 15.0-16.0v.

Overvoltage Limit

Sensitive consumers are protected by means of limitation of charging voltage to maximum 14.8v during all modes of charging/battery type.

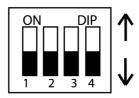
Battery Type Selection

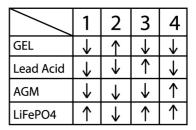
Operation

On the Charge Controller bottom face, the battery type DIP switches and battery type table an be found. Confirm the type of battery being fitted and arrange the DIP switches to its corresponding configuring.

Battery type

The battery type can only be set for Main Battery 1. Starter Battery is only supported by trickle charging to a maximum 1amp in all settings.





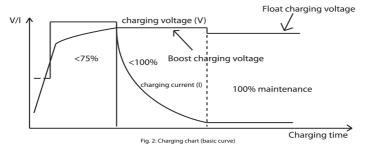
ATTENTION: Only connect LiFePO4 batteries with integrated BMS!

Note: The possible parallel/floating operation with consumers being connected to the battery is also automatically considered by all charging programs.

Charging Parameters

Battery Type	Boost Charging Voltage	Float Charging Voltage	Default Temperature
GEL	14.3 volts (3-10 hours)	13.8 volts	20°C
Lead Acid	14.4 volts (1.5 - 6 hours)	13.45 volts	20°C
AGM	14.7 volts (1.5-5 hours)	13.5 volts	20°C
LiFePO4	14.4 volts (0.5 - 3 hours)	13.8 volts	20°C

Charging Process



Function display / troubleshooting

On the Charge Controller front face, status LED's are positioned. The following table details the indicating condition of each LED.



Display	Status	
Batt Low - illuminated	Main battery voltage is below 10.5 volts	
	Discharged battery	
	 Insufficient battery connection 	
	Failed supply fuse	
MPP - illuminated	• CC Charging	
MPP - short flashing	CC ready to charge	
>80% - illuminated	 Main battery is almost fully charged 	
>80% - flashing 1 pulse/sec	CC over-heated	
>80% - flashing 2 pulse/sec	Main Battery or solar panel overvoltage	
Batt Full - illuminated	Battery (batteries) are fully charged	
All LED flashing	Battery selection is incorrect	

Maintenance

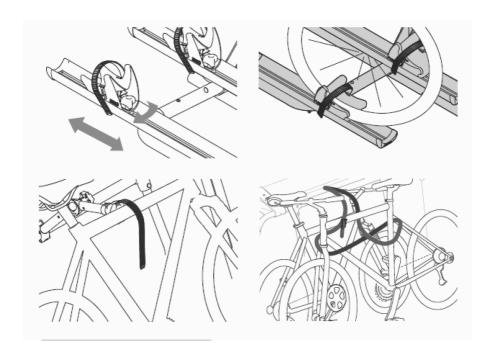
The power supply must always be disconnected before performing any maintenance work.

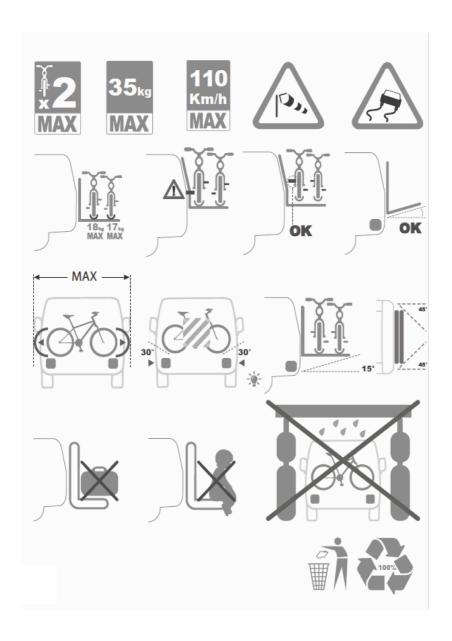
A competent person must first switch off any central control (power distribution) device and remove the charge controller supply fuse OR cover the solar panels to prevent power generation.

Clean the device with a dry and lint-free cloth.

Bike Rack - (Where used)

- Flamma declines all liability for any personal injury or damage due to mounting or inability to use the product. It is suggested to keep bike carrier instructions inside the vehicle.
- Product installation is to proceed according to the mounting instructions; the product may not be modified or altered in any way.
- After having positioned the Carry-Bike on the rear axle of the vehicle, the normal weight distribution on both axles would be modified. This variation must not exceed the maximum permissible axle load.
- Never exceed the maximum permitted length and the total weight of the full-load vehicle.
- Make sure that the loading occurs following a correct weight distribution; it must be uniformly distributed (the heaviest bike must be placed near the wall of the vehicle) to ensure better stability.
- Always give warnings about the presence of the Carry-Bike on your vehicle, using a clearly signal for leaning loads and, in case of limited rear visibility, use the additional rear-view mirrors.
- Take into account the presence of the Carry-Bike, paying attention during driving and especially during reversing manoeuvres, particularly if you have parking assist system.
- In case of use of the bike carrier with tow make sure that the tow hook is always accessible and the corner mobility of the tow is guaranteed (volume measuring DIN 74058).
- Check periodically the bicycle rack to make sure it is firmly attached, especially during the first kilometers or after long trips to avoid damages if the Carry-Bike/Vehicle. Make sure the belts are not loose and that the holding brackets have not shifted. Replace worn components immediately.
- While assembling, pay attention not to close the rear door if the screws of the lower bar of the Carry-Bike are not tightened, the body of the vehicle could be damaged.
- During Carry-Bike installation, verify that there is enough distance between handlebars and/or pedals and the vehicle's rear windows in the order to avoid any damages of the window van.
 Do not leave accessories attached (bay seats, baskets, etc.) because vibrations could disengage bikes.
- In some cases, the rear windscreen wiper may not work due to the presence of bicycles. Be aware of the brush radius before operating the windscreen wiper.
- On this type of Carry-Bike-Covers are not allowed (Bike Cover).
- Lower version must be used together with the number plate holder bar with regulation lights.





Back Rack (Where fitted)

SAFETY Intended Use

Backrack + Bike Carrier Shuttle Specific (Where fitted)

The Backrack+ Bike Carrier Shuttle is designed to be installed on the Backrack+ base frame and is used exclusively for transporting bicycles. Bicycles must meet the following requirements:

- Structural integrity
- Tyre size (26" to 29") and tyre width (<3")
- Observe the manufacture's instructions.

Backrack+ Number & Light Bar Specific

The Backrack+ Number & Light Bar is designed to be installed in vehicle model Fiat Ducato and Mercedes Sprinter. It serves as a duplicate for lights or number plates in case they are covered by the Backrack+ when loaded. It can be folded down and can also be used as a step (max. 100 kg).

Backrack+ Mini Rack Specific (Where fitted)

The Backrack+ Mini Rack is designed to be mounted in the Backrack+ base frame and is used exclusively for transporting additional luggage to a maximum of 20 kg.

Backrack + Snap Box Specific (Where fitted)

The Backrack + Snap Box is intended for mounting on the Backrack+ mini rack base frame and is used exclusively for transporting additional luggage up to a maximum of 30kg. Any other use is not intended.

All Backrack + relates to all above accessories

Any other use is considered improper. The Backrack+ accessories are referred to in the following as the rear carrier system/accessories.

- Only install the rear carrier system/accessories in accordance with the installation instructions.
- Only install the rear carrier system/accessories to vehicles with a properly installed Backrack+.
- Only use original accessories and original spare parts. Check with the respective manufacturer regarding the suitability of any other accessories.
- The driver of the vehicle is responsible for the rear carrier system/accessories and for compliance with the relevant regulations.
- It may only be used if vehicle parts (lights, indicators, number plates) are obscured by additional components and thus a duplicate number plate is necessary.
 (Backrack+ Number & light Bar Specific)

In the event of improper installation, use or use that deviates from the user information or use that is not in accordance with the intended purpose, all guarantee and warranty claims against the manufacturer will be voided.

Foreseeable Misuse

- The rear carrier system accessories are not designed for installation by children or youth.
- The rear carrier system/accessories are not suitable for bicycles with mudguards on the front wheel.
- If conversions and modifications are made to the rear carrier system / accessories, the type approval is voided.
- Installation without Backrack+ is not permitted.
- Installation without Backrack+ mini rack is not permitted. (Backrack+ Snap box only)
- The Backrack+ Bike Carrier Shuttle is only intended for transporting bicycles. Other uses are not permitted.
- The maximum load if the Backrack+ Bike Carrier Shuttle is 28kg & must not be exceeded.
- If the door is swung open fully, the load can damage the shell of the vehicle.
- Remove bicycles before opening the vehicle doors to avoid damage.
- The additional luggage must be safely packed and properly secured. This user information is intended for the securing it.
- Secure engagement of the locking bolts and secure the seating of the box must be checked before each ride, (Backrack+ Snap Box only)
- The box and the locking bolt must be locked before each journey (Backrack+ Snap Box only)
- Folded down rear carrier system / accessories must be additionally secured.
- Fold up and secure unloaded rear carrier system / accessories while driving.
- If the door is opened fully, the load can damage the outer skin of the vehicle.
- On a slope, be careful when opening/closing the rear doors with a load.
- During into car washes with the mounted components installed is not permitted.

General Safety Instructions

- When using the rear carrier system/accessories, ensure that the national laws of the respective country are complied with.
- Ensure that the change in the axle load distribution due to the rear carrier system / accessories does not lead to the permissible axle loads being exceeded.
- Replace damaged parts immediately with original spare parts. Do not use a damaged rear carrier system/damaged accessories for transporting bicycles.
- When using sliding blocks, make sure that the groove channel is not damaged or deformed.
- Only use sliding blocks in the areas intended for the approved mounted components.
- Only use the original accessory sliding blocks.
- Always check that the lights are functioning properly before setting off.
- Load only secured with the folded down transport rear carrier system / accessories
- When using the slot or T-nuts, ensure that Groove channel is not damaged or deformed.
- Slot or T-nuts only in the approved mounting components intended for use.
- Only use the original accessories slot or T-nuts.

Safety Instructions for lighting

- If vehicle lights or number plates are obscured (even partially) by the rear carrier system/accessories or the load, duplicate them
- Before initial use, ensure that all lights and number plates are visible and fully functional.
- If the number plate is concealed, use a separate duplicate number plate.
- If the vehicle lightening is observed by a bicycle (especially long bicycles), move the bicycle carrier to a higher position. The driver of the vehicle is responsible for compliance.

Safety instructions for the load

- Do not exceed a load of 28kg. (Backrack+ Bike Carrier Shuttle only)
- Do not exceed a load capacity of 20kg. (Backrack +Mini Rack only)
- When loading, make sure the load is distributed and the center of gravity is as low as
 possible. Secure the load against slipping and check regularly that it is in the correct
 position.
- When loading make sure no vehicle components are covered (e.g. windscreen wipers, spoiler, exhaust.)
- Ensure that the load does not extend beyond the vehicle body.
- Secure the load carefully with special straps (plastic/textile)/. Do not use elastic straps.
- If the load protrudes, secure it in accordance with the legal requirements and, if necessary, mark it in accordance with regulations.
- Attach long loads (e.g. surfboards) to the front and rear of the vehicle and, if necessary mark it in accordance with regulations.
- Avoid obstructing the view to the front and rear with loads or lashing straps.
- Do not pack bulky loads in tarpaulins. Dismantle easily lost parts of the load (e.g. air pump, battery) and bulky accessories (e.g. child seat, side bags) before setting off.
- Remove load before opening the vehicle door to avoid damage.

Safety instructions for the operation

- When driving with bicycles, fold in the carrier and secure it with the locking strap (see graphic 6).
- Observe the slope angle when loading bicycles: Angle to the vehicle max. 7.5". The rear carrier system/accessories must always be in contact with the ground.

Residual risks

Risk of accidents due to changed driving behavior

The driving behavior of the vehicle changes when the rear carrier system/accessories are mounted and loaded.

Allow for increased braking distances and drive at an appropriate speed.

Danger of accident due to incorrect installation

Due to incorrect installation, the rear carrier system/accessories or load can come lose during travel and cause accidents.

- Do not use elastic tensioning straps
- Check all bolted connections and tensioning straps for damage, firm hold and proper fit
 for the first time after initial assembly, after a short travel distance (approx. 50km) and
 then before all travel, and tighten if necessary. Replace damaged parts immediately
 with original spare parts.
- In case of unusual noises or changed driving behavior, make sure the load and rear carrier system/accessories are fit securely.

Damage due to increased vehicle dimensions

The dimensions of the vehicle increase when the rear carrier system / accessories are mounted and loaded.

- Pay attention to the new vehicle dimensions while driving (e.g. underpasses, multi-storey car parks).
- When using the rear carrier system, note that the function of the parking sensors and reversing camera may be restricted.

Damage caused by swinging open the door

If the door is swung open fully the load can damage the shell of the vehicle.

Open the door carefully.

Damage caused by mounting & dismounting the snap box

The guide profiles, especially the coating, can suffer wear and tear if the aluminum box is frequently snapped in and out of the rail.

Scope of delivery and spare parts list

 Check delivery for damage and completeness after unpacking. Report any defects to the dealer immediately.

Transport and Storage

• Store the rear carrier system / accessories in a dry, clean and frost-free place.

Cleaning and Maintenance

- Tighten the fastening screws at regular intervals.
- Regularly clean the rear carrier system / accessories with warm water and suitable cleaning agents, at the latest after exposure to salt water. Do not use aggressive cleaning agents.
- Do not clean the rear carrier system / accessories in car washes.

Assembly

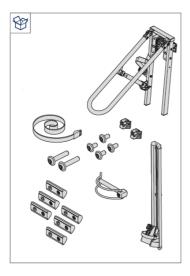
Backrack+ Bike Carrier Shuttle Specific

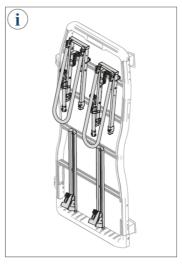
Note regarding installation

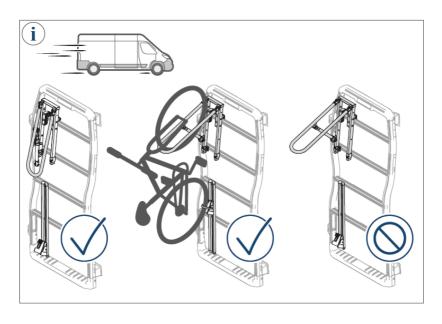
These instructions describe the installation of the rear carrier system / accessories on the left-hand rear door. Installation on the right rear door is just the same. Note regarding screws with thread-locking fluid: Screw in the screws as far as they will go and tighten them with the specified torque. Preparation installation only by specialist dealers.

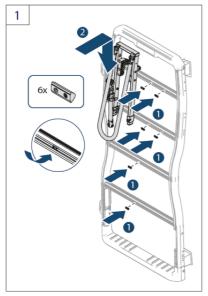
Required tools

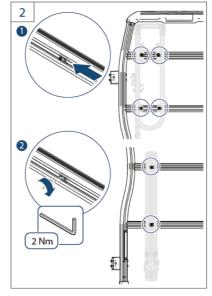
- Torx spanner TX30
- Allen key size 3
- Torque spanner
 - Extension
 - TX30

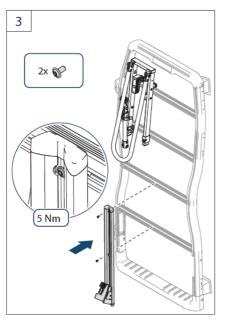


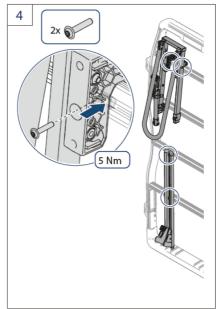




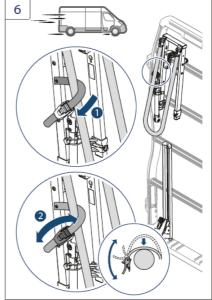


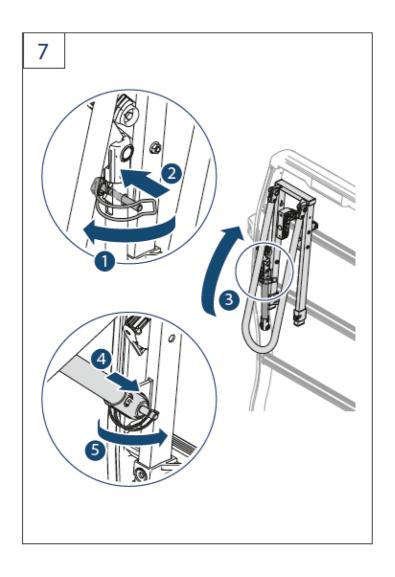


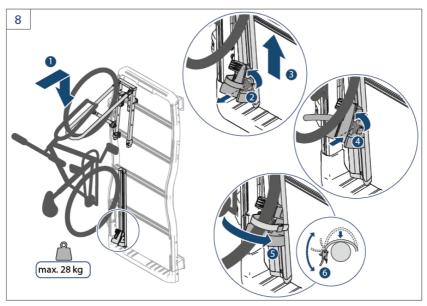


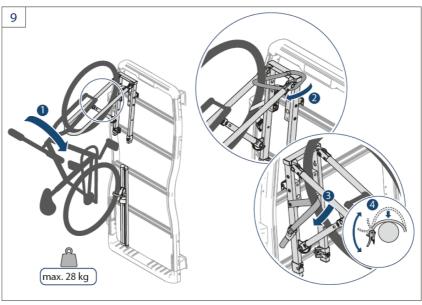


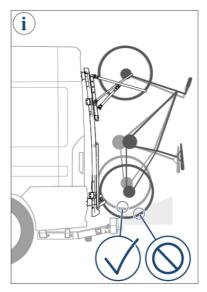


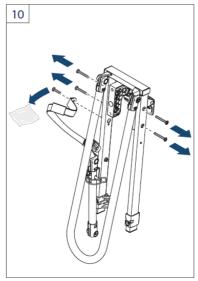


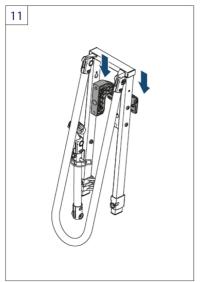


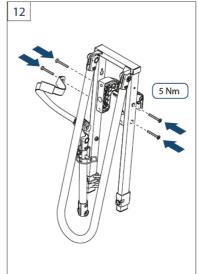








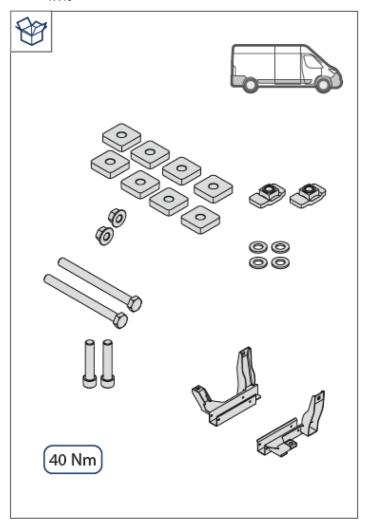


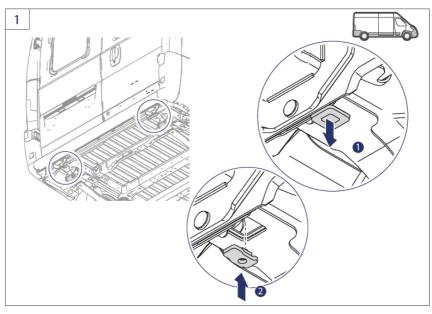


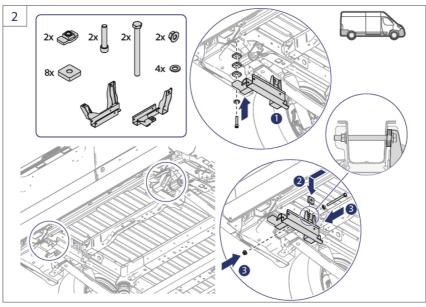
Backrack+ Number & Light Bar Specific

Required tools

- Torx spanner TX30/T40X
- Torque spanner
 - extension
 - Size 17
 - TX30
 - TX40







Backrack+ Mini Rack Specific (Where fitted)

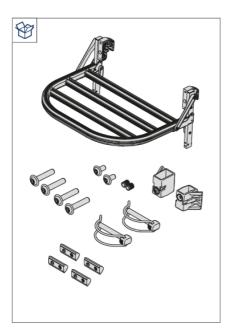
Instructions for assembly

This manual describes the installation of the rear carrier system / accessories on the left rear door. Installation of the right rear door is similar.

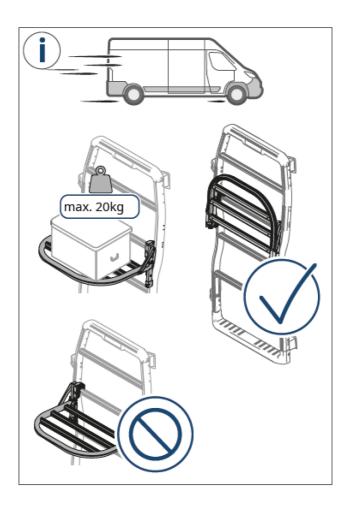
Note on the screws with the thread locking compound: Screw in the screws completely until they stop and tighten them with the specified torque. Installation of the preparation only by specialist dealers.

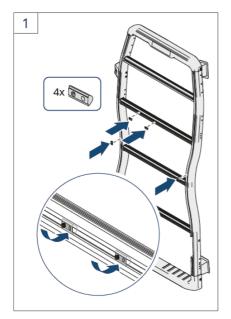
Required tools

- Torx spanner TX30
- Allen key SW3
- Torque wrnch
 - renewal
 - TX30

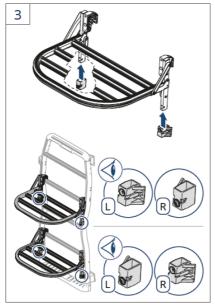




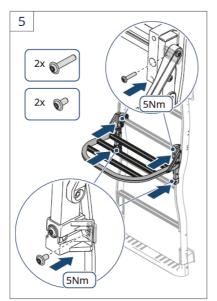


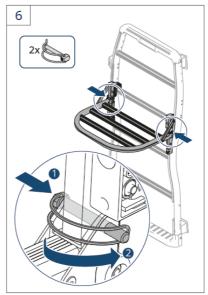


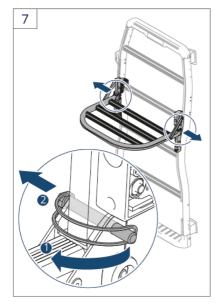




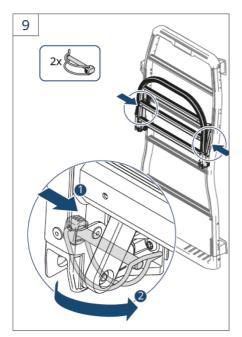


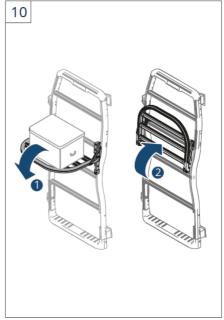












Backrack+ Snap Box Specific (Where fitted)

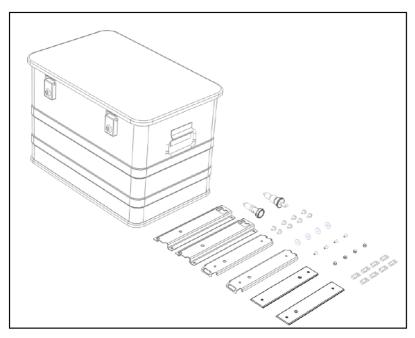
Instructions for assembly

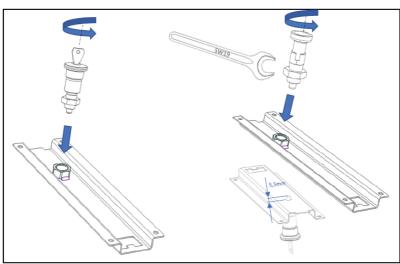
Note on screws with thread locking compound: Screw in the screws completely until they stop and tighten them with the specified torque.

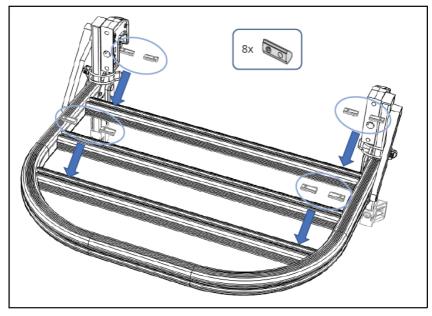
Installation of the preparation only by specialist dealers.

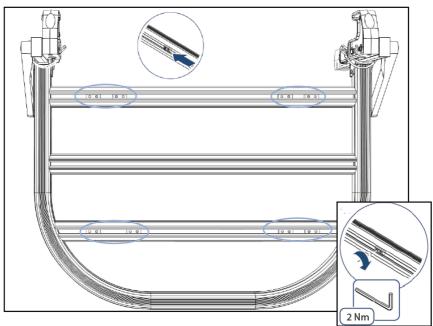
Required tools

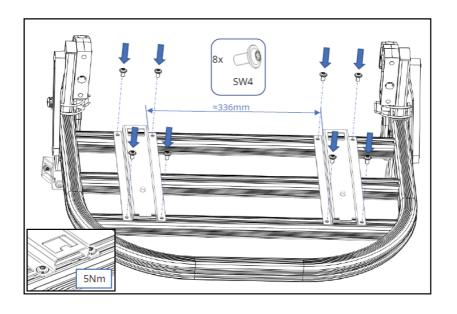
- Open-end spanner SW19
- Loctite 242
- Allen key SW4
- Torque wrench
- Extension
- Socket SW8

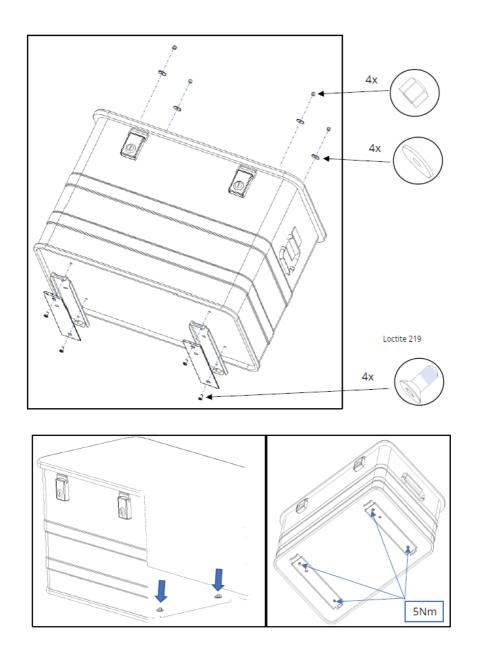


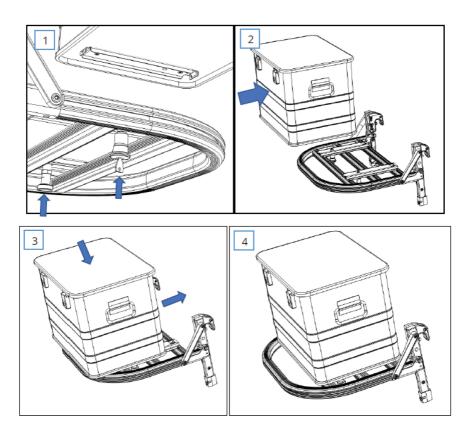


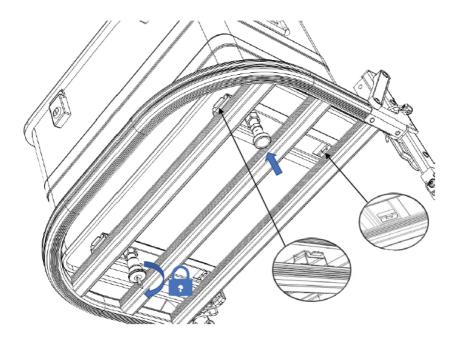












Roll Out Awning (where fitted)

General Safety



WARNING! Failure to obey these warnings could result in death or serious injury.

Health Hazard

- The awning must be installed in accordance with the Domestic installation manual by a qualified technician with sufficient technical knowledge for installing components in vehicles.
- This device can be used by children ages from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the device in a safe way and understand the hazards involved.
- Children must be supervised to ensure that they do not play with the device.

Operating the awning safely



WARNING! Failure to obey these warnings could result in death or serious injury.

Health Hazard

- Do not touch moving parts while operating the awning. There is a danger of injuries from moving parts.
- Before starting your journey, check that the awning is fully retracted.
 Never move the vehicle when the awning is open.
- Never drive with the crank inserted. Remove the crank before starting your journey.

- Do not drive the vehicle if the fabric is damaged or torn, even if the awning has been properly retracted. The awning arms are held in place by the fabric. If the fabric rips while driving, the awning will suddenly shoot out. This can lead to serious injury. Secure the awning so that it cannot extend suddenly and unexpectedly while driving.
- Do not open the awning while driving.
- Do **not** open the awning in strong winds or snowfall.
- Retract the awning if strong winds, heavy rain or snowfall are imminent.
- Make sure that water or snow does not accumulate on the fabric. Otherwise this could damage the awning or the awning arms could collapse and cause severe injury or fatality.
- Do **not** approach the awning
 - if it was left open during heavy winds
 - if pools of water have formed on it
 - if snow has accumulated on it
 - if any debris is on awning fabric

The awning may move unexpectedly, become unstable and bend or break.

- Do not leave the extended awning unattended. Retract the awning before leaving your locations.
- Keep a safe distance from the awning when having barbecues or open fires.
 The fabric can be damaged by heat or catch fire

NOTICE! Damage hazard

- Park the campervan so that no debris (branches, leaves or similar) can get onto the fabric.
- The fabric of the awning should not hang down at the edges but must be taut at all times. If the fabric hangs down, it could rub on the arms and get damaged.
 - The fabric should not sag in the middle with long awnings
- Only retract the awning, when the fabric is free of debris (branches, leaves or similar). Otherwise awning can be damaged when it is retracted.
- Keep the awning free of dirt to prevent abrasions, stains and mildew.
- Only retract the awning if it is wet for safety reasons. Extend it again as soon as possible. Otherwise, mildew or stains can form or the colour may fade.
- Never bend an awning arm or the cover down to drain water off the awning. This can bend the awning and impair its function.
- Do not hang any objects on the awning, on the front cover or the awning arms.
- Do not use any sprays (e.g. insect repellent, hairspray) near the awning. This will soil the fabric or the waterrepellent effect of the fabric will be lost
- If there is insufficient space above the door after the awning is mounted, the door must remain closed when retracting of extending to avoid the door making contact with the arms or the front panel. The required space depends on the design or the door (door width, swing or sliding door) as well as the set awning angle of inclination

Operating the awning

Note on the vehicle location



NOTICE

- Park the vehicle so that no debris (branches, leaves or similar) gets on to the fabric.
- Keep the awning free of dirt to prevent abrasions, stains and mildew.

Extending the awning



WARNING! Beware of injury

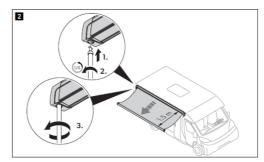
Keep a sufficient distance from objects or other vehicles. Once it is retracted, it should be at least 40 cm away from other objects and vehicles on all sides.

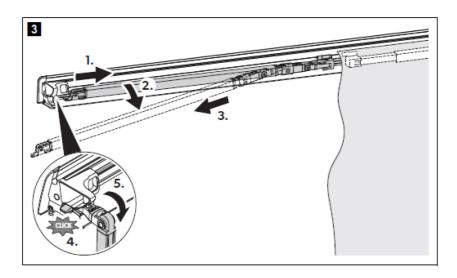
Proceed as shown (fig.2. to fig 4).

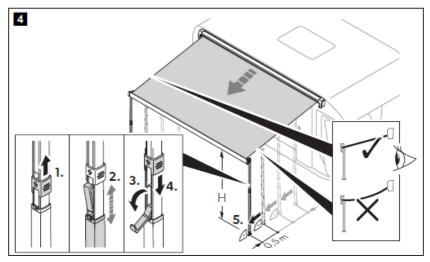


NOTICE! Beware of damage

The fabric of the awning should not hang down the edges, and must remain taut at all times. If the fabric hangs down, it could rub against the arms and become damaged. The fabric used for long awnings may sag in the middle.







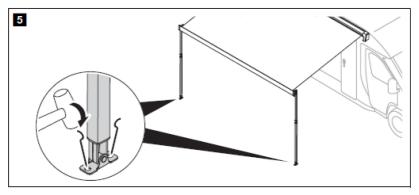
Positioning the support legs on the ground

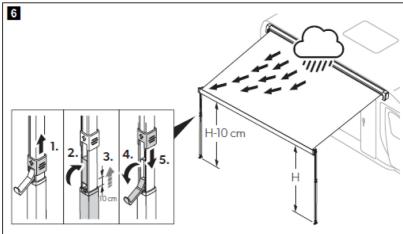


WARNING! Beware of injury

- Only position the support legs on solid ground
- · Secure the support legs from slipping
- Proceed as shown (fig.5. to fig 6).

HOW TO USE YOUR CAMPERVAN'S EQUIPMENT

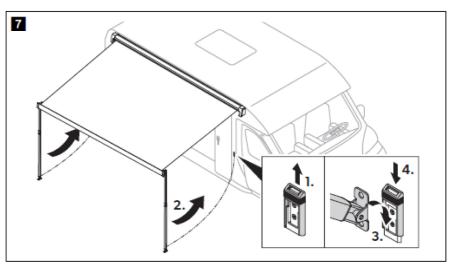


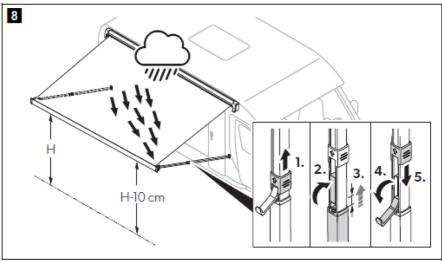


Securing the support legs on the vehicle

You can secure the awning on your vehicle directly if you have already mounted the latches for the support legs.

Proceed as shown (fig.7. to fig 8).

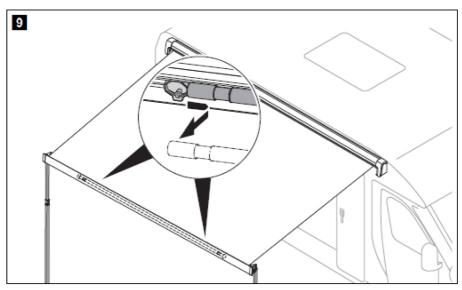


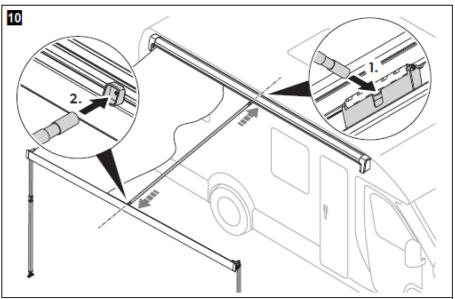


Mounting the tension rafter

Awnings with a length of 4 meters or more need to have a tension rafter fitted in the middle of the awning. This prevents the awning from sagging.

Proceed as shown (fig.9. to fig 10).



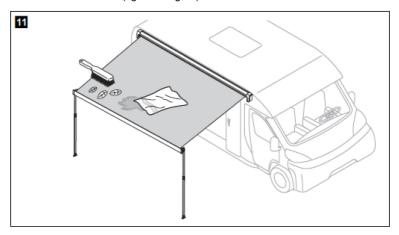


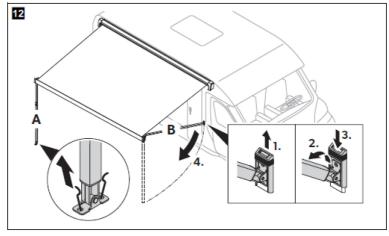
Retracting the awning

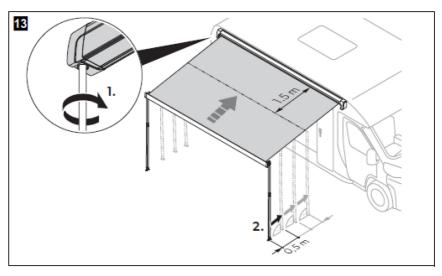


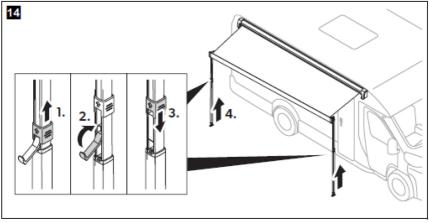
NOTICE!

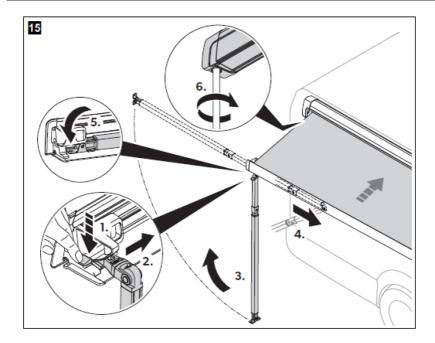
- Only retract the awning when the fabric is free of debris (branches, leaves or similar). Otherwise the awning may be damaged when it is retracted.
- Keep the awning free of dirt to prevent abrasions, stains and mildew.
- When retracting the awning, make sure that no branches or other objects are trapped in it.
- If the awning is retracted when wet, extend it again and the fabric dry out at the next opportunity. If the wet fabric stays rolled up for a long tome, mildew will form and the fabric can fade.
- Proceed as shown (fig.11. to fig 15).











Cleaning and maintenance

Cleaning



NOTICE! Beware of damage

- Never clean the awning with a high-pressure cleaner.
- Do not use abrasive cleaning agents or hard objects during cleaning, as these can damage the product.
- Remove any debris (twigs, leaves or similar) lying on the awning fabric to prevent abrasions, stains and mildew. The awing can also be damaged when it is retracted.
- Clean the awning fabric regularly to remove any dirt and dust:
 - To do this, use water with 30ml detergent and 30ml bleach for 10L of water.
 - Soap down the fabric and leave the liquid to soak in for five minutes.
 - Rinse thoroughly with clean water.
 - Make sure that the detergent with the bleach is completely washed off. Otherwise it can damage the fabric.
 - Leave the fabric to dry.

NOTE



The manufacturer recommends:

To clean the cloth used the Dometic awning cleaner (ref .no 9600000165, available form your service partner).

Lubricating

If required, lubricate the joints of the awning with paraffin wax, teflon oil or silicone oil.

Checking



WARNING!

Do not use the awing if any settings or maintenance work are required. If you discover any damage, please contact a service partner in the respective country.

- Check the awning regularly for any imbalance and wear, as well as damage to major parts.
- 2. Check the awning regularly:
 - Is the fabric free from damage?
 - Are the arms and lead rail free of damage with no signs of wear?
 - Does the awning close properly?



NOTE

Dometic accessories such as sealing joints or foam strips are subject to environmental wear and tear. This is not an evidence of poor quality. To ensure the function of these parts, Dometic recommends replacing rubber seals and form strips every 5 years.

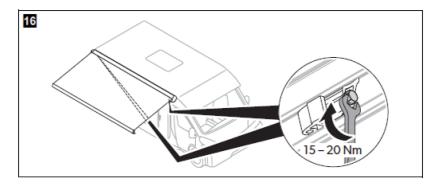
Tighten up the screws on the rear hinge

The screws on the rear hinge must be re-tightened after being subjected to a load for the first time:

- · After the first holiday using the awning
- After driving 20000 km or six months after the awning was installed (whichever occurs first)

The screws on the rear hinge also need to be checked during the routine vehicle inspection.

Contact your service partner to re-tighten the screws (fig. 16).



Tie down kit

Awnings, where specified, are supplied with a tie down kit. Please read the instructions and ensure the tie down kit is used even in calm weather. Where wind speeds increase to more than a light breeze it is advised to take down the awning fully.

HOW TO USE YOUR CAMPERVAN'S EQUIPMENT

Tow Bar (Where fitted)

Maintenance

Periodic maintenance must be carried out and should include checking:-

- All fixing points and torque settings
- All Towbar components for any movement from original position and ensure it is rigid, square and secure.
- Chassis for corrosion around the Towbar mounting points
- Possible wear on Towball
- Towbar paintwork for chips, scratches etc.

Any use outside of the recommended towing limits for the vehicle or failure to carry out maintenance check will invalidate warranty.

Note:

- 1. Recommended Torque Setting for M12 Grade 10.9-130 Nm.
- Nose load limits and vehicle manufacturers trailer / caravan weight limits must be observed.

SECURITY

Theft deterrent, prevention and security of your campervan is taken very seriously at Erwin Hymer Group UK. That is why we have provided a combination of standard features and optional extras designed to deter and prevent thieves from stealing your property. And in the unlikely event that they should succeed, aid the identification, speedy recovery of your property and assist in the prosecution of the thief.

Tracker (Option)

Your campervan can be fitted with an optional TRACKER.

Your dealer may have registered the campervan with TRACKER and confirmation sent to you via email.

If it has not been registered you can easily do it yourself.

Open the TRACKER registration portal www.tracker.co.uk/elddis

TRACKER VLU and Campervan VIN

Numbers are matched and confirmed with the vehicle model

Enter Dealership name from dropdown menu

Enter customer details including email address

Confirmation sent to customer email One year subscription will begin

TRACKER will contact customer towards the end of the one year subscription period with the options available.

or call TRACKER directly on 0870 606 1269

Campervan Theft

The theft of a campervan can occur in the most unlikely circumstances; from a motorway service area, even from an owner's driveway. Secure all windows and doors when your campervan is unoccupied, even if only for a short length of time.

VIN CHIP

VIN CHIP is the theft deterrent and identification system for touring caravans, motorhomes and campervans. VIN CHIP has been launched to deter criminals looking to steal your vehicle and help aid the identification and recovery. VIN CHIP is unique as it uses both visible and invisible markings containing a specific 17 digit VIN.

Alarm (option)

Your vehicle can be fitted with an optional Autowatch 695 Thatcham Category 2-1 alarm.

Electronic Alarm (Category 2-1)

A Thatcham assessed 2-1 Electronic Alarm is to be combined on a vehicle installed with an existing Thatcham Category 2 immobilisation system to obtain a Thatcham Category 1 status.

Δlarm

The Alarm is to provide warning of an attempted of intrusion into the passenger compartment or unauthorised interference with a vehicle.

- · Perimeter detection
- · Ignition detection
- Passenger compartment movement detection
- Audible warning with battery back-up power supply
- Siren Resistance to attack for a minimum duration of 1 minute

CARE OF YOUR CAMPERVAN

This section of the guide is devoted to the care, cleaning and general preservation of your campervan in order to retain its showroom condition.

For care of the base vehicle please refer to the original manufacturers handbook provided with your campervan for more information.

Exterior Body Shell

The exterior painted body shell of your campervan, is extremely durable and easy to clean. It is recommended you first wash off any embedded dirt and mud with cold water then use suitable propriety caravan or car cleaning products.

CAUTION: Under no circumstances should an abrasive or harsh cleaner be used. Do not use a pressure washer as this can disturb bonding agent.

Acrylic Windows

Your campervan is fitted with shatter resistant acrylic windows. To preserve their clarity and unblemished transparency it is essential that the following cleaning instructions are strictly adhered to: Road grit, dust, sand, flies, bird droppings etc., should be washed off using plenty of cold water do not use a sponge to clean off heavy dirt deposits. Any remaining dirt should be washed off using a soft cloth and warm water. Under NO circumstances should any abrasive cleaning agents, household detergents or proprietary cleaning fluids be used. Wash the window again using only cold water and dry off with chamois leather.

Please note: Should scratches appear on the acrylic windows these can often be removed with an acrylic polish. Gentle polishing with a liquid metal polish, i.e. Brasso may also have the desired effect - consult your retailer BEFORE attempting to remove any but the slightest scratch.

Window Blinds & Flyscreens

To clean the blinds and flyscreens, moisten a soft cloth or sponge with a small amount of water and mild soap suds and gently wipe dirt off. Allow to dry before retracting, failure to do this could result in mildew forming.

ABS - Components

To preserve the appearance of all ABS panels and fittings road grit, dust, sand, flies, bird

droppings etc., should be washed off using plenty of cold water. Any remaining dirt should be washed off using a soft cloth and warm water. Under NO circumstances should any abrasive cleaning agents, household detergents or proprietary cleaning fluids be used. Wash the ABS material again using only cold water and dry off.

Interior Walls

Your campervan interior walls will only require a wipe over with a damp cloth, using soap and water to keep them in a 'showroom' condition.

Furniture

Treat your campervan furniture as you would the furniture in your home. Polish wood surfaces sparingly with a good quality wax or spray polish. Use a damp cloth to clean Melanate laminated surfaces.

Taking care of your upholstery:

You may find your upholstery a little firm at first. this is perfectly normal as all foam and filling composites will naturally soften in time. This softening does not constitute as a fault under the warranty. Fabrics with a pile may appear to have a difference in shades, this is due to the direction of the pile and how the light reflects. This is not a fault but a part of the charm of the fabrics. Regular care with a soft brush will ease the pile back and reduce the effect of the pile being flattened over time. Fabric will stretch, move and develop creases or wrinkles during use, these are expected and are completely normal during the lifetime of the product. It is important that all cushions and upholstery are regularly "dressed". To do this, the cushions and upholstery require 'plumping' to ensure they revert to their original shape. Without "dressing" and "smoothing" the cushions it could give the appearance of flat or miss shaped, making the fabric appear loose or baggy. This is not a defect but part of the care of the product/s. Please ensure all cushions/ upholstery are always placed in the correct position during use. It is recommended that the curtains in your leisure vehicle are washed on a delicate cycle at 30°C. This will not damage the clip glides. Shrinkage may be caused should you decide to dry clean your curtains.

Note: Curtains should not be left closed during daytime hours otherwise some fading may occur.

Taking care of your carpets (Where fitted):

Soiling (dirt, dust and abrasive matter) is the greatest threat to carpet. Door mats should be cleaned frequently to prevent them from becoming a source of soiling. The best way to increase the life of your carpet is to vacuum regularly. For general cleaning use a dry shampoo following the products instructions. Spills are likely to happen and if you treat spots and stains immediately, they will be easier to remove. Blot liquids with a dry, white, absorbent cloth or plain white paper towel. To prevent the spill from spreading, please work from the edge of the spot to the centre. For food and other nonliquids, start by gently scraping up with a spoon or knife blade and vacuum until completely removed.

Note: Do not get the carpet too wet. Wetting through to the backing may result in shrinkage, discoloration, odour and delaminating. Certain products can cause irreparable damage to your carpet. Bleaches, tile cleaners, mildew removers, oven cleaners, etc can have strong chemicals which discolour or dissolve carpet fibres.

Washroom And Handbasin Fittings

These should be cleaned using a non abrasive household cleaner. Always put the cold water into the hand basin before adding the hot in order to preserve the finish of the thermoplastic formed basin.

Please note: Under no circumstances should alcohol, spirit or solvent-based liquids be used on GRP or ABS plastic panels as these substances may react with the material and cause visible damage.

Cleaning instructions for all chrome & black plated products – (taps, wastes, bathroom accessories, etc.)

Alcohol, solvents and solid detergents, liquids containing acid or aggressive solutions, anticalcareous products, abrasive sponges or steel wool should absolutely be avoided since they could corrode in an irreparable way the outer surface of the products.

Shower Trays

Only clean your shower tray using soap and water. Do not use chemical based cleaning agents as this may attack the material of the tray.

Water Systems

The water systems and in particular storage tanks, in campervans are susceptible to contamination by bacteria if care is not taken with their use and cleaning. The symptoms caused by bacterial contamination are not purely limited to gastro-intestinal diseases, but may also manifest themselves as ear, nose, throat, and eye or skin infections. It is therefore important that you carry out the following procedure prior to using the campervan each time, even if you boil or filter all water you use for drinking.

Please note: If your campervan is not going to be used for an extended period of time please refer to section 12-1 Storage.

Water Containers

- All water remaining in any water container should be disposed of so that the container is empty.
- The outside of external water containers should be thoroughly cleansed and washed down to remove any dirt, dust or other contaminant. Water at a suitably hot temperature containing an appropriate detergent is recommended for this purpose.
- All containers should then be totally filled with water containing an appropriate disinfectant / sterilising solution and allowed to stand for the recommended contact time.
- The solution should be emptied from the container.
- External containers should be inverted whilst stored overnight (if possible).
- Containers must be filled with mains water only and mains water only should be used for the above cleaning procedure.
- On no account should garden hoses be used to fill water tanks.

Internal Water Systems

- Drain down the system. (Open all taps to allow air in, enabling the system to drain quickly).
- Fill the system by using the pump with a disinfectant / sterilising solution.
 (Check that the solution at full strength appears at all taps/showers). Allow to stand for the recommended period of time.
- Drain the system down completely.
- Thoroughly clean the outside of all taps/connectors with a cloth soaked in the disinfectant / sterilising solution.
- Flush the system through with clean drinking water until no traces of disinfectant / sterilising solution can be detected at any tap.
- Sterilising chemicals are available from your Erwin Hymer Group UK Retailer, accessory shop, chemists, or homebrew shops. It is not, however, recommended to use bleach or sodium metabisulphite.

Thetford Toilet

WARNINGS

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

The C60 toilet does not have its own fresh water tank and only operates from the fresh water supply so it is not possible to add antifreeze or Thetford chemicals.

Warmer Weather Use - In warmer weather or longer intervals between emptying the waste tank you may require additional toilet fluid. Use only Thetford toilet fluid to achieve the best results.

CAUTIONS

- Do not use strong household detergents or cleaners that contain chlorine, solvents or acid contents
- High Altitude and Hot Weather Use with large temperature differences and

changing heights during driving, pressure can start to build up in the waste holding tank, causing contents to splash upward upon opening the valve blade if opened too fast

Changing a Wheel

Refer to the original manufacturer handbook provided.

Tyres & Tyre Pressures

Please refer to the Technical Specifications pack that is provided with the vehicle for information regarding tyre pressures and tyre sizes. It is dangerous to drive with under inflated tyres. Pressure checks, including those on the spare tyre, should be carried out whilst the tyres are cold using an accurate pressure gauge. These checks should be carried out before each journey and at regular intervals during storage.

Tyre Wear and Damage

Your vehicle tyres, like all tyres, are legally required to have a minimum tread depth. Please refer to the original manufacturer's handbook provided. A redundant tyre must be replaced by one of the same size and load index. A tyre should be renewed if a blister, rupture or cut exposing the casing is detected. If the tyre has suffered a violent impact, it should be examined by a specialist as soon as possible.

PRE-SEASON WATER SYSTEM PREPARATION

Over the winter months bacteria can grow in your water system. Particles of minerals and dirt gather in joins and any undrained areas.

After following this guide, change your water filter. If you have a Whale AquaSmart system, change your Whale WF3000 Water Filter. If you have an in line filter in your plumbing system, Whale recommend you use WF1230 Aquasource Water Filter.

To check the system hasn't suffered any frost damage over the winter and floods your van, take the following precautions:

- Close all drain valves in your van's water system.
- · Re-attach your shower head.
- Ensure all taps and showers are positioned over sinks and drains.
- Check condition of leisure battery, if it is below 12V please connect to mains electricity supply.
- Rinse out fresh and waste water tanks with water, add a non-caustic cleaning and purifying agent.
- Completely fill your fresh water tank with tap water.
- Leave the hot tap that is furthest away from the water heater fully open, close all remaining taps and showers.
- Turn on isolation switch for water pump, normally found on the control panel or in a menu within the control panel's software.
- You should hear the pump running or the pressure coming from the open hot tap.
- Water will pop and splash as it comes from the hot tap, it will take some time for a flow of water to arrive as the water heater needs to fill up first.
- Once an even flow is achieved, work back towards the water heater, opening the next further away hot tap until all have been opened and there is a smooth water flow.
- The next stage is to close all hot water taps and open the cold water taps in the same order as the hot taps, beginning at the furthest away cold tap.
- When an even flow is achieved through all the taps in your van close all the taps. The pump should turn off (after a few seconds if it is a pressurised system).

Remain in your van after the pump has stopped and inspect all the taps and shower heads for leaks. You may need to dry them down first to spot any leaks). If there is access to the underside of the taps check for water leaks.

If you find a water leak, check the following:

- If there is a water leak coming from the connections on the underside of the tap, try to push them home.
- If the leak originates from a crack or an unknown source check the rest of the taps and showers before turning off the water pump.
- Then drain the water system as the water pressure will continue to escape through the leak and will cause water damage to your van. Contact your local dealer to rectify the leak(s).

(**Note:** While checking the taps and showers you may hear the pump turn on and off a few times. If you hear this, turn on and off all the taps for 10 seconds individually to remove any trapped air from the system.)

- If the pump continues to run intermittently for short bursts this can indicate a leak as pressure is being lost. Follow all the water pipes and check if there is any water leaking from joints or if a pipe is burst.
- Should you find a leak at a joint, tighten the joint or push the pipe fully into the Quicklift fitting to dry up the water and wait to see if the problem persists.
- If you find a burst pipe or damaged tap/ shower we recommend that you contact your nearest Campervan dealer.
- After the cleaning agent has remained in the system for the required time, purge the system by running 2 or 3 full tanks of water through the system using all taps and showers in the mixed position.
- · Check the strainer on the pump.
- Finally your system is ready for use.

If you have successfully carried out this guide, please check your water heater is functioning correctly, to do this please follow the manufacturer's instructions.

Enjoy the new season.

GETTING READY FOR THE WINTER

If possible carry out the following procedure prior to moving your vehicle to its winter storage location. The movement of the vehicle will encourage residual water to naturally drain from the system.

Ensuring that all water is removed from the vehicle's pipework, taps and appliances will reduce the risk of frost damage occurring. Frost damage occurs when water left in the system freezes and expands, causing pipework and appliances to split, crack or burst.

- Open water heater drain valve and leave open.
- Open external tank valve (if present) and leave open.
- Ideally, position campervan so the drain taps are at the lowest point i.e. tilt the motorhome or park on a slope.
- Ensure the gas is turned off at the mains.
- Open all taps/mixers to the mid position, including the external shower (if fitted).
- If internal pump is accessible, disconnect outlet pipe and turn on pump, allow to run for 2 minutes to expel additional water into an adequate basin, turn the pump off. Only reconnect pump when water system is to be used.

- Remove shower head and hose (including the external shower, if fitted) and shake water out.
- Waste tank remove all sink plugs, open drain taps and leave open.
- · Open any other drain points (if present).
- · Drain all external water components.
- Fully drain/empty holding tank and flush toilet tank in accordance with the manufacturer's instructions.
- Do not close the fridge door, leave ajar to allow air flow to prevent mildew

User tip: If mains electric hook up is available and a Whale Space Heater is fitted, select 500w electric and set temperature to frost protection.

User tip: To maintain the battery, periodically charge throughout the winter. Do not allow the leisure battery to fully discharge as this could cause irreversible damage.

Whale Customer Support:

Tel: +44 (0)28 9127 0531 Fax: +44 (0)28 9146 6421 Email: info@whalepumps.com www.whalepumps.com

1. Pop Top Tent Fabric

The Pop Top Tent fabric has water repellent properties, however, it is not waterproof.

Care:

- Clean dirt with a soft brush at regular intervals when dry.
- Small dirt can be carefully removed by rinsing with warm water (max. 35°C) (Do not use high pressure cleaners).
- After cleaning, allow the tent fabric to fully dry, preferably in sunlight.
- For larger dirt and stains, clean only with a mild soap solution at approx.
 35°C, rinse well to remove any soap residue.

2. Cleaning recommendation of the Outer Shell

This cleaning guide must be followed to maintain the lifespan of the product.

2.1 Cleaning recommendations

Regular cleaning must be carried out to maintain the lifespan of the product. The outer surfaces should be cleaned by hand using cold water to remove any embedded dirt, then use suitable proprietary caravan or car cleaning products in accordance with the manufacturers recommendations.

All heavily soiled areas of grease or oil smeared surfaces should be washed or wiped off immediately. Drying can be done naturally or with a soft clean cloth.

2.2 General Cleaning

Do not use a pressure washer on your vehicle as it can lead to water entering via any of the external vents and could cause damage to the graphics. NO mechanical cleaning aids should be used i.e rotating brushes, scrapers or similar cleaning devices as they will scratch the outer surface of the product. Under NO circumstances should an abrasive or harsh cleaner be used. The use of tree resin remover should be avoided, cleaning agents of this type can lead to stress cracks in the product.

User Tip: In general, cleaning agents should be removed from the surface to avoid lasting damage.

General

Information in this handbook relating to inspection and maintenance is referenced from Liquid Gas UK, Code of Practice 32 – 2020.

The maintenance of an installation after commissioning is the duty of a suitably trained and qualified person.

Vehicle mounted LPG tanks shall undergo an annual inspection to verify their continued serviceability. It is recommended that the inspection is carried out by a person that has been successfully trained to the requirements within the code of practice.

Road Going Vehicles with integral LPG fuel tanks shall be inspected both internally and externally within ten-year intervals from the CoC (Certificate of Conformity) date of manufacture to ensure they are still within specification. It is expected that the vehicle will be returned to an approved workshop or similar for the work. Personnel carrying out the required 10-year inspection will require relevant qualifications.

Periodic Inspection and Maintenance of the LPG system

- Periodic inspection and maintenance, including safety devices, shall be undertaken to ensure the continued safety and performance of the installation.
- Any redundant pipework shall be made safe, and where practicable disconnected and removed. Any redundant pipework that has not been removed shall be isolated, and any open end sealed with an appropriate fitting.
- Flexible pipework connections, including assemblies, should be routinely inspected, and replaced as needed (it is recommended that hoses are changed at or before they are 10 years old). These connections should not be used if any signs of physical damage, environmental degradation, or service failure are detected during inspection. The inspection process should cover:
 - Physical damage: This includes cuts, abrasion, cracking, stretching, flattening, kinking, missing or worn sealing washers, damaged cylinder connections, and rodent attacks.
 - Environmental deterioration: Look for stiffening, cracking, delamination of the outer covering, and chemical degradation, such as softening of the outer coating due to contact with oil.
 - Service failure: Be alert for blistering, soft spots, rupture, and issues with preassembled end fittings, such as corrosion or loosening of swaged fittings that connect the hose.

Periodic Inspection of Fixed Tanks used in motor caravans.

To maintain the safety of LPG tank installations, a visual inspection of the LPG tank, filling point, valves, regulators, and fittings to check for:

- · Dents and gouges
- Corrosion, especially beneath mounting straps, or brackets (Isolated small areas of corrosion without pitting may be cleaned and painted).
- · The condition of hoses, mounting straps, brackets, and their attachment to the vehicle
- Damage to valves and fittings, focusing on the filling connection and cap.
- Proper functioning of valves, regulators, and fittings

Note - Any identified defects must be repaired by a suitably trained and qualified person.

It is a statutory requirement in Great Britain, the Isle of Man, Northern Ireland and Guernsey that all "gas work" (on installations within the scope of the Gas Safety (Installation and Use) Regulations) must be carried out by a business or self-employed person(s) that is a member of a "class of persons" registered with a registration body which has been approved by an approval body to operate and maintain such a register.

STORAGE

LONG TERM & WINTER STORAGE

If your campervan is to be stored for any length of time, especially over the winter period, the following operations are recommended:

- Ensure all windows, roof lights, habitation and exterior locker doors are closed firmly and locked.
- (ii) Remove all soft furnishings which could be affected by damp conditions
- (iii) Clean the campervan inside and out.
- (iv) Drain the water system.
- (v) For winter storage and to prevent frost damage all taps must be left in the open position. For those campervans with lever taps please ensure the taps are left in the central position.
- (vi) All blinds and flyscreens should be left in the retracted position. Check all fixed ventilation apertures are not obstructed.
- (vii) Ensure that the refrigerator/freezer compartment doors are left open during storage.
- (viii) Check that the site you have chosen to store the campervan is open, fairly high and dry and if possible not exposed to gales etc.
- (ix) It is recommended that you use a suitable dehumidifier or place a bowl of salt within your campervan to absorb any moisture during the winter months.

Campervan Covers

Covers may be used to protect your new campervan provided that the cover used is of a breathable type.

Lower the TV antenna and ensure the cover is well tied down to avoid the cover being punctured.

Your campervan must be ventilated every 4 to 6 weeks if it is to be stored with a cover in place.

Battery Maintenance

Storage

Ensure that the leisure battery is fully charged before placing the vehicle into storage.

Check the battery state every month, if the terminal voltage drops below 12.07V then recharging is necessary.

Charging should be carried out in a cool, dry well ventilated area.

Do not place the battery onto cold surfaces such as concrete as this will affect the battery's ability to charge.

Should the campervan be stored for a prolonged period of time it is strongly recommended that the campervan is fully serviced before the commencement of use. Your retailer will ensure that your campervan is safe, secure and ready for your enjoyment.

CAMPERVAN HABITATION WARRANTY COVER

Introduction

At Erwin Hymer Group UK we are confident that our new campervans are engineered using the latest manufacturing techniques and advanced materials technology ensuring that, when buying one of our products, you are buying the very best. We extend this philosophy to our customers by offering long term peace of mind and reassurance through our extensive warranty cover.

Your warranty cover commences on the day your new campervan is purchased and comprises of three key elements:

- The base vehicle warranty cover is provided by the original manufacturer. Please contact your local base vehicle retailer direct for any base vehicle warranty issues.
- 2. Three year Erwin Hymer Group UK manufacturer's warranty
- 3. Ten year Erwin Hymer Group UK body integrity warranty

Scope

This applies to all new products and is a guide intended to give a brief overview of the warranty terms applicable to your vehicle.

Conditions of use

Your new campervan has been designed as a leisure vehicle only. The warranty will not be given if the vehicle is used under the following circumstances.

- Used as a permanent residence
- · Used for racing or time trials
- Damage resulting from freezing, accident or fire damage

Exclusions

- No liability will be accepted for fair wear and tear, including mould or discolouration of adhesive. Damage including rodent damage, wilful damage or negligence from abnormal working conditions will not be covered.
- Condensation is not covered under the warranty agreement.

Three year manufacturer's warranty

Year 1 warranty - Covers all original components, forming part of the original product specification excluding normal wear and tear.

Year 2 and 3 warranty – Covers all original components, forming part of the original product specification, excluding the following items:

- · Normal wear and tear
- Microwaves
- Batteries
- · Windows and glass
- All soft furnishings including mattresses (2-year warranty cover)
- · Entertainment equipment
- LED lights
- · All plastic products
- Adjustments
- Ironmongery and corrosion of metallic components
- · Electrical connections
- Floor coverings

We would recommend that customers have their vehicle serviced on or before the due date to ensure that all warrantable parts are identified before the expiry of the component.

Ten year body integrity warranty

Erwin Hymer Group UK products are covered against water ingress for 10 years from the original date of purchase of a new product. (Reduced to 6 years for subsequent owners from 1st owners original date of purchase). Covering any water ingress as a result of a warrantable defect through a permanently sealed seam or joint.

Reporting a fault

In the unlikely event that you experience a problem with your campervan please contact your retailer.

It is with the retailer that your contract of sale exists and consequently they have the responsibility to ensure any complaints and warranty issues are addressed. Any Erwin Hymer Group UK approved Retailer / Service Centre are able to undertake any warrantable work at their convenience or discretion, but are not obliged to do so, if the vehicle was not purchased from them.

All Erwin Hymer Group UK products are classed as portable and therefore all work under warranty requires the campervan to be delivered and collected from the approved chosen Erwin Hymer Group UK agent.

The cost of transporting the campervan by any means to and from the place of repair is the responsibility of the owner.

In order to comply with the terms of the above cover the following conditions must be met.

Conditions attached to the warranty cover

- You must retain the original sales invoice for the campervan.
- All new campervans must be registered with Erwin Hymer Group UK within 6 weeks of purchase. Your retailer can forward this information to us. Please keep us informed of any name or address changes by using the Notification of Change to Name and Address form.
- The campervan must have an annual service and damp check carried out by an Erwin Hymer Group UK approved Retailer / Service Centre or NCC Approved workshop or NCC equivalent standard as set out in this handbook. Original invoices, service checklists and damp reports must be retained as proof that the annual services have been carried out in accordance with our warranty terms.
- Service intervals:
 - a) In years 1, 2, and 4 through to 9 the service must be completed no more than 60 days either side of the anniversary of the date of purchase.

- In Years 3 and 10 the service must be completed no more than 60 days on or before the anniversary of the date of purchase and must not exceed this date.
- For second owners the service in years 3 and 6 must be completed no more than 60 days on or before the anniversary of the original date of purchase. This date must not be exceeded
- d) No service interval should exceed 14 months
- e) Failure to service the vehicle within the specified time limits will invalidate your warranty.

We would recommend that you have your service carried out by an Erwin Hymer Group UK Approved Retailer/Service Centre, who are able to assist you should warranty work be required. Should you choose to have your service carried out by a non Erwin Hymer Group UK Approved agent, an additional charge may be payable by the customer to cover the second inspection.

 The campervan must be made available for repair within 6 weeks of the date of inspection for the purpose of carrying out the repair work.

Erwin Hymer Group UK reserves the right to inspect the vehicle before work commences. Failure to do this may invalidate your claim.

All defects must be assessed by an Erwin Hymer Group UK Approved Service Centre to determine the root cause of the issue. They must submit a warranty claim for our consideration, to determine if the defect is covered by the manufacturer's warranty agreement. The repair method will be agreed and any rework will be carried out at no charge to the customer.

We will not be responsible for costs incurred without prior approval via the warranty authorisation.

Warranty work may only be undertaken by an Erwin Hymer Group UK Approved Retailer/Service Centre.

- Erwin Hymer Group UK will pay the costs of remedial work to the repairer, only after approved work has been carried out. The cost of transporting, towing or moving the campervan by any means to or from the place of repair is the responsibility of the owner.
- The Policy is not retrospective and is applicable to 2019 model year campervans onwards.
- No liability will be accepted for any consequential loss, damage, costs, expenses or other claims for compensation arising which were not reasonably foreseeable by both parties when the campervan was originally purchased.
- No alteration may be made to the original construction

Mains electrics

It is recommended that you have your mains electrics system inspected by a NICEIC approved contractor every 3 years.

Transfer of ownership

If you purchase this vehicle as a used vehicle it may be possible to transfer the unexpired term of the warranty cover (up to a maximum of six years commencing at the original date of purchase from new). The warranty cover for a used vehicle commences from the original date of purchase from new and is as follows:

- Three Year Manufacturer's Warranty
- A maximum of Six Years' Water Ingress and Body Integrity Warranty

The warranty is subject to the usual terms and conditions' set out in the handbook and is only transferable on payment of an administration fee. Full documentary evidence that the campervan has been serviced annually should be provided at the time of transfer, in accordance with the terms and conditions of the warranty stated in the handbook. Transfer of ownership must be completed within three months of change of legal ownership. Please complete the Notification of Change of Ownership form in your handbook. Failure to do this will negate the remaining warranty.

This warranty does not affect the purchaser's statutory rights. The warranty shall be governed and construed in accordance with the laws of England and the parties irrevocably submit to the exclusive jurisdiction of the courts of England.

For second owners the service in years 3 and 6 must be completed on or up to 60 days before the anniversary of the first owners date of purchase and must not exceed this date.

NON WARRANTY REPAIRS

Should you require any replacement parts for your campervan it is necessary that you contact the Retailer from whom you purchased the campervan or any Erwin Hymer Group UK approved Service Centre and give the following information, which will help in identifying the required component:

- (i) Model and make of campervan
- (ii) VIN number
- (iii) Description of required part
- (iv) Photograph, size or diagram of required part

Please note: All parts must be ordered and supplied through an approved Retailer or Service Centre.

REMEDIAL WORK

Erwin Hymer Group UK, together with its suppliers is continually undertaking extensive research into testing, remedial work procedures and materials such as structural bonding adhesives, gaskets and tapes. Therefore, if for any reason your new campervan is damaged or requires remedial work then we would recommend an approved Erwin Hymer Group UK Retailer or Service Centre should undertake such work.

All such work must be undertaken using only approved Erwin Hymer Group UK genuine parts, recommended structural bonding adhesive and following Erwin Hymer Group UK procedures. Erwin Hymer Group UK will also undertake to supply certain specialist repairers with the necessary spare parts. In this case, your selected repairer must contact the PARTS DEPARTMENT with all enquiries.

Base vehicle warranty - The base vehicle warranty cover is provided by the original manufacture. Please contact your local base vehicle retailer direct for any base vehicle warranty issues.

CAMPERVAN CONSTRUCTION - MAIN COMPONENTS

The following is a brief description of the main components used in your campervan. More comprehensive descriptions can be found in the equipment manufacturers literature held in the Owner's Information Pack.

WINDOWS

Windows are all of a double glazed acrylic construction.

INSULATION

Erwin Hymer Group UK campervans are built to comply with thermal insulation in accordance with the European Standard BSEN 1645 part 1.

ELECTRICAL DRAWINGS

The water pump has an internal pressure **CAMPERVAN** All white negatives are linked therefore cable sizes and locations may vary. 230V Mains Intake Water Space Heater Microwave Duel fuel hob Optional Hote Spur 134 PDU 230V Input switches fitted. 3 core flex Wh NOTE: 10A MCB d £ [1] m 16A MOB 6A MOB Barginn (5) # Barginn (1) # Who (1) # ₩ 3 Auxillary Battery PDU 12V Inputs ŝ Vehicle ş Brn/Red EB 10A 16A 16A Ì 10.70 (4) Wh (5) Yel/Blk 6 €3 €3 100 100 100 **TREE** TIBE. 88

Or/Wh – Orange/White BIK/Wh – Black/White 3r/Brn – Green/Brown Brn/Red - Brown/Red Wh/Gr – White/Green Wh/Blu – White/Blue Red/Or - Red/Orange Yel/Blk - Yellow/Black 3lu/Bm - Blue/Brown Gr/Blk - Green/Black Wh/Blu - White/Blue Red/Wh - Red/White 3ry/Blk - Grey/Black Brn/Blu - Brown/Blue Gr/Blu - Green/Blue 3r/Red - Green/Red Pnk/Blu - Pink/Blue Blu/Red - Blue/Red Or – Orange Red – Red Gr – Green Wh – White Yel – Yellow Pur - Purple Blk – Black Pnk – Pink Blu - Blue

4 N

1 2

GENERAL QUESTIONS

Q: Where Can I Obtain Your Latest Brochure?

A: Our latest brochures are available from Approved Retailers or can be viewed and printed from our website:

www.elddis.co.uk www.buccaneer-rv.co.uk www.xplore-rv.co.uk

Q: Why Is the Handbook Not Specific To My Model?

A: Many of the components used in the manufacture of our campervans are identical throughout our model ranges, so we produce a generic handbook, which covers all models manufactured within a range for that season. If the literature supplied with your campervan does not answer your question then please contact your Retailer for further assistance.

Q. I Require Technical Or Other Information, Who Can Help Me?

A. The majority of information you require is available through your Erwin Hymer Group LIK Retailer

Q - Can You Tell Me The Second Hand Price Of My Campervan?

A - As a manufacturer we are not involved in the second hand market. You should contact a Retailer. They should be able to give some indication of market value.

Q: Can I Fit A Bicycle Rack To My Campervan?

A: It may be possible to fit a bike rack, please contact your retailer for more information.

Q: My Interior Lights Are Not Working, What Do I Do?

A: It is possible that all of the 230V mains electrical equipment may not be operated simultaneously. Check fuses, battery connections and power supply (master light switch). Refer to your Retailer for further assistance.

PLEASE NOTE: The internal lights in your campervan will not operate whilst the campervan engine is running.

Q: Where Can I Get Spare Parts For My Campervan?

A. We do not supply parts direct, we have an extensive network of Retailers/Service Centres which will be able to source most parts you require. For details of your nearest Erwin Hymer Group UK Retailer please refer to 'Find A Retailer' section on our website. Note: If your vehicle is 8 years or older please refer to the Help and Support/FAQ's/Parts section of our website https://lelddis.co.uk/help-and-support/faqs, for a list of surplus stocklists and breakers.

Q. How Many Years Will Spare Parts Be Available For My Campervan?

A. Erwin Hymer Group UK will endeavour to supply spare parts for a campervan, for at least 8 years from new.

Q. Why Don't You Stock Parts At The Erwin Hymer Group UK Factory?

A. Due to the volume of models we produce it is not possible for us to maintain stock levels of every individual component used in our manufacturing process. We do stock commonly requested items, but some items must be made to order

Q. What If The Parts Are No Longer Available?

A. Where an original part is no longer available, whenever possible we will suggest a suitable alternative if it is available.

Q: Who Can Service My Campervan?

A: Any EHG UK Ltd Approved / Service Centre can undertake the service work, but this is at their discretion. We will also accept services completed by a NCC approved company, but they will NOT be able to undertake any warranty work if they are not an EHG UK Ltd Approved / Service Centre.

You may choose to have your annual service performed by an unauthorized repairer / service Centre and if you do it will be your responsibility to ensure that the service meets our requirements.

Q. I Am Having Trouble Booking My Campervan in For Its Service, In Line With The Requirements. What Timescale Is Acceptable?

A. Please refer to the warranty section for the terms and conditions of servicing. We would recommend that you plan your services in advance in order to meet the requirements.

GLOSSARY

ABS Plastic

Acrylonitrile Butadiene Styrene Plastic the material used for most of the large plastic components within your vehicle.

Actual Laden Weight

This is the total weight of the vehicle when ready for use by the end user.

Awning

This is a tent-like structure of fabric over a supporting framework, which can be attached to the side of vehicle

Battery Charger

This is required to keep a leisure battery charged. All vehicles include a charging facility which operates via the mains hook-up, and also has the ability to recharge through the base vehicle chassis or tow car's alternator.

Berth(s)

Sleeping place - Refers to the number of people a vehicle can accommodate for sleeping.

Blown Air Heating

A method of heating the living quarters of a vehicle by use of a fan pushing air out through a number of outlets.

Bunk Bed

This is a sleeping place, usually higher up than a conventional bed. Often (but not always) this can be folded or removed to provide additional living space.

Butane

Is a form of Liquefied Petroleum Gas (LPG) which normally comes in blue cylinders. This type of gas is most commonly used in the UK, although a switch to propane is advised in severely cold weather conditions.

Calor

This is the main supplier of propane (red) gas cylinders and significant seller of butane (blue) gas.

Cassette Blind

This is a roller blind which is fitted as part of the window assembly, often along with a flyscreen, thus giving a neat installation.

Cassette Toilet

A form of chemical toilet found in modern vehicles, where the waste holding tank can be accessed and emotied from outside.

Chemical Toilet

A toilet that has a compartment in which waste is treated with chemicals.

Control Panel

Used as the description for the panel of electrical switches and gauges governing 12V and mains electricity systems.

CRIS

This is the Central Registration and Identification Scheme. It is a voluntary scheme which registers a vehicle. Allows you to check the legitimate right to ownership of the seller of a second-hand vehicle, and helps in the recovery of stolen vehicles.

Dinette

This is a popular style of seating arrangement where two seats or settees face each other across a table.

Earth Leakage Circuit Breaker

ELCB Earth leakage circuit breaker - see residual current device (RCD).

Essential Habitation Equipment

Those items and fluids required for the safe and proper functioning of the equipment for habitation as defined by the manufacturer of the vehicle. This includes items such as the leisure battery and gas cylinders, plus water contained in the water heater etc.

Flyscreens

Mesh fittings for windows doors and roof vents, to keep out insects etc.

Free-Standing Table

This is a table which, because of its leg design, can be used inside or outside.

Full Service Pitch

This is a pitch which has individual provision for fresh water supply and waste water disposal, in addition to mains electricity and in some cases TV aerial connection.

Gas Cylinder

This is a portable, pressurised container for the storage of LPG.

Gas Locker

Is the compartment on the caravan for the storage of gas cylinders.

Gas Drop out Holes

These are not part of the ventilation. LPG is heavier than air, so holes through the floor below gas-powered appliances allow any leakage of gas to exit the habitation area.

Gas Regulator

Safety device fitted between the gas cylinder and the gas system of a vehicle, which controls the pressure of gas being released from the cylinder.

Grey Water

This is the waste water from sink/shower

Gross Train Weight

This is also known as Combined Weight. The maximum permitted weight of an outfit as specified by the tow vehicle manufacturer.

Gross Vehicle Weight (GVW)

This is the weight of the vehicle laden to its maximum, as defined by the manufacturer. See also MTPLM

GRP

Is Glass-reinforced plastic, but more commonly known as glass fibre (not fibre glass, which is a trade name).

Handbook

This is a generic owners manual, a guide to the workings of your vehicle.

Hardstanding

This is a pitch which has a hard surface made of gravel, asphalt, concrete etc, instead of grass.

Hook-Up

This is a facility on a pitch for connection to mains electricity.

Ingress

The entry of water into the vehicle structure.

Jack

This is a device for raising the vehicle so that a wheel can be changed, for instance. Note for caravans only - Not to be confused with corner steadies which although they are sometimes referred to as 'corner jacks' are steadying, not lifting devices.

Kerb Weight

This is the empty weight of a motor vehicle as defined by the manufacturer.

Layout

This is the interior design and details where furniture units are placed in relation to each other

Leisure Battery

This supplies the power for the vehicle 12V systems and is sometimes called an auxiliary battery.

Levelling

The process of ensuring that a vehicle is level when sited on a pitch. It is important for comfort and also to ensure the correct functioning of the fridge and water systems.

LPG

Liquid Petroleum Gas, i.e. butane or propane.

L-Shaped

This is a term where the seating area of a vehicle is indeed L-shaped.

Mains Hook-Up

This is a campsite facility where you can plug into a mains electricity supply.

Maximum Permissible Towing

This is the maximum weight that the towing vehicle is allowed to tow.

Maximum User Payload

This is the maximum payload available for the user.

MIRO - Mass In Running Order

Weight of the vehicle equipped to the manufacturer's standard specification including essential habitational equipment.

MTPLM - Maximum Technically Permissible Laden Mass

The technical maximum permissible laden weight of the vehicle, this must not be exceeded.

NCC - National Caravan Council

The only trade association representing manufacturers, retailers and suppliers within the vehicle industry.

Optional Equipment Payload

A mass specified by the vehicle manufacturer for factory or pre-registration fitted options only.

Owners' Club

This is a group of people who usually own the same brand of vehicle and enjoy meeting up for rallies.

Payload

The amount you can put into a vehicle. Specifically the difference between the Maximum Technical Permissible Laden Mass (MTPLM) and the Mass In Running Order (MIRO).

PDI

This is an inspection undertaken by the Retailer prior to handover to the customer.

Pitch

A designated area of a vehicle site allocated for the use of one outfit. Most sites will be arranged with defined pitches.

Propane

Gas used in colder conditions and is usually supplied in red cylinders.

RCD

This is a residual current device and is part of the electrical system which will 'trip' if there is an electrical fault.

Road Lights

The external lights used while the vehicle is travelling.

Roof Lights - See Roof Vent.

Roof Vent

Is an opening unit in the ceiling which lets in ventilation and light, these vary in size, but the best ones will have integral blinds and flyscreens and are also called rooflights.

Semi-Rigid Pipe work

Is water pipes made of a semi rigid plastic and are preferable to cheaper convoluted piping which can act as a trap for germs and smells

Serial number

This is a unique serial identification number for a vehicle.

Slats

Sometimes used for beds and can improve ventilation to mattress cushions.

Space Heater

This is a type of heating equipment for the living quarters. Modern units fitted offer gas and mains-operation.

Speed Rating

This is the maximum speed at which a tyre may be used, as marked on its sidewall.

SMMT

Society of Motor Manufacturers and Traders.

Torque Wrench

A form of spanner used to set nuts and bolts to a specified degree of tightness. It is recommended for adjustment of wheel fixings on vehicle.

Towing Limit

See manufacturer's braked towing limit and manufacturer's unbraked towing limit.

User Payload

The weight of all items carried in the vehicle.

U-Shaped Settee

Usually a reference to seating that literally is 'U' shaped.

Vehicle Kerb weight

The weight of the tow car often indicated in the manufacturers specifications..

VIN - Vehicle Identification Number

This is a unique vehicle identification number. All Cars and motorhomes should carry a VIN.

Caravans are not obliged to, but the serial number is used as part of the CRiS voluntary registration scheme.

Warranty

Are the terms and conditions that spell out your rights with regards to servicing, repair or replacement of parts as provided by the manufacturer.

Wild Camping

Term used for staying overnight away from a campsite. Illegal in many countries, but permission may be granted by individual landowners.

CAMPERVAN ANNUAL SERVICE RECORD

In order to ensure your warranty remains valid an annual service must be carried out in accordance with the requirements of this handbook. You are responsible for any charges incurred for the service of your vehicle. If the annual service is performed by an authorised Erwin Hymer Group UK Approved Retailer / Service Centre or NCC Approved Workshop then Erwin Hymer Group UK Limited deems that the service has been performed correctly.

You may choose to have your annual service performed by an unauthorised repairer / service centre and if you do it will be your responsibility to ensure that the service meets our requirements.

We will ask you to provide a copy of the following documentation:

- Damp report
- Annual Habitation Service check list (to the minimum standard set out in this handbook)
- Invoice / dated service stamp

If the Annual Service has not been performed in accordance with the requirements in this handbook your warranty will be invalidated, however this will not affect your legal or statutory rights as a customer.

Erwin Hymer Group UK will not pay any unapproved Service Centre for the undertaking of any warranty work.

Minimum service requirements

The service must be undertaken by suitably qualified personnel.

A full damp test check should be undertaken and damp readings recorded.

A service check must be performed to the minimum standards set out below.

Annual Habitation Service check list

UNDERBODY

Item	Condition
Under slung tanks and pipes - check condition and security	

ELECTRICAL SYSTEMS

Item	Condition
Check the leisure battery is being charged from both the engine when running, or with a multi-tester and the mains charger	
Leisure Battery (if fitted) - check condition of the battery & its compartment	
Interior lighting & equipment - check operation and fuse rating	
Awning light - check operation	
Wiring earths - check for defects on all ELV circuits (Visual)	
LV inlet plug & extension lead – check condition & resistance across pins	
Earth Bonding - visual inspection	

SERVICE DOCUMENTS

ELECTRICAL SYSTEMS (continued)

Item	Condition
RCD unit - check operation of RCD test button and operations of MCBs	
230V appliances - check operation	

GAS SYSTEMS

Item	Condition
Regulator and gas hose - check age performance and security	
Perform a gas pressure check	
LPG Tank (if fitted) - check security	
Flame failure devices - check operation	
Gas dispersal holes - check they are clear from obstructions.	

APPLIANCES (check gas and electric operation)

Item	Condition
Hob - check operation	
Oven - check operation	
Grill and fan - check operation	
Fridge - check operation	
Water boiler – Check operation	
Heater - check operation	

WATER SYSTEM

Item	Condition
Water pump & pressure switch - check operation	
Taps, pipes - check operationy	
Water system - check for leaks	
Water Tanks (if fitted) - check security of all water tanks including underslung tanks.	
Toilet - check security, operation of flush pump and free from obstructions.	
Drain down the system when checks are complete.	

VENTILATION

Item	Condition
Rooflights - check all are free from obstructions, cracks and have a free air flow	
Floor vents - remove protective cover and check they are clear from obstruction then refit covers	

FIRE & SAFETY

Item	Condition
Smoke and carbon dioxide detectors - check for operation via the test buttons fitted, check battery condition.	
Fire Extinguisher (if fitted) - check it is still within date	
Fire Blanket (if fitted) - check it is still within date	
Habitation doors operation	

BODYWORK

ltem	Condition
Doors and windows - check all catches are present and operating correctly.	
Blinds and flyscreens - check condition and operation	
Roof - check condition of roof.	
Cab seats - check condition of the seats and seats belts	
Floor - check condition of floor	
Furniture - check condition of the furniture	
Damp Test - undertake a damp test and record all readings taken.	
Lubricate all locks	

ANNUAL HABITATION SERVICE RECORDS

ANNUAL SE	ERVICE RECORD
CAMPERVAN MODEL	
VEHICLE IDENTIFICATION NUMBER	YEAR
1st SERVICE	2nd SERVICE
DATE:	DATE:
RETAILERS STAMP:	RETAILERS STAMP:
I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.	I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.
3rd SERVICE	4th SERVICE
DATE:	DATE:
RETAILERS STAMP:	RETAILERS STAMP:
I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.	I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.
5th SERVICE	6th SERVICE
DATE:	DATE:
RETAILERS STAMP:	RETAILERS STAMP:
I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.	I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

7th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

8th SERVICE

DATE:

RETAILERS STAMP.

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

9th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

10th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

11th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations

12th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

13th SERVICE

DATE:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

14th SERVICE

DATF:

RETAILERS STAMP:

I/We certify that an annual service has been carried out in accordance with the manufacturers' and NCC recommendations.

NOTIFICATION OF CHANGE OF OWNERSHIP

If you purchase this vehicle as a used vehicle it may be possible to transfer the unexpired term of the warranty cover (up to a maximum of six years commencing at the original date of purchase from new). Please refer to the warranty section of the handbook for terms and conditions.

Please complete the attached form and post it to us along with the following information:

A copy of the V5 registration form

www elddis co uk

please tick.

- A copy of the habitation service handbook displaying a complete and up to date service history, including service checklist and damp report.
- Please contact the customer care team to arrange payment.

Transfer of ownership must be made within the first three months of any change of legal ownership in order for the warranty cover to remain valid.

Erwin Hymer Group UK Limited Customer Care Delves lane Consett County Durham DH8 7PF

Email documents to customer.care@erwinhymergroup.co.uk payment can be taken over the phone

Notification of change of ownership Previous owner details (if known): Name: Address: Post code: Email: New owner details: Name: Address: Post code: Email: Daytime telephone number: Details of Campervan: Range: Model: Vehicle identification number (17 digits): * In order for you warranty to remain valid, your campervan must have been serviced annually by an Approved

Retailer / Service Centre, NCC Approved Workshop or NCC equivalent standard as set out in this handbook. If you do not want to receive information about products and services from Erwin Hymer Group UK,

NOTIFICATION OF CHANGE TO NAME AND ADDRESS

In order that we can provide you with the very best level of service we ask that you keep us informed of any changes to your contact details.

Should your details change please complete the attached form and post to us:

Erwin Hymer Group UK Limited Customer Care

Delves Lane

Consett

County Durham

DH8 7PE

www.elddis.co.uk

Email documents to customer.care@erwinhymergroup.co.uk

NOTIFICATION OF CHANGE TO NAM	ME AND ADDRESS
Previous details:	
Name:	
Address:	
	Post code:
Email:	
New details:	
Name:	
Address:	
	Post code:
Daytime telephone number:	Date of purchase:
Email:	
Details of your Campervan:	
·	
Range:	Model:
Vehicle identification number (17 digits):	
If you do not want to receive information about please tick.	products and services from Erwin Hymer Group UK,

INDEX

Α	ı
Alarm system 9-1	Insulation
В	L
Bed make up 8-43 Bicycle racks 3-2, 8-61	Levelling
Back Rack8-64	M
Care of your Campervan	Mains Unit
Door flyscreen 8-34	Notification of Change of Ownership
Electrical System	Refrigerator 8-22 S Safety, general 2-1 Security 9-1 Service records 17-4 Site Regulations 5-1 Storage Long Term & Winter 11-1 T
	Taps

V	
Ventilation	2-2
W	
Water System	6-7
Wiring diagram1	14-1