





# Swift Group Owner's Handbook

Select Van Conversion Addendum



Issued March 2022

The text below is in addition to fault finding on page 91 in this handbook.

#### Truma Combi Heating fault codes 507, 516 or 517.

This fault will appear in the display of the Truma Combi digital display in the Truma CP Plus control panel. This is a preventative measure to stop the heater constantly trying to restart if there is no gas and is referred to as 'gas lockout'.

# Remedy Faults 507 / 516 / 517 (gas supply interrupted)

- Restore the gas supply, for example by connecting a full gas cylinder.
- Then confirm or delete the fault code by tapping the rotary push button. Please note that the first tap might only activate the backlighting of the control panel.
- The heating then starts automatically if there is a heating requirement.

(**)** Note: If the fault 507, 516 or 517 is displayed in the heater's control panel, switching the control panel on and off does not help. This does not delete the fault, but blocks the heater for 15 minutes. The heater is also blocked for 15 minutes if the fault 507, 516 or 517 is deleted four times without the gas supply being established.

## Remedying flashing fault 507 / 516 / 517 (gas supply interrupted)

The fault code 507, 516 or 517 flashes because the heater is still in a 15-minute blocking time. This was possibly caused by the heater control panel being switched off or because the heater's 12-Volt supply was interrupted. The heater is also blocked for 15 minutes if the displayed fault is deleted four times without the gas supply being restored.

- Wait out the 15-minute blocking time for the heater. During this time, do not switch off the heater's control panel and also do not interrupt the power supply.
- As soon as the heater's blocking time has expired, the fault is then displayed permanently rather than flashing. It can now be deleted as described in the point above







# Swift Group Owner's Handbook

Select Van Conversion

Issued August 2021 Part No. 1443245



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#### Dear owner

Thank you for deciding to buy one of our new motorhomes.

We are sure you will enjoy many happy hours in it and we hope the information and hints in this handbook will heighten your enjoyment.

The handbook has been designed to give you a general guide to the care, use and maintenance of your motorhome. Whether you are a new or an experienced motorhomer the hints will help to protect your investment.

The information contained will answer most of your queries, but if there are any aspects which are not covered please consult your appointed dealer. We would suggest you make a note of your dealers name and contact information below.

Important - please quote the base VIN (vehicle identification number) in all correspondence with your dealer or Swift Group Limited (Swift), this can be found on the lower corner of the front windscreen or on the Fiat plate positioned on the front cross member within the engine compartment.

All the illustrations and descriptive matter in this handbook are intended to give a general idea of the motorhome. Changing market and supply situations may prevent us from maintaining the exact specification details in this handbook. We therefore reserve the right to alter specifications as materials and conditions demand.

Dealers are not agents of Swift Group Limited and have absolutely no authority to bind Swift Group Limited by any express or implied undertaking or representation.

#### Online Handbooks

Throughout the season, specifications and equipment details contained within this handbook may change. Please refer to our online handbooks (www.swiftgroup.co.uk) for the most up-to-date version of your handbook.

#### Handbook Definitions

Customers should note that this handbook contains general information for the use and care of your product and the Technical Handbook, which contains technical information, weights and dimensions of your product.

Happy touring!

#### Dealer Name:

.....

#### **Telephone Number:**

.....

#### E-mail:

.....

#### VIN:

.....

#### Sales Tel:

.....

#### Service Centre Tel:

#### .....

Parts Tel·

First Service Due:



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# WARRANTY INFORMATION

# 1. Warranty

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#### 1.1 Panel Van Conversion Motorhome Warranty

All the illustrations and descriptive matter in this handbook are intended to give a general idea of the motorhome. Changing market and supply situations and our policy of continuous product development may prevent us from maintaining the exact specifications detailed in this handbook. We therefore reserve the right to alter specifications as materials and conditions demand.

#### Dealers are not agents of Swift Group Limited ("Swift") and have absolutely no authority to bind the manufacturer by any express or implied undertaking or representation.

Note: To register your warranty, please use the Connect Direct Registration process, by doing so you are agreeing that you have had the details of the warranty and the annual service arrangements fully explained. This in no way affects your statutory rights under the Consumer Rights Act.

#### Your Panel Van Conversion has four warranties:

#### Base Vehicle Warranty - provided by Fiat

Your vehicle is a panel van conversion motorhome which utilises a Fiat base vehicle. For a panel van conversion motorhome, Swift takes a panel van as supplied by Fiat and fits out the interior of the van for habitation. Fiat provides a manufacturer's warranty for the base vehicle as supplied to Swift by them. For any issues with the base vehicle warranty please contact your local Fiat dealer. This Motorhome Warranty does not cover any parts of your motorhome that are covered by the Fiat manufacturer's warranty. Your base vehicle warranty is subject to the terms and conditions contained in the Fiat handbook supplied with the base vehicle and the vehicle must be serviced in accordance with Fiat requirements.

#### SuperSure Warranty - provided by Swift

For all parts or fittings of your panel van conversion motorhome other than the Fiat base vehicle, Swift will repair (or at its option, replace) any defective parts or fittings for 3 years from the date of purchase (or hire purchase) subject to conditions, terms and exclusions below.

#### Panel Van Conversion Body Shell Warranty – provided by Swift

Swift will repair (or at its option, replace) any defects with the panel van conversion to the body shell for 3 years from the date of purchase (or hire purchase), subject to the conditions, terms and exclusions below.

This Motorhome Warranty does not cover any parts of your motorhome that are covered by the Fiat manufacturer's warranty.

# Conditions for the SuperSure and Body Shell Warranties

- You must ensure that the habitation part of your motorhome has an Annual Service (see clause 2 below) within 90 days before or 60 days after each anniversary of the original date of purchase. In order to preserve your SuperSure and Body Shell Warranties the third Annual Service must, however, be carried out before the expiry of the 36 month period from the original date of purchase. If you have not performed an Annual Service then Swift will not be obliged to perform any work under the applicable warranty. Original VAT invoices must be retained as proof that Annual Service have been carried out.
- 2. The Annual Service on the body shell and habitation area must be carried out in accordance with the requirements in this handbook. You will be responsible for any charges made for an Annual Service. If the Annual Service is performed by an authorised Swift Group Service Centre then Swift warrants that the Annual Service has been performed correctly. If the Annual Service is performed by an unauthorised repairer or service centre then if the Annual Service has not been performed in accordance with the requirements in this handbook and/or work has been performed on your motorhome that is defective or faulty, then Swift will not be obliged to perform any work under this Warranty (insofar as it relates to defective or faulty work or defective Annual Service
- 3. The benefit of the SuperSure and Body 3. All new motorhomes must be registered with Swift within 6 weeks of purchase as new.

- 4. The benefit of the SuperSure and Body Shell Warranties may be transferred to a new owner if the motorhome is re-sold, provided that the motorhome has been serviced in accordance with the requirements of this handbook, and details of the change of ownership have been supplied to Swift using the change of ownership form set out in this handbook as soon as reasonably practicable after the change.
- 5. If any repairs are identified as being necessary to the body shell or habitation areas during an Annual Service or otherwise, Swift will only pay for Warranty work performed by an authorised Swift Group Service Centre. The motorhome must be made available to an authorised Swift Group Service Centre within 6 weeks of the date the repair need was identified for the work to be carried out. The cost of transporting, towing or moving the motorhome by any means to or from the place of repair is the responsibility of the owner.
- The SuperSure and Body Shell Warranties only apply to motorhomes purchased and used primarily within the UK. Please refer to the Fiat handbook for use of the base vehicle outside the UK.

#### Terms

- 7. The Body Shell Warranty covers any defect with the joints and seals of the panel van conversion. This includes body leaks, delamination of floors, and water ingress through any permanently sealed seam joints which relate to the conversion of the panel van. This Motorhome Warranty does not cover any parts of your motorhome that are covered by the Fiat manufacturer's warranty.
- In the first 12 months the SuperSure Warranty will cover any defect other than those specified in the Exclusions below.

- 9. In the years 2 and 3 the SuperSure Warranty will only cover any defect with the following components:
- Electrical System: PSU, battery charger and interior lighting units (excluding bulbs).
- Water system: water heater, fresh water tank, water pump, water gauges, taps and shower head.
- **Cooker:** the cooker unit including grill, oven, burners, igniter, and flame failure device.
- Refrigerator: gas igniter, flame failure device, door seal condenser, gas control valve, 12v and 230v heater elements, gas thermostat, 230v thermostat and 230v temperature control switch.
- **Cassette Toilet:** the cassette toilet (excluding seals, valves and glands).
- Heating system: thermostat, motor, switches, control unit, gas heater, flame failure device and igniter (exluding ducting and fittings).
- Windows: the functionality of the opening and closing system (stays, handles and catches) and a warranty against the cracking of the acrylic, Excludes fading.
- Upholstery: zips, seams and colour fastness.

In years 2 and 3, any defect specified in the Exclusions will not be covered. Exclusions

#### Exclusions

- 10. Swift shall not be liable under the SuperSure and Body Shell Warranties for any defect related to or arising from the following:
  - 1. The failure of a component for reasons of fair wear and tear;
  - Damage resulting from freezing, fire, over-heating or accidents (whether caused by the user or a third party);
  - 3. Misuse of any component;
  - Normal deterioration, corrosion, intrusion of foreign or harmful bodies, lack of servicing or negligence of any person other than Swift which causes stoppage of or impairment to the function of any component of the motorhome;
  - Replacement of parts which have reached the end of their effective working life because of age and/or usage;
  - Cleaning or adjustment of any assemblies;
  - 7. Damage caused by any abrasive cleaners

- 8. Cosmetic finishes to kitchen sinks, cooker tops, vanity units, shower trays; and/or
- Routine maintenance items which are part of the annual service including lubricants, rubber gas hose, the cleaning of the heater and fridge flues, the replacement of gas jets, the resealing and/or replacement of shower room sealant, and the adjustment and lubrication of locks.
- 10. Should you have an enquiry or require assistance with a problem, we hope that this guide will be of assistance to you.
- 11. In addition to the exclusions above, in years 2 and 3 of the SuperSure Warranty Period, Swift Group Limited shall not be liable under this Warranty for any defects related to:
- Any microwave
- Factory fitted leisure battery after 12 months of date of purchase
- 12. Swift shall also not be liable under the SuperSure, and Body Shell Warranties if the motorhome has been neglected, misused, modified or used for hire or reward or if the identification marks (chassis/VIN numbers) have been removed or defaced. The motorhome will be deemed to have been neglected if it has not been serviced and maintained as stated in this handbook or any repairs being identified as necessary at an Annual Service or by a Swift Group Service Centre have not been carried out in a reasonable time.

#### You have legal rights under UK law governing the sale of consumer goods. This Warranty does not affect your legal rights.

The name and address of the Warranty provider is:

Swift Group Limited, Dunswell Road, Cottingham, East Yorkshire, HU16 4JX

To make a claim under this Warranty, contact the Swift Group Dealer which supplied your motorhome. Alternatively, details of your nearest authorised Swift Group Service Centre can be obtained by contacting the Swift Group Customer Service Department on 01482 875740, or enquiring on the website www. swiftgroup.co.uk

#### **Change of Ownership**

You can transfer the remainder of any three year 'Supersure warranty' and the three year 'Body shell' warranty, details of how to do this can be found at the rear of this handbook.

#### **1.2 Swift Connect Direct**

You have access to an online system which is for all Swift models. A password will be issued to you, to enable you to interact with us.

To access the system, called 'Swift Connect Direct', your initial log in details will be emailed to you once your supplying dealer has registered your ownership with us.

Please log in and create your own profile. Should you have issues with accessing Swift Connect Direct, please contact our Customer Services Team.

#### What to do if you Require Assistance

Should you have an enquiry or require assistance with a problem, we hope that this guide will be of assistance to you.

#### Please follow these steps:

- 1. Check the Owners Handbook, paying particular attention to the fault finding advice at the back of the book.
- 2. Contact your supplying dealer for assistance.

## If you need to contact Swift Group Limited, please be aware of the following:

- When contacting Swift Group, please quote your name, postcode and VIN (Vehicle Identification Number). This can be found at the bottom of the front windscreen and on the side of the sliding door. Also within the engine bay.
- 2. In most instances, the Customer Service Team will involve your dealer in resolving the issue you are experiencing.
- Check our website www.swiftgroup.co.uk and enter the help and advice section which provides answers to frequently asked questions and how to contact us.

- If you are contacting the company by email, letter or fax, the Customer Service Team will respond to you within five working days from the date of receiving the correspondence.
- Please be aware that Swift Group Limited cannot send parts direct from the factory. In all cases, without exception, your dealer must place the order for you.

#### **1.3 Supplier contacts**

A number of Swift Group suppliers manage their own Technical and Warranty related queries. Where a customer has a question relating to a product manufactured by a company listed below, we would advise that the first contact should be directly with them.

SAR <b>©</b> ENT	Sargent Electrical Services Unit 39, Tokenspire Business Park, Beverley, East Yorkshire, HU17 0TB Phone: 01482 678981 Fax: 01482 678987 E-mail: support@sargentltd. co.uk	https://sargentitd.co.uk
truma	Truma UK Ltd. Park lane, Dove Valley Park, South Derbyshire, DE65 5BG Phone: 01283 586020 Fax: 01283 586029 technical@trumauk.com	https://www.truma.com/uk/en/home
THETF RD Corporation	Thetford Ltd. Unit 6, Brookfields Way, Manvers, Dearne Valley, Rotherham, South Yorkshire, S63 5DL Phone - 0844 997 1960 Fax - 0844 997 1961 Email - infogb@thetford.eu	https://www.thetford-europe.com
Dometic	Dometic (UK) Ltd Dometic House, The Brewery, Blandford St Mary, Dorset, DT11 9LS Phone: 0844 626 0133 Email: technical@dometic. co.uk	https://www.dometic.com/en-gb/uk

#### 1.4 Annual service / inspection record

In order to comply with the warranty, you must have your motorhome inspected and serviced in accordance with the warranty.

We highly recommend that you have your Motorhome serviced by a Swift Group Approved Service Centre who have direct access to our online Customer Service system, Connect. This system provides them with the ability to order approved parts and ensure that any product upgrades which may be available for your Motorhome can be offered to you and carried out as part of the service. In the unfortunate event that an issue requires attention under warranty then a Swift Group Approved Service Centre are able to submit a warranty claim to the Swift Group for processing, and deal with the issue for you from start to finish. All of our Swift Group Approved Service Centres are provided with up to date technical information and have access to current repair methods giving you peace of mind that any defect has been repaired effectively.

It is important that the owner's handbook is stamped on the appropriate page by the authorised Swift Group Service Centre.

Failure to do this will invalidate the warranty and the transfer of the warranty on the change of ownership.

The inspection should take approximately two hours and will cover the areas dealt with in the annual service check list. Any areas requiring service and/or maintenance will be highlighted by your dealer and we recommend that you authorise any necessary work to be carried out.

Just as the engine/gearbox/roadwheels need regular servicing by your chassis dealer, so there are components in your conversion that need regular maintenance by your motorhome dealer.

These include the gas and electrical systems and the seals in the bodywork. Your dealer will complete the record in this handbook to show that the work has been carried out.

- 1. Damp and lamination test.
- 2. Chassis and chassis to body security.
- 3. Motorhome step.
- 4. Road lights, wiring and reflectors.
- 5. Internal lights and 12V DC system.
- 6. Water heater gas and 230V AC.
- 7. Hob, grill and oven.
- 8. Refrigerator 230V AC, 12V DC and gas.
- 9. Gas system.
- 10. Water pump, taps and water system.
- 11. Mains 230V AC system.
- 12. Windows and fittings.
- 13. Roof lights.
- 14. Furniture hinges/stays etc.
- 15. Exterior locks and hinges.
- 16. All internal vents.
- 17. Seals.
- 18. Blinds and fly screens.
- 19. Blown air heating systems.
- 20. Smoke alarm and battery
- 21. Carbon monoxide detector and battery

Motorhome model:	1st service
	Date:
Registration number	Dealer's Stamp
Chassis number	
Registration date	
	We certify that an annual service has been carried out in accordance with the handbook.
2nd service	3rd service
Date:	Date:
Dealer's Stamp	Dealer's Stamp
We certify that an annual service has been	We certify that an annual service has been
carried out in accordance with the handbook.	carried out in accordance with the handbook.
4th service	5th service
<b>4th service</b> Date:	<b>5th service</b> Date:
Date:	Date:
Date:	Date:
Date:	Date:
Date: Dealer's Stamp	Date: Dealer's Stamp
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Date: Dealer's Stamp We certify that an annual service has been carried out in accordance with the handbook. <b>6th service</b> Date:	Date: Dealer's Stamp We certify that an annual service has been carried out in accordance with the handbook. <b>7th service</b> Date:
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Date: Dealer's Stamp We certify that an annual service has been carried out in accordance with the handbook. <b>6th service</b> Date: Dealer's Stamp	Date: Dealer's Stamp We certify that an annual service has been carried out in accordance with the handbook. <b>7th service</b> Date: Dealer's Stamp
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8th service	9th service
Date:	Date:
Dealer's Stamp	Dealer's Stamp
We certify that an annual service has been carried out in accordance with the handbook.	We certify that an annual service has been carried out in accordance with the handbook.
10th service	11th service
Date:	Date:
Dealer's Stamp	Dealer's Stamp
We certify that an annual service has been	We certify that an annual service has been
carried out in accordance with the handbook.	carried out in accordance with the handbook.
12th service	13th service
Date:	Date:
Dealer's Stamp	Dealer's Stamp
We certify that an annual service has been	We certify that an annual service has been
carried out in accordance with the handbook.	carried out in accordance with the handbook.

# MOTORHOME CODE

## 2. Motorhome code

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#### 2.1 Camp sites

#### Arrivals

Report to reception immediately on arrival.

#### Vehicle Movement

Keep to roadways unless otherwise directed. Adhere to speed limits. Note that these are generally 10 mph. (Remember that the stopping distance on grass is considerably greater than on tarmac.)

Only a person in possession of a current driving licence may drive on the site.

Park correctly as advised on your pitch. Where possible leave 20 feet of free space around your vehicle.

#### **Use of Site Appliances**

Use the electrical mains hook-up in the correct manner and with caution. Ensure that all fresh water taps/connections are turned off after use. Have care and consideration when using all facilities (toilets and showers etc) and leave clean and tidy. Young children should be supervised.

#### Waste Disposal

If the vehicle is not fitted with a waste water tank, a suitable receptacle should be placed below all waste water outlet pipes. Do not let these containers overflow. Dispose of all waste water where instructed. Empty effluent from chemical toilets where instructed.

To avoid possible damage to sewage purification works, only approved chemical fluids must be used. Under no circumstances should coal tar, phenol or caustic-based fluids be used.

Disposable nappies and similar bulky items must not be put into chemical closet emptying points but should be wrapped in a polythene bag and placed in the container provided.

Place all litter in containers marked for the purpose.

#### Noise

Do not make excessive noise. Children should be restrained from making excessive noise.

Flying kites, drones and model aircraft, and the use of items like catapults or air-guns, as well as ball games, should not be permitted among, or close to other vehicles.

Musical instruments, record players, radios and televisions should not be used to the inconvenience of other people on the site. Open and close doors quietly. Power generators must be adequately silenced and used with consideration.

#### **Dogs and other Pets**

All dogs and other pets should be kept under control. Unless permission has been granted, no animal should be allowed loose on the site and leads must not exceed 10ft.

No animals should be allowed in the shower/ toilet blocks.

Do not let dogs foul the site.

#### **Fire Precautions**

Adhere to and take note of fire precautions noting the whereabouts of the fire points.

A WARNING: Provide one dry powder fire extinguisher of an approved type or complying with EN3-7 or ISO 7165, of at least 1kg capacity, by the main exterior door and a fire blanket next to the cooker. Familiarise yourself with the operating instructions on your fire extinguisher and the local fire precaution arrangements.

When using a dry powder extinguisher it is suggested that the motorhome be evacuated until the powder has settled, to avoid inhalation. Code of conduct

Unless permission has been granted, barbecues should not be used. If permission is given, consideration should be given to the annoyance that can be caused to other users of the site.

Open fires are not allowed.

#### **Awnings and Tents**

Awnings and tents should only be used when permission has been obtained. When on grass and staying for more than a few days, the ground sheet and/or side flaps of awnings should be periodically raised in order to avoid damage to the ground.

#### Departure

Leave the pitch clean and tidy.

On leaving, check out with reception paying the required fees.

#### 2.2 Wild camping

Camping away from licensed sites, without the permission from the land owner or his agents, is not allowed in the United Kingdom.

When permission has been granted, all aspects of this Code should be adhered to.

On no account should:

- a. Litter be disposed of other than in the receptacles provided.
- b. Water be allowed to escape from the vehicle.
- c. Chemical toilets be emptied except into the disposal places agreed with the land owner.
- d. Washing or similar be hung outside the vehicle.

#### Parking

Motorhomes should only be parked in approved places.

When using the facilities of a motorhome, care and consideration should be given to those around them.

#### Driving

Before moving off, elevated rooflights and aerials should be lowered and correctly secured, and top hinged windows closed. Likewise all doors and access lockers for gas containers and chemical toilets must be properly secured.

Exterior steps should be properly retracted and secured. When the vehicle is in motion it is compulsory for all front seat passengers and rear seat passengers to wear seat belts, where fitted. When using a motorhome on either the public highway or private roads the Highway Code should be complied with and full consideration given to other road users.

In the event of a motorhome travelling slowly the driver of the motorhome should, where possible, pull over in order to let other traffic pass. **WARNING:** When travelling, refuelling or on a ferry ensure the gas system is fully isolated at source.

# 2.3 Handbooks (Chassis & Converter)

Before using a motorhome all aspects of the handbooks, produced by the chassis manufacturer and the converter, must be read and adhered to.

The separate chassis manufacturer handbook refers to your motorhome chassis and base vehicle including care and maintenance.

http://aftersales.fiat.com/eLumData/ EN/77/290\_DUCATOMCA/77\_290\_ DUCATOMCA\_603.85.375\_EN\_01\_04.21\_L\_ LG/77\_290\_DUCATOMCA\_603.85.375\_ EN\_01\_04.21\_L\_LG.pdf



#### Environment

Care and consideration should be taken to protect the environment. Observe the Country and Coastal Codes.

#### 2.4 The Country code

Enjoy the countryside but respect its life and work.

More people than ever before are exploring the countryside, interested in farming, plant life, bird watching or just observing the general wildlife. Whatever your interest, there is a lot to learn, but please observe the following code:

1. Guard against all risk of fires. Hay and heathland catch alight easily and once ablaze are very difficult to put out.

#### Remember: fire spreads quickly.

- 2. Fasten all gates.
- 3. Keep your dog under proper control.
- 4. Keep to the paths across farm land.
- 5. Avoid damaging fences, hedges and walls.
- 6. Leave no litter.
- 7. Safeguard water supplies.
- 8. Protect wildlife, wild plants and trees.
- 9. Go carefully on country roads.
- 10. Respect the life of the countryside. The Coastal code

#### 2.5 The coastal code

As our coastlines are increasingly used for recreation and education, the following suggestions are made to enable us to enjoy our inheritance and preserve it for posterity.

**Do not** trample about, or move rocks unnecessarily.

**Do not** frighten seals or seabirds.

**Do not** spill detergents, solvents or fuel from boats as these can kill marine life.

When sailing, moderate your speed - the wash from a fast boat can destroy banks and nests.

Live molluscs and crustaceans need not be collected as souvenirs - dead shells can usually be found.

Shellfish can take years to grow and fines can be imposed for not observing national regulations.

**Do not** pull up seaweeds unnecessarily. Make your visit instructive - not destructive.

Look at material - don't remove it. Take notes and photographs, not specimens.

Observe by-laws and be considerate to others.

National Trust property and Country Parks have regulations to protect the wildlife. Follow these and the Country and Coastal Codes.

# PREPARING FOR THE ROAD

## 3. Preparing for the road

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#### 3.1 Before moving off

#### Check:

- Gas cylinders are correctly positioned, secured and turned off unless using en-route heating.
- All gas operated appliances have been isolated except en route heating where fitted and in use.
- Loose articles are stowed securely. Do not stow tins, bottles or heavy items in overhead lockers.
- All lockers and cupboard doors are closed and secured.
- Tables are stored or locked in their transit position.
- Fridge is on 12V or auto operation and door lock is set.
- 230V mains input socket flap is securely closed.
- All drain valves are closed.
- Tyre pressures
- Exterior roof rack ladder / bike rack is secured (where fitted).
- All windows/doors/rooflights are closed and secured.
- Exterior step (where fitted) is retracted / folded in.
- Special attention must be taken to ensure all top hinged windows as well as rooflights are closed when in transit. All units should be fully closed and latched to prevent damage. The motorhome rear and side sliding door should also be locked.

WARNING: Large and/or voluminous items should be stored securely before travelling.

## 3.2 Motorhome terms

#### Mass in Running Order:

The mass of the motorhome equipped to the motorhome manufacturers standard specification, as stated by the manufacturer.

The MRO comprises the ex-works weight of the motorhome, including the driver, 90% fuel capacity, 1 x LPG gas cylinder @10kg and standard fixtures & fittings in compliance with European Regulation No. 1230/2012 (Masses & Dimensions)

**Note:** The mass of the motorhome in running order contains provision for the masses of liquids, gas etc. (see Mass in Running Order in the Technical Section). Part of this provision can also be utilised as additional payload, if for example, you wish to travel with no gas cylinders.

**Note:** If you travel with water in the fresh water tank or waste tank, the payload will be reduced accordingly.

**Note:** Quoted MRO is subject to tolerance, due to weight variation of materials used in Motorhome construction.

#### Maximum User Payload:

The maximum allowable weight to be put into the motorhome whilst it is being driven. This is made up of 4 sections:

Personal effects, conventional load, optional equipment and essential habitation equipment.

The Maximum User Payload is the difference between the Maximum Technically Permissible Laden Mass and the Mass in Running Order.

#### Personal Effects:

Those items which a user can choose to carry in a motorhome and which are not included as Essential Habitation Equipment or Optional equipment.

#### **Conventional Load:**

A mass allowance for each designated passenger seat.

#### **Optional Equipment:**

Items made available by the manufacturer over and above the standard specification of the motorhome.

#### **Essential Habitation:**

A mass allowance for liquids in systems not accounted for within the MRO.

#### Maximum Technically PermissibleLaden Mass:

The maximum weight for which the motorhome is designed for normal use when being driven on a road, laden.

This mass takes into account specific operating conditions including factors such as the strength of materials, loading capacity of tyres etc.

#### **Gross Train Weight:**

The maximum combined weight of the motorhome and trailer.

A WARNING: Under no circumstances should the axle loadings or the Maximum Technically Permissible Laden Mass of the motorhome be exceeded.

#### Nose weight on towed trailers:

The static mass of the trailer towing device on the rear of the towing vehicle.

When measuring the noseweight it is important that the trailer is loaded.

The trailer is intended to be towed slightly nose heavy. The nose weight can be adjusted by distribution of the load. The nose weight should be approximately 7% of the actual laden weight (but not greater than the hitch capacity) and at the same time suit the motorhome requirements. See 'Advice on Towing' page 28.

#### 3.3 Loading of vehicle

A WARNING: Loads must not be exceeded. The driver is responsible for arranging the loads so that they comply with the technical weight limits of the specific motorhome model.

See Technical handbook.

Correct weight distribution is an important factor in ensuring your vehicle is well balanced and easy to drive. It is therefore necessary to load your motorhome carefully making sure all heavy articles are evenly distributed and are preferably placed in the lower lockers or bed boxes.

A WARNING: Do not travel with televisions or microwaves in overhead lockers unless the appliance was supplied fitted to your motorhome by the manufacturer.

Although it is essential to ensure that the total weight of your motorhome does not exceed the stipulated Maximum Technically Permissible Laden Mass, (MTPLM), it is important to remember that the front and rear axles also have individual maximum weights which must not be exceeded.

#### To ensure adequate road holding the load on the front axle, under all conditions, must not be less than 40% or more than 70% of the total weight.

Ensure you distribute the payload equally on each side of the vehicle to avoid an imbalance.

These weights, together with the MTPLM, can be found on the statutory plate affixed to the forward edge side sliding door.

A WARNING: Turn off all gas appliances while the vehicle is in motion. If a en-route heating system is fitted isolate all appliances except the heater.

A WARNING: Please take care to ensure you have allowed for the masses of all the items you intend to carry in your motorhome e.g. passengers, optional equipment, essential habitational equipment and personal effects such as clothing, food, pets, bicycles, sailboards and sports equipment etc.

**Note:** Care must be taken to ensure that exterior doors are closed, locked and that all possessions are properly stored and secured before setting off on any journey.

#### 3.4 Large storage areas

The large storage areas provided in some motorhome layouts are designed solely for the purpose of carrying personal possessions, these areas must not be used:

- As a habitation area (eg 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 cylinders.
- To carry any flammable liquids, unless properly stored, sealed and secured.
- For the operation of an electrical generator.
- In such a way that the load exceeds the MTPLM, and/or minimum and maximum axle loads.

Care must be taken to ensure that exterior doors are closed, locked and that all possessions are properly stored and secured before setting off on any journey.

#### 3.5 Tyres

If a wheel or tyre is changed any replacement must be of the same type of construction and size.

The law requires that the tyres and pressures must be suitable for the use to which they are being put. The minimum tread depth must be 1.6mm throughout a continuous band comprising the centre three-quarters of the breadth of the tread and around the circumference of the tyre.

Please refer to the base vehicle manufacturer's handbook for tyre pressure information. This may also be displayed in the driver's or passenger's door aperture.

The motorhome tyre pressure noted in the Technical book are the pressures stated by Fiat for your vehicle calculated in a fully laden condition. If you are not running fully laden, reduced pressures could be used but please seek clarification from the tyre manufacturer.

# 3.6 Dedicated travelling passenger seating

Seat belts are fitted to all travelling seats. Travelling seats are designated by the manufacturer and vary according to the layout you have purchased. Each seat is homologated i.e. tested to all relevant safety requirements. NEVER travel in or attempt to install a seatbelt to a non-designated seat.

A WARNING: Side facing seats are designed for habitational use only, not for when the vehicle is in motion.

#### Seat belts and legislation

Designated driver and passenger seats are fitted with seat belts and MUST be worn when travelling.

All children up to 135cm (4'5") in height, or 12 years of age, whichever is reached first must use a child car seat or booster seat suitable for their age and weight.

Children over 135cm (4'5") in height or aged 12 years and over must wear a seat belt.

Note: It is the legal responsibility of the driver To ensure children aged up to 14 years old are suitably restrained.

For passengers aged 14 and over, it is their responsibility (not the driver) that a seat belt is worn.

Seat belts are fitted for your safety and must be worn unless a 'Certificate of Exemption from Compulsory Seat Belt Wearing' is held. This Certificate must be produced if asked for by the Police – seat belt offences can result in a fine.

#### 3.7 Child seats

#### **Choosing/Buying**

Go to a reputable retailer such as Halford's, Mothercare, John Lewis etc. Most reputable retailers will have trained child seat advisers on site and will offer a fitting service. Ask the advisor to fit various seats to the vehicle. Once a correctly fitted seat has been installed, satisfy yourself on it's suitability for your child and the vehicle before buying as it is important to use a correctly fitting seat in your motorhome.

A WARNING: The child seat you use in your car may not be suitable for mounting on a motorhome seat.

AWARNING: Choose the right seat for your child's height and weight.

#### **Height-based seats**

Height-based seats are known as 'i-Size' seats. They must be rear-facing until your child is over 15 months old. Your child can use a forwardfacing child car seat when they're over 15 months old.

You must check the seat to make sure it's suitable for the height of your child.

Only EU-approved height-based child car seats can be used in the UK. These have a label showing a capital 'E' in a circle and 'R129'.

#### Weight-based seats

The seat your child can use (and the way they must be restrained in it) depends on their weight.

Only EU-approved weight-based child car seats can be used in the UK. These have a label showing a capital 'E' in a circle and 'ECE R44'.

You may be able to choose from more than one type of seat in the group for your child's weight.

For more information visit www.gov.uk

Never fit or use a second hand car seat. It could have been damaged and may not meet modern standards. The fitting instructions may also be missing.

#### **Positioning/Fitting**

Dependant upon the child seat type, the most suitable position for the child seat to be fitted may be the front passenger seat of the cab (NOTE airbag advice on following page) or the window seat of the forward facing rear seat. The isle seat in the rear is NOT a recommended position. Advice should always be taken from the retailer on the suitability and security of the seat in the motorhome. Read and follow the child seat manufacturer's instructions for fitting the seat.

All Swift motorhomes are fitted with inertia reel seat belts, however, the child seat must be tight in the adult seat. Push all your weight into the child seat as you tighten the belt.

Keep a copy of the child seat fitting instruction in the motorhome for easy reference.

Any doubts, ask an advisor to show you how to correctly install the seat.

#### 3.8 Airbag

Never fit a rear facing child restraint in a seat with an active airbag in front of it.

Forward-facing child restraints should be positioned as far back from the airbag as possible. Check the base vehicle handbook.

#### 3.9 Three point seat belts

This section refers to the seat belts located in the habitation area of your motorhome.

#### Fastening the seat belt:

Insert tongue into buckle; a positive 'click' indicates correct assembly.

#### Releasing the seat belt:

Press the red release button, the tongue will be ejected from the buckle.

- The belt is designed for use by one person and must not be put around a child seated on a person's lap.
- The belt is suitable for restraining most child seats and boosters.
- The belt should at all times be adjusted and used in accordance with the instructions. No excessive slackness should be present.
- Once installed the diagonal should pass across the centre of the shoulder and the buckle should lie just on or below the hip.
- Avoid twisting the webbing during use.
   Webbing must not be allowed to chafe against sharp edges.
- Do not make alterations or additions to the belt.
- Belts that have been cut, frayed, damaged or stressed through impact should be replaced. After impact the motorhome anchorage points should also be checked.
- To clean use warm soapy water only.
- Periodic inspection of the installation will ensure reliability of the seat belt.

#### 3.10 Driving licence

Licences issued to drivers who passed their car driving test before 1st January 1997 include categories B+E and C1+E which gives them entitlement to drive motor vehicles up to 7500kg MTPLM.

Drivers who passed their test on or after this date have category B entitlement only, which restricts the entitlement to motor vehicles with up to 8 passenger seats and an MTPLM of up to 3500kg with trailers up to 750kg MTPLM (4250kg gross train weight) or larger trailers providing the combination of the trailer and towing vehicle does not exceed 3500kg and the MTPLM of the trailer does not exceed the unladen weight of the towing vehicle.

Drivers who passed their test on or after the

1st January 1997 will need to take an additional test(s) to gain the C1+E entitlement.

#### 3.11 Advice on towing

The towing capability of each motorhome differs depending on the specific chassis and engine types, (see 'Towing Capabilities Table' in your specification section).

This table takes account of the maximum front and rear axle loadings as well as the minimum front axle loading in two conditions, MRO and MTPLM condition.

Towing in these, and any other condition requires sensible loading and distribution of payloads to ensure the requirements of the towing capability table are met.

When towing, the demands on both the vehicle and driver increase. A trailer reduces manoeuvrability, the ability to climb hills, acceleration and braking capacity and makes the vehicle handle and corner differently. It will also increase the fuel consumption of the vehicle.

Always brake in good time. Special care must be taken when descending gradients. Change down before going down a steep hill so the engine can act as a brake. Ensure that the towing vehicle tyre pressures are correct and adjusted for full load conditions and that the trailer tyre pressures are as recommended by the trailer manufacturer. Regularly check the operation of trailer brakes and lights.

For maximum stability, when loading the trailer ensure that the loads are properly secured during transit. Position loads so that most of the weight is placed close to the floor and, where possible, immediately above or close to the axle(s). Where the load can be divided between trailer and tow vehicle, loading more weight into the vehicle will generally improve the stability of the combination.

After loading the trailer, check that the nose weight and axle loads are in accordance with the manufacturer's recommendations, also check the rear and front axle loads on the motorhome. When calculating the laden weight of the trailer, remember to include the weight of the trailer PLUS THE LOAD. **Note:** Towing regulations vary from country to country. It is very important to ensure that national regulations governing towing weights and speed limits are observed (refer to the relevant national motoring organisation for information). The stated maximum permissible towing weights refer to the vehicle's design limitations and NOT to any specific territorial restrictions.

#### Notes:

- 1. Do not exceed the motorhome gross vehicle train weight.
- 2. Do not exceed the maximum front & rear axle loads on the motorhome.
- 3. Ensure the motorhome front axle load is never less than 40% or more than 70% of the total weight.
- Motorhomes with an MTPLM up to 3500kg which have European Type approval can only be fitted with a type approved towbar complying to 94/20/EC or UN ECE R55.
- 5. The limit for towing an un-braked trailer is 750kg (based on VIN plate not actual weight), this applies to a towed car.
- 6. A car dolly with a car with a GVW over 750kg in place is considered as two trailers, these are legal for use for recovery but under the Road Traffic Regulations Act 1984 the combination is limited to 40 mph on motorways and dual carriageways and 20 mph elsewhere. A car dolly is not legal for transportation (there is a very specific difference between recovery and transportation. Recovery is defined as the removal of a broken down vehicle to a place of safety).
- The maximum permitted vehicle combination length is 18.75m, however any combination must ensure compliance with the turning circle requirements of Construction and Use regulations 1986 & EU 1230/2012.

**Note:** Not all motorhomes are suitable for towing and may not have sufficient payload to permit towing. If in doubt, consult your dealer.

#### 3.12 European Touring

Please note there are a number of requirements placed on a driver when driving on European roads. Carrying a warning triangle, high visibility jacket, first aid kit and spare bulb is now compulsory in many EU states but some EU countries are now introducing further regulations such as carrying a breathalyser kit and not being able to use satellite navigation systems with speed camera warnings.

We would advise customers to check on the many web-sites available to ensure you are carrying the correct equipment when touring in those EU countries

# EN ROUTE

### 4. En-route

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#### 4.1 Fix & Go Repair Kit (where fitted)

**CAUTION:** Before use please read the user instructions supplied with your Fit & Go repair kit.

#### (For more details see Fiat user Manual)

If a spare wheel is not fitted within the specification of your vehicle, then a Fix & Go kit is supplied.

The Fix & Go automatic quick tyre repair kit is positioned at the front of the vehicle passenger compartment and includes Fig. A:



#### Fig.A

- Bottle A containing sealer and fitted with:
  - a transparent filler pipe B;
  - a black pressure restoring pipe E;
  - sticker C bearing the notice "max. 80 km/h", to be placed in a position visible to the driver (on the instrument panel) after fixing the tyre;
- Instruction brochure (see fig. B), to be used for prompt and correct use of the quick tyre repair kit and then to be handed to the personnel charged with handling the tyre treated with the tyre repair kit;
- A compressor D complete with pressure gauge and connectors; a pair of protective gloves located in the side compartment of the compressor;
- Adaptors for inflating different elements

**CAUTION:** Give the instruction booklet to the tyre repair workshop personnel.

**CAUTION:** Punctures on the sides of the tyre cannot be repaired. Do not use the quick tyre repair kit if the damage is due to running with flat tyre.

**CAUTION:** If the wheel rim has been damaged (bent so as to cause air to leak), the wheel cannot be repaired. Do not remove the foreign body (screws or nails) from the tyre.

**CAUTION:** Punctures caused by foreign bodies can be repaired if the damage does not exceed 4 mm on the tread and on the shoulder of the tyre.





#### Fig.B

#### Important Information:

The sealing fluid of the quick tyre repair kit is effective at external temperatures of between -20 °C and +50 °C. The sealant has an expiry date.

**CAUTION:** The bottle contains ethylene glycol. It contains latex that might cause allergic reactions. It is harmful if swallowed. It is irritant for the eyes. It may cause sensitisation if inhaled or on contact. Avoid contact with eyes, skin and clothes. In the event of contact, wash immediately with plenty of water. Do not induce vomiting if swallowed. Rinse your mouth and drink plenty of water. Call a doctor immediately. Keep out of the reach of children.

The product must not be used by asthmatics. Do not breathe in the vapours during insertion and suction. Call a doctor immediately if allergic reactions are noted. Store the bottle in its proper compartment, away from sources of heat. The sealant

#### **4.2 Inflation Procedure**

**CAUTION:** Wear the protective gloves provided together with the quick tyre repair kit.

**CAUTION:** Affix the adhesive label in an easyto-see position for the driver as a reminder that the tyre has been treated with the quick tyre repair kit. Drive carefully, particularly on bends. Do not exceed 80 km/h. Do not accelerate or brake suddenly.

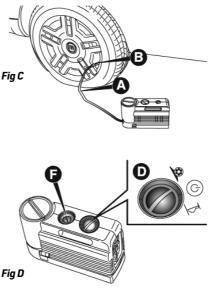
**CAUTION:** If the pressure falls below 3 bars, do not drive any further: the Fix & Go automatic quick tyre repair kit cannot guarantee proper hold because the tyre is too much damaged. Contact a Fiat Dealership.

**CAUTION:** You must inform the dealership that the tyre has been repaired using the quick tyre repair kit. Give the booklet to the personnel who will be handling the tyre treated with the repair kit.

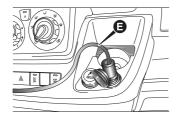
**CAUTION:** If different tyres from the ones supplied with the vehicle are used, it may not be possible to carry out the repair. If the tyres are replaced, it is advisable to use those approved by the manufacturer. Consult a Fiat Dealership.

- Pull the handbrake. Unscrew the tyre valve cap, take out the filler hose A (Fig. C) and tighten the ring nut B on the tyre valve;
- Insert the plug E (Fig. E) in the nearest 12V power socket and start the engine. Turn the selector D (Fig. D) anti-clockwise to the repair position. Activate the kit by pressing the on/ off switch. Inflate the tyre to the pressure specified in the "Inflation pressure" paragraph, in the "Technical Data" chapter;

For a more accurate reading, it is advisable to check the pressure reading on the pressure gauge F (Fig. D) with the compressor off and without moving the centre selector from the repair position



- If after 10 minutes it is still impossible to reach at least 3 bar, release the transparent filler pipe from the valve and take out the 12 V plug, then move the vehicle forwards by about 10 metres in order to distribute the sealing fluid inside the tyre evenly, then repeat the inflation operation;
- If after this operation you still cannot reach at least 3 bar after 10 minutes, do not resume driving because the tyre is too damaged and the quick tyre repair kit cannot guarantee suitable sealing. Contact a Fiat Dealership;
- If the tyre reaches the pressure specified in "Inflation pressure" paragraph in the "Technical Data" section of the Fiat user manual start driving immediately;



### Fig E

after having driven for about 10 minutes, stop and recheck the tyre pressure; remember to apply the handbrake;

If a pressure value of at least 3 bar is detected, inflate to the correct pressure, resume driving and drive with care to nearest Fiat Dealership.

### **Bottle Replacement Procedure**

To replace the bottle, proceeds follows:



### Fig. F

- press button A (Fig. F) to release the part;
- fit the new bottle and press until it is automatically engaged.

**CAUTION:** Punctures caused by foreign bodies can be repaired if the damage does not exceed 4 mm on the tread and on the shoulder of the tyre.

**CAUTION:** Replace the bottle containing the sealant after the expiry date. Dispose of the bottle and the sealant properly. Have the sealing fluid and the bottle disposed of in compliance with national and local regulations.

### 4.3 Cruise control

The driver of the vehicle should always remain seated and in control of the vehicle when cruise control has been engaged. Never leave the driving seat for any reason when the vehicle is underway

### 4.4 Parking sensors

Parking sensors are fitted to some vehicles. Please use the information provided. Use the sensors as a guide only. It is the responsibility of the driver to ensure it is safe to reverse the vehicle.

# SAFETY AND SECURITY

# 5. Safety and security

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### 5.1 Fire

Note: Your attention is drawn to the notice affixed inside the wardrobe advising on fire precaution, ventilation and what to do in case of fire.

### In case of fire

- 1. Get everyone out of the motorhome as quickly as possible using whichever exit is the quickest, including windows. Do not stop to collect any personal items.
- 2. Raise the Alarm. Call the Fire Brigade.
- 3. Turn off the gas supply valve if it is safe to do so.
- 4. Turn off the electricity supply at supply point.

### 5.2 Smoke Alarm Operation



Your motorhome is fitted with a Fire Angel SB1 smoke alarm. Please read the user instructions for the smoke alarm, which are available at the following location:

https://www.fireangel.co.uk/products/sb1-t



If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy. A WARNING: Never use portable cooking or heating equipment other than electric heaters that are not of the direct radiant type, as it is a fire and asphyxiation hazard.

WARNING: Appliances such as cookers must not be used for heating.

### 5.3 Fire Extinguisher

It is recommended that a dry powder fire extinguisher be carried inside your motorhome at all times.

When using a dry powder extinguisher it is suggested that the motorhome be evacuated until the powder has settled, to avoid inhalation.

A fat pan fire should not have a fire extinguisher aimed at it. It should be smothered with a fire blanket.

A WARNING: Provide one dry powder fire extinguisher of an approved type or complying with EN3-7 or ISO 7165, of at least 1kg capacity, by the main exterior door and a fire blanket next to the cooker. Familiarise yourself with the instructions on your fire extinguisher and the local fire precaution arrangements.

### 5.4 Escape paths

It is important that you do not block escape paths to emergency exits with obstructions or hazards.

### 5.5 Children

Do not leave children alone in the motorhome in any event. Keep potentially dangerous items out of reach, as at home e.g. matches, medicine etc.

### 5.6 Ventilation

All motorhomes comply with BS EN 721. The ventilation points on your motorhome are fixed points of ventilation which are required by the European Standards.

All motorhomes have ventilation at high level and low level which have been calculated to suit the individual needs of your motorhome.

High level ventilation is achieved by means of the roof lights and washroom roof ventilators (where applicable). The low level ventilators are positioned under sink units.

Under no circumstances must these vents be blocked or obstructed in any manner as this could lead to insufficient fresh air. In this case the confined atmosphere becomes depleted of oxygen which could lead to dangerous levels of carbon dioxide (CO2) build up leading to the risk of asphyxiation.

The risks of carbon monoxide (CO) build up, which is a colourless, odourless and tasteless gas, will also be reduced with ventilation. Carbon monoxide is produced from incomplete combustion and should the CO detector be activated the cause of the incomplete combustion must be investigated prior to reusing the appliance in question.

It is advised that fixed ventilation points are checked and cleaned (if necessary) on a regular basis using a small brush and a domestic vacuum cleaner.

Additional night time ventilation is obtained by releasing the window catches and placing them in the second groove. Note the windows are not sealed from rain in this position.

As the ventilation levels are calculated to suit each model requirements no modifications should be made which may result in reduced ventilation levels.

WARNING: Do not obstruct ventilation.



Your motorhome is fitted with a Fireangel CO-9XT-FF Carbon Monoxide Alarm. To activate the alarm, you will need to pull the disabling tab as shown in the above image. For further information, please read the instructions for the alarm, which are available at the following location:

https://www.fireangel.co.uk/product/co-9xt-ff/



5.7 CO alarm

If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

### 5.8 Security

### Motorhome theft:

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

### VIN (Vehicle identification Number)

Record your motorhome VIN which can be found on the lower edge of the base vehicle front windscreen and the plate located on the front cross member under the bonnet.

Make a note of these numbers in the space provided at the front of this handbook and make a separate note of the numbers to keep safe at home.

### Additional security

Consider fitting any device which might deter intrusion by thieves. Customers are advised to identify their motorhome with a method for subsequent identification if other forms of identification have been altered or removed.

Free crime prevention advice about securing your motorhome, protecting your valuables, property marking either at home or whilst on site, can be obtained from the Crime Prevention Officer through your local Police station.

### 5.9 VIN CHIP™

Your motorhome has been securely marked and the VIN recorded with VIN CHIP™.

VIN CHIP™ is the industry standard security marking system for touring caravans and motorhomes.

Shortly after purchasing this motorhome. you will receive via email your VIN CHIP™ registration document. This document will include the 17 digit VIN (vehicle identification number) and other relevant details about your motorhome. If you sell your motorhome, please follow the instructions on the VIN CHIP motorhome document.

### VIN CHIP identification

The motorhome's unique 17 character VIN will be incorporated into VIN CHIP tamper evident labels;

The master VIN CHIP label is situated on the front near side window to aid police checking, another in the gas locker and a maximum of 10 placed on the inside of the windows (with the exception of opaque windows).

Three electronic RFID chips containing the individual identity of your caravan are concealed within the motorhome and can only be read by using a specially programmed RFID scanner.

Your local police can obtain the use of a VIN CHIP™ scanner by contacting VIN CHIP on tel: 0333 2124746.

For help, support and advice, contact:

VIN CHIP PO Box 445

Aldershot

GU119SF

Tel 0333 2124746

www.vinchip.co.uk

# 6. Arrival at site

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### 6.1 Positioning the motorhome

### Note: Check and observe site regulations.

Keep to roadways unless otherwise directed. Adhere to speed limits. Note that these are generally 10mph.

(Remember that the stopping distance on grass is considerably greater than on tarmac.)

Only a person in possession of a current driving licence may drive on the site.

### Selecting a pitch

Do not pitch in such a position that your motorhome will obstruct others coming in.

Try to choose an area which is dry, reasonably level and preferably with a hard base.

If you have no alternative but to pitch on a slope try to ensure that you are facing down the slope, for when you leave.

### Levelling the motorhome

Levelling must be carried out in both directions for the refrigerator and other equipment to function correctly. Stepped levelling boards (Fig. A) or proprietary ramps are ideal for this purpose. Levelling pads or boards should be used under the wheels where the ground is soft or uneven.



## Fig. A

### Awnings and Tents

Awnings and tents should only be used when permission has been obtained. When on grass and staying for more than a few days the ground sheet and/or side flaps of awnings should be periodically raised in order to avoid damage to the ground.

# CONNECTING SERVICES

# 7. Connecting services

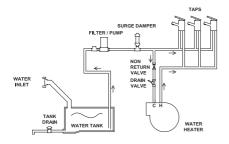
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### 7.1 Water system - Introduction

All Swift Group motorhome water systems have been designed around a pump fitted within the motorhome. This pump draws water from an under floor or internal water tank, to provide water pressure within the water system, whenever it is switched on and water is available.

The schematic below shows the basic configuration of the water system:

### WATER SYSTEM SCHEMATIC MOTORHOME WITH FITTED FRESH WATER TANK



When power is supplied to the pump, it will draw water from the water tank, and pump it to the motorhome taps, shower and water heater.

The pump is fitted with its own pressure switch, and will continue to pump water, until the pressure of water on the output of the pump reaches a pre-set level. For this pressure to be achieved, the taps must be closed.

When the taps are opened, water will leave the tap via the spout, and the pressure in the pipes between the pump and the taps will reduce. Because of this reduction in pressure, the pressure switch on the pump will switch back on and the pump will again run to pump more water.

Close to the pump, the water under pressure is split into two paths:

- 1. Through blue water pipes routed directly to the cold connection of each tap.
- 2. To the water heater.

Water from the pump enters the bottom of the water heater. Once the water fills the water heater (typically 10 litres), water then leaves the water heater via a connection at the top of that water heater. This water, which is still under pressure, then routes to the hot connection of each tap via the red pipes.

# To winterise the system please see separate details later in this handbook.

### 7.2 Fresh water system

All fittings, including the holding tank, water pipes, taps and connections are of food quality material (to BS6920) and therefore, should not affect the quality of the water used. It is recommended however, that the system is flushed through twice before it is used for the first time, and always cleaned/flushed after it has stood unused for a period of time (eg over the winter period). Care has been taken (using smooth bore pipes etc) to eliminate as many water traps as possible.

When filling the fresh water system remember to check that the water source is suitable for use as drinking water. If possible avoid using water sources which use desalination or other similar processing, as they may contain chemicals that could damage the stainless steel components within your motorhome water system. If in doubt, check locally before using a water supply.

The fresh water system is fitted with an electrically operated drain valve, which will drain the contents of the fresh water tank. The valve is controlled using a switch located in an upper locker, within the motorhome.

### 7.3 Priming the water system

When water is first introduced, or the water supply in the internal tank, runs out, air will be present in the pipework. It is important that every tap is run to remove any air in the system before, for instance, the shower is used. Air left in pipework local to a tap can act as an accumulator and affect the ratio of hot and cold water flowing from other taps or shower mixers in the system.

- 1. Close the water tank drain valve or re-fit the drain bung. (Model specific)
- 2. Fill the water tank with water.
- 3. Close the water heater drain valve (see boiler instructions in the fitted equipment section)
- 4. Open all the taps except the shower tap. Mixer taps should be opened in the central position so that both the hot and cold pipes are purged of air. Ensure the tap spouts are over the sinks.
- 5. Turn on the pump using the button on the control panel (See pump button in paragraph 2.5 of the Electrics section).
- 6. Turn each tap off in turn as and when the air is expelled and the water runs smoothly from each tap. Move the mixer taps to hot and then cold to check that the air is out of both the hot and cold pipes before turning them off.
- Whilst holding the shower head down towards the shower drain, open the shower tap and shower head tap until all the air is expelled and the water runs smoothly. Turn the shower taps off.
- 8. Top up the fresh tank with water.

Please note that priming the system will automatically fill the water heater with water.

Please ensure all taps are fully turned off when not in use (except when winterising).

**Note:** All tanks are fitted with a breather which acts as an overflow. Overfilling a tank will result in water being expelled from the overflow.

### 7.4 Cleaning water system

Clean the water system at the start and end of the season with sterilising fluid.

### Sterilising

When cleaning the water system at the start or the end of the season it is advisable to use a suitable sterilising fluid available from your motorhome dealer. The fluid must be suitable for use with stainless steel components.

Do not use products that contain aggressive agents, bleach or sodium metabisulphite for sterlising the water system.

Always flush the system thoroughly to remove any traces of the cleaning fluids.

The water systems, and in particular storage tanks, in motorhomes 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, eye or skin infections. It is therefore important that you carry out the following procedure prior to using the motorhome each time, even if you boil or filter all water you use for drinking.

### **Separate Water Containers**

- 1. All water remaining in the container should be disposed of so that the container is empty.
- 2. The outside of the container 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.

- 3. Water should be put in the container, swirled around, then emptied out.
- The container should then be totally filled with sterilising fluid mixed to the strength recommended by the manufacture of the sterilising fluid and allowed to stand for the recommended contact time.
- 5. The solution should be emptied from the container.
- The opening of the container should be cleaned thoroughly with an appropriate prepared wipe impregnated sterilising fluid.
- 7. The container should be inverted whilst stored overnight (if possible).

- The container must be filled with mains water only and mains water only should be used for the above cleaning procedure.
- 9. On no account should garden hoses be used to fill water tanks.

### Motorhome water systems

- 1. Drain down the system by opening the tank drains and boiler/water system drain. (See section 7.2) Open all taps to allow air into the system to enable the water to drain more quickly.
- 2. Remove any water filters fitted, and replace with a short length of hose or empty filter cartridge (this will ensure the filter is not affected by the sterilising fluid.
- 3. Fill the water system with sterilising fluid mixed to the strength recommended by the manufacture of the sterilising fluid. (check that the solution at full strength appears at all taps/showers). Allow to stand for the recommended period of time.
- 4. Drain the system completely.
- 5. Thoroughly clean the outside of all taps/ connectors with a cloth soaked in the disinfectant/sterilant.
- Flush the system through with clean drinking water until no traces of sterilising fluid can be detected at any tap.

**CAUTION**: Never use the water heating system when sterilising fluid is present. Doing so may damage the system.

### External 12v Fill Socket

Your motorhome is fitted with an external 12v socket which can be used to attach an external 12v tank filling pump.



### Boiler / Water System Drain

The boiler / water system drain valve is located close to Alde or Truma heating appliance. To drain the system lift the yellow handle to the vertical position (f) The drain is closed when the handle is in the horizontal position (e).





### Fresh Water Tank

Your motorhome is fitted with a water tank filled from the outside via a lockable water filler cap. When filling, use a hose manufactured from non toxic material, to prevent tainting of the water. Remember, if the water heater has been drained it will require 10 litre (2.2 gal) of water to fill it.

### 7.5 Pressure switch

The purpose of a pressure switch is to monitor the pressure on the outlet side of the pump. When a tap is closed, and the pump continues to run, there is an increase of pressure in the system, and when that pressure reaches a pre-set limit, the pressure switch will turn the pump off.

### **Pressure switch adjustment**

Pressure Switch Adjustment, Truma/Flo-Jet pump. (Normally Grey upper section with White lower section/valve housing)

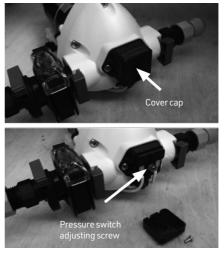
- All of the Truma/Flo-Jet pumps used by Swift are pre-set at 25psi 31psi.
- To further adjust the pressure switch setting, a cover cap must be first be removed from the end of the pump to reveal a pressure adjusting screw, as shown in the photos. A maximum of 1/4 turn clockwise or anti-clockwise, from the factory setting, is advised. Turning the screw clockwise 1/4 turn will increase the pressure switch cut-out pressure, turning the screw anti-clockwise will reduce the pressure setting.Please note a second screw mounted below the cover cap is set in position with threadlock, this should not be disturbed

### 7.6 Waste water system

- The waste water holding tank is secured below the floor of the motorhome, and is gravity fed.
- In order to eliminate unpleasant odours as much as possible, only smooth bore pipes are used.

Should the waste water tank be overfilled, it is possible that waste water will backfill the pipes until it eventually appears in the shower tray. In order to prevent this, please monitor the water level gauges on the motorhome control panel. It is also possible to to enable a 'waste tank full' alarm, on the control panel.

The waste water tank is fitted with an electrically operated valve, which when opened will drain the contents of the waste water tank. The valve is controlled using a switch within the motorhome, located in an upper locker.



The pump may have to be removed to gain access to the adjusting screw. Drain the water system before removing the pump. To remove the pump pull the blue taps at right angles to the pipe work and lift the pump out.

### 7.7 Tank heaters

Depending on specification, your motorhome may be fitted with 12v tank heaters, designed to prevent or reduce instances of freezing water in fitted water tanks.

If tank heaters are fitted, they can be turned on via the control panel feature above the entrance door (see 8.7). Turn this feature on when the external temperatures are low, and the tank heaters will then turn on and off automatically.

Before heating each tank the system will check that the water level in each tank is at the 1/4 level or higher (the heaters will not operate if the tank is 'empty'). If the water level is appropriate, the heaters will then switch on and off depending on temperature.

As the tank heaters check the water level in each tank, the fresh and waste water tank heaters can operate independently, for instance use of frost protect feature while the fresh tank is full, but waste tank is empty, would only result in the operation of the fresh tank heater.

It is also possible to use the tank heaters enroute, i.e. while driving. With the control panel ON, turn on the tank heaters as described above. While the engine is running the control panel cannot be operated, however, the tank heater circuits will remain ON.

Please note that the heating elements use a 12V supply. With the engine off, and if used without a mains hook up and charger operating, then leisure battery power consumption will be increased (see 7.20 for more information).

### 7.8 Water level sensor & cleaning Principle

The sensors fitted to Swift Group motorhomes are mounted on the water tanks, and link to the power supply unit, via a pre-fitted wiring harness. These can be in the format of rod, stud, or float switch types.

The rod type sensors consist of a number of stainless steel rods, at different positions, suspended from the top surface of the tank and immersed in the water contained within the tank. They use the conductivity of water, between the rods, to provide a reading to the control unit.

The stud type sensors are similar, except they are mounted in the side of the tank at differing heights. As with the rod type, the conductivity of water between the studs is used to provide a reading.

A final, float type, is also mounted in the side of the tank. These multiple switches are 'on' or 'of' depending on the level of water within the tank, relative to their height on the side of that tank.

The rod and stud sensors are 'digital', in that while the conductivity (resistance) value can vary, the power supply unit will register any conductivity between the rods or studs, indicating water present. Normally, even if the rods or studs are dirty, providing the they are not bridged by a foreign object, a circuit will still be delivered back to the control unit and a water level displayed.

### Sensor cleaning

The first step, in case of fault diagnosis, is to clean the inside of the tank and/or sensors. False water level readings at the control unit can be caused by calcium build-up or foreign objects within the tank bridging the rods or studs, or, preventing the movement of float switch.

Your dealer will be able to assist in the purchase of cleaning solutions for the water tanks, those products being safe for use in drinking water supplies, and not containing chemicals which could damage the stainless steel components within the water system.

### In addition, to clean a rod type sensor:

A WARNING: Only use food safe plastic mesh scourers, which are suitable for domestic use, for cleaning the sensor studs.

- 1. Remove the sensor from the tank
- 2. Check the studs for build up of contamination
- 3. Use clean soapy water
- 4. Place scourer in water to dampen
- 5. Apply scourer to the sensor probes with limited pressure
- 6. Rub sensor studs removing contamination
- 7. Swill sensor studs with fresh clean water
- 8. Replace sensor into tank.

### 7.9 The External Shower Point



The external power point if fitted, will be supplied with a separate shower head and hose assembly.

To connect the shower, simply align the plug with the socket and push into position.

To remove, pull the lower trigger and pull the plug from the socket.

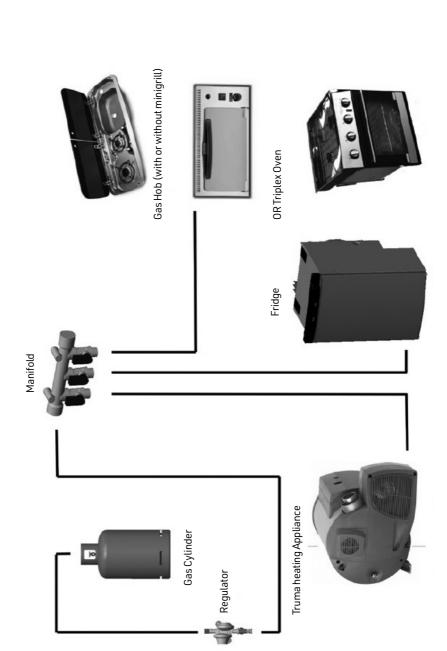
### 7.10 Water fault finding

Fault	Cause	Remedy
Water not flowing	Freshwater tank empty	Check
from any tap when operated but pump runs	Pump wired in reverse	Check wiring, refer to pump manufacturers instructions
	Pipe inlet or outlet pipe disconnected	Check connections
	Pump pipes restricted by kinking	Check pipes run
	Blockage in pump inlet or outlet pipe	Check, starting inside freshwater tank
	Blocked pump filter	Dismantle and clean filter. See pump manufactures instructions.
	Air leak in suction line to pump	Check condition of pipe and pipe joints between the water tank and the pump.
Pump does not run	Pump incorrectly wired	Refer to pump manufacturers instructions
	Pump fuse blown	Check wiring connection and then replace with fuse of correct rating
	Battery disconnected	Check connections
	Pump seized or overheated	Refer to pump manufacturers servicing instructions
	Pressure pump sensing switch may have failed	Refer to pump manufacturers servicing instructions
	Contacts may be faulty	Check contacts in plug and socket are clean and making contact
	Wiring connections may be faulty	Check wiring connections
Water flows from	Blockage in hot pipeline	Disconnect pipes and inspect
cold tap but not from hot	Heater inlet or outlet pipes kinked preventing flow	Check and re-route if necessary.
	Hot tap failed or blocked	Disconnect and inspect
	Heater non-return valve jammed	Seek service attention

Fault	Cause	Remedy
Water flows from hot tap but has reduced	Cold water pipe kinked preventing	Check and re-route if necessary
flow from cold	Blockage in cold pipe line	Disconnect pipes after 1st connector and check up to tap
	Cold tap not connected	Refer to installation instructions
	Cold tap failed or blocked	Disconnect and inspect
Reduced flow from both hot and cold	Battery condition low causing pump to run slowly	Check battery state of charge, refer to electrical supply note
taps	If new taps have been fitted they may be restricting flow	Disconnect and check that they have at least 1/4" (6.3mm) bore
	Pump needs servicing	Refer to pump servicing instructions
	Partially blocked pump filter or in- line filter, if fitted	Dismantle and clean if necessary
	Pump outlet pipe kinked restricting flow	Check and re-route if necessary
	Waterleak	Check all water connections
Reduced flow from either tap	Pipe kinking restricting flow	Check and re-route if necessary
	Bore size difference in taps	Use taps of equal bore size
If pump motor runs steadily and will not stop	Battery voltage may be too low (below 10.5 volts)	Check that there is water in the container Adjust switch and/or re-charge battery. Check all connections in pipework

### 7.11 Gas Schematic

Typical gas schematic drawing with Combi Boiler



### 7.12 Gas

### **General information Gas Cylinders**

Bottled Liquefied Petroleum Gas (LPG) is the most convenient portable source of fuel for your vehicle.

The gas cylinder, cooking and heating appliances should be isolated when travelling unless your motohome is fitted with en-route heating.

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.

The LPG system should be inspected annually by a competent person.

Only use gas cylinders that are located within their dedicated position within the gas bottle housing never extend the hose - hose lengths must not exceed 400mm.

Your vehicle is supplied with a wall mounted gas regulator plumbed inside the gas bottle compartment. The regulator and all appliances work at a harmonised 30mb pressure, which work with Butane and Propane gas.

Pressure regulation system in this vehicle has a fixed working pressure of 30 mbar with a flow rate of 1.5 kg/H and complies with the requirements of EN 12864 annex D.

We do not recommend the use of an inline LPG BBQ with the 1.5kg/H regulator when other LPG appliances are in use.

### **Gas Hoses**

High-pressure hoses or pigtails as they are called must be used with the new style regulator.

High-pressure hoses incorporate a safety shut off valve for the use of the en-route heating system.

LPG cylinder i.e. Propane, Butane, BP and Camping Gaz cylinders all have unique bottle adaptor connections. It is important to check you have the correct hose and adaptor to suit your gas cylinders. Push on hoses are no longer permitted under the latest regulations.

The high-pressure hoses have threaded connections and must be securely attached to the regulator and to the gas cylinder.

The hose connection to the pressure regulator relies upon a sealing washer(s) to maintain a gas tight joint, and it is essential to check that the washer is present, sound and correctly positioned prior to making the connection. The gas cylinder connection relies on a metal seating or bull nose connection to obtain a gas tight joint, therefore it is essential that the mating surfaces are clean and undamaged. In no case should a damaged valve or connection be used.

Ensure that there is a constant rise in the flexible gas hose between the gas cylinder outlet and the regulator elbow.

AWARNING: Inspect flexible gas hose (s) regularly for deterioration and renew as necessary with the approved type, in any case no later than 5 years after the date of manufacture marked on the hose. When replacing the en-route hose ensure the new hose incorporates a safety shut off valve (Hose rupture protection)

A WARNING: Ensure that the high pressure hose is not excessively twisted or under stress when connected to the LPG cylinders and regulator.

A warning: Always ensure the gas supply is isolated at the LPG cylinder (and not at the regulator) whilst the vehicle is in storage for any period. It is important to ensure that the high pressure gas hose has a continuous rise from the bottle cylinder to the regulator to allow any condensate to fall back into the gas bottle cylinder.

### Cylinder compartment

Some cylinder compartments have four plastic mouldings per cylinder position fitted to the floor of the compartment that are designed to fit both steel and BP Gas Light cylinders. Either two straps are provided for retaining thebodies of the cylinders at mid to high level or a single 'holding ring' strap is provided which secures the gas cylinder to the base of the compartment.

### 7.13 Types of gas

### Propane

Propane is supplied in red, or partly red cylinders which have a female left hand threaded connector.

Scandinavian countries use the same connector.

Germany and Austria supply propane with a male connection.

Propane will work at temperatures as low as -40°C and is therefore suitable for all winter motorhoming.

**Note:** Swift recommend that 6kg Calor propane gas bottles are used.

**Note:** A hose suitable for use with propane has been supplied with your motorhome.

### Butane

Butane is supplied in the U.K. in green or blue cylinders.

All these have a male left hand thread

EXCEPT for Camping Gaz which has a special female right hand thread and Calor 7kg and 15kg and aluminium bottles which have a special clip-on connection.

Continental cylinders usually have a male left hand thread similar to but not identical with U.K. butane.

Butane is only suitable for use at temperatures down to 2°C but will not work below that.

### 7.14 Changing a gas cylinder

Please use the correct size spanner for the gas hose connectors as this will prevent damage to the screw fittings and ensure that the fitting is tightened sufficiently.

- Turn off gas appliances
- Close the empty gas cylinder's valve
- Remove the high pressure hose from the gas cylinder.
- Attach the high pressure hose to the full gas cylinder.
- Open the full cylinder's valve.
- Press the hose-break safety device and the gas-flow monitor.

Check the hose connection to the cylinder valve for leaks.

### 7.15 En-route heating

An en-route heating system is installed with additional safety features.

A WARNING: When re-fuelling your motorhome, switch off the heater and close the cylinder valve.

### Safety features

- MonoControl CS regulator incorporating a crash sensor which stops the gas flow in the event of the motorhome being involved in a traffic collision.
- Gas flow monitor
- Hose rupture protection is installed.

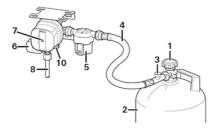
The full system is homologated in compliance with UN ECE Regulation 122

### **Operating instructions**

Use of safety devices

Open cylinder valve

- 1. Firmly press the hose rupture protection (green button) on the high pressure hose for about 5 seconds (fig 1 item 1)
- If the Yellow reset button (fig 2, item 7) is not pressed ("not ready for operation" position), reset the crash sensor. To reset, press the Yellow reset button (fig 2, item 7) firmly, turning it slightly clock-wise, hold it for 5 seconds and ensure that it stays in the "ready for operation" position (figure 2).
- If the re-set is not successful, use the Torx (T20) screw aid (fig 3, item 12) to support the clockwise rotation.



**Note:** Modifications, **s**ervicing and repairs must only be carried out by a competent service engineer.

**Note:** The regulator should be replaced no more than ten years after manufacture.

A WARNING: To ensure the safe working of the en-route heating any replacement high pressure hoses must be of the same type as originally fitted. They must have the safety valve to ensure that the gas does not leak out in the event of damage to the gas pipe work in the event of a traffic collision.

A WARNING: When travelling using the enroute system all other LPG appliance shut off valves must be in the closed position including the cooker, fridge, etc.

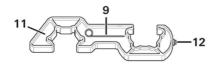
**Note:** It is dangerous and illegal to operate other LPG appliances whilst travelling.

A WARNING: Never allow modifications or repairs of electrical or LPG systems and appliances except by qualified persons.

Fig. 1









### **Gas safety advice**

A WARNING: If you smell gas or suspect a leak or in the event of a fire and if it is safe to do so, isolate the gas appliances and turn off the gas bottles at the regulator. Evacuate the motorhome and ventilate. Seek professional advice as to the cause of the leak.

### Facts about LPG

- LPG is not poisonous.
- Bi-products are harmless.
- There is danger if all air and oxygen were excluded.
- (Ventilation holes must be kept clear at all times).
- LPG has been given a smell by the manufacturers in order to identify leaks.

### **Awning Spaces LPG Appliance Exhaust**

There is no danger of pollution of an enclosed awning space by the LPG exhaust from a refrigerator venting into it, as awning spaces are generally well ventilated.

Space heaters may produce sufficient exhaust to pollute the awning space, if it is totally enclosed, from a general comfort, smell and hygiene point of view. In the extreme case there could be a build up of carbon dioxide to a dangerous level.

Motorhome owners are advised to allow some fresh air circulation in the awning space when such appliances are in use.

### **General Safety Notes**

In the event of leaks in the gas system or if there is a smell of gas:

- Extinguish all naked flames.
- Do not smoke.
- Switch off the appliance and gas cylinder.
- Open the windows.
- Do not operate any electrical switches.
- Have the entire system checked by an expert.

### Precautions

- a. Never look for a leak with a flame. Always use a soap solution or its equivalent when testing connections. Do not operate any electrical apparatus whatsoever, especially light switches. If the leak is not obvious, the motorhome should be evacuated and qualified personnel consulted.
- b. Avoid naked lights when connecting or changing a cylinder.
- c. Check the flexible hose frequently.
- d. The gas is heavier than air and therefore sinks to the lowest point.
- e. Keep bottle gas containers outside (and protected against frost). If they must be kept inside make sure they are well away from heat.

**WARNING:** Do not use appliances with a different working pressure to 30mbar.

**WARNING:**Maintain adequate spacing of combustible materials from sources of heat.

A WARNING: Do not use independent portable gas appliances inside the vehicle. Cookers shall not be used as heaters

A WARNING: A BBQ point inlet valve, if fitted, must only be used for the connection of portable LPG appliances.

WARNING: If in doubt ask for advice from a competent person.

### Always read individual appliance instructions.

### Connection

Ensure that the gas regulator hose is correctly connected to the gas cylinder in gas bottle compartment and that the hose connection is tight.

Gas cylinders must be fully located, seated at the base of the bottles and restrained by the straps provided in the dedicated compartment position. Straps are positioned to suit 6kg, 7kg and 13kg bottles.

A WARNING: If using cylinders other than those recommended, the user must ensure these are adequately supported, ventilation openings must not be obstructed and the cylinders must not cause damage to other fixtures

Open ended gas hoses must always be protected from dirt and insects.

Before turning on the gas supply at the regulator, ensure that all gas operated equipment in the motorhome is turned off.

All gas equipment is supplied through a Gas Manifold System which has individual isolation taps for each appliance (Fig A), as follows:



### Fig. A

RED - Water Heater / Combination boiler WHITE - Heater / Heating system

BLUE - Fridge

GREEN - Hob / Grill / Oven

YELLOW - Grill

**Note:** If the motorhome is in storage or not being used for a period of time, we recommend turning off the gas supply at the gas bottles.

### Flue installations

All flue installations should be inspected once a year throughout their length for corrosion. Flues should be replaced if any sign of perforation is found. Ensure that the replacement is of an approved type.

### Thermal insulation heating

Your motorhome has been designed to achieve a thermal insulation and heating level for specific climatic conditions when tested according to the procedure in EN1646-1.

See the motorhome technical book for the classification of your motorhome. All Swift Group motorhomes achieve a Grade 3 classification.

### The classifications are as follows:

### Grade 1

A motorhome with an average thermal transmittance (u) that does not exceed 1.7w/ (m2k).

### Grade 2

A motorhome with an average thermal transmittance (u) that does not exceed 1.7w/ (m2k) and which can achieve an average temperature difference of at least 20°C between inside and outside temperatures when the outside temperature is 0°C.

### Grade 3

A motorhome with an average thermal transmittance (u) that does not exceed 1.2w/ (m2k) and which can achieve an average temperature difference of at least 35°C between inside and outside temperatures when the outside temperature is -15°C.

### 7.16 External BBQ point

Models equipped with an external barbeque point can be used to power any gas appliance suitable for the gas used in the caravan, at the working pressure shown on the label in the barbeque outlet box. Please note when using the outlet that the fitted regulator will allow a maximum of 1.5kg per hour of gas to be taken from the gas bottle. Therefore the consumption of gas from both the appliances within the caravan and the appliance connected to the barbeque point cannot exceed a total of 1.5kg per hour at any one time. If you are in any doubt please consult your dealer for advice. To use point proceed as follows:

- Fit male tail connector from despatch kit to your barbeque or appliance ensuring a gas tight joint. The work should be carried out by a competent person; if in any doubt consult your dealer.
- 2. Open box lid by pulling tab on bottom edge and lifting, while pressing on centre of flap.
- Insert tail connector on appliance into female coupling, twist to engage and lock.
- 4. Open gas locker on caravan, ensure gas bottle tap is open and supply is connected to regulator.
- Light and operate appliance to its instructions. Please note that you cannot open the gas supply until the nozzle has been inserted. In the interest of safety all external hose lengths should be kept to a minimum and attachments secured correctly.

A WARNING: Care should be taken when using the external barbeque point. Never barbeque next to an awning or tent.

A WARNING: The caravan barbeque point should only be used as an outlet point for gas, never connect a gas bottle direct to the outlet.

### 7.17 Gas fault finding

Fault	Cause	Remedy
Hob does not light	No gas	Check level of gas in cylinder
		Check gas cylinder valve is on
		Check gas taps are on
	Air in pipe	Purge system
		Refer to hob manufacturers instructions
Oven does not light	No gas	Check level of gas in cylinder
5	5	Check gas cylinder valve is on
		Check gas taps are on
	Air in pipe	Purge system
		Refer to oven manufacturers instructions
BBQ does not light	No gas	Check level of gas in cylinder
5		Check gas cylinder valve is on
		Check gas taps are on
	Overgeged	Turn off appliance wait 2 minutes and try
	Over gassed Air in pipe	Turn off appliance, wait 2 minutes and try again
	Airin pipe	Purge system
Fridge does not light	No gas	Check level of gas in cylinder
		Check gas cylinder valve is on
		Check gas taps are on
	Air in pipe	Purge system
		Refer to fridge manufacturers instructions
Combination Heater	No gas	Check level of gas in cylinder
does not light		Check gas cylinder valve is on
		Check gas taps are on
	Air in pipe	Purge system
	·	Refer to water heater manufacturers instructions

### 7.18 The electrical system

### **General Information**

It is strongly advised that the mains installation is inspected periodically to ensure safe use. The IET (BS7671) wiring regulations recommend that mains installations in motorhomes are reinspected every 3 years or annually if the van is used frequently. The National Caravan Council lists the qualifications necessary to perform this inspection, but an NICEIC approved contractor is probably the first choice.

### On arrival at the campsite

- Check the suitability of the supply, is it AC or DC, is the voltage and frequency correct.
- Ensure that there is a proper earth (3 pin socket outlet).
- If in doubt consult site staff.
- Make sure that the supply from the site is switched off.
- Make sure that the charger switch on the PSU is switched off.
- Lift the cover on the electricity inlet on the motorhome, and insert the connector on the flexible supply cable.
- At the site supply point, connect the other end of the supply cable to this using the socket provided.
- Switch on the main switch at the site supply point.

**Note:** It is good practice to test the RCD (Residual Current Device) in the PSU before switching on. There is a test button on the RCD to test the lever, put the lever in the up position (on) before testing.

**Note:** As with the RCD it is good practice to check the Miniture Circuit Breaker (MCB) in the PSU. Switch all to the on position (lever up). If any do not stay up then there is a fault.

### On departure from the campsite

- Switch off supply from the site, disconnect the cable at both ends.
- Switch off RCD.

**Note:** Never use a mains supply lead whilst coiled. Always uncoil the full length before connecting to the supply and remember to protect the cable from traffic.

A WARNING: Current consumption in the motorhome must not exceed 16 amps or the pitch permitted maximum if this is less than 16 amps.

### 7.19 Overseas connection

- Connection to a mains voltage overseas requires particular attention.
- Overseas supplies can be of reverse polarity.
- Reverse polarity results in equipment not necessarily being isolated when turned off, reverse polarity indicator on the PSU will light in the event of reverse polarity.
- The only sure way to make equipment safe is to unplug it.
- It is useful to have a means of checking polarity when overseas.
- If it can be achieved then connect live to live, and neutral to neutral to achieve full electrical protection.

A WARNING: Never allow modifications or repairs of electrical or LPG systems and appliances except by qualified persons.

# CONNECTING SERVICES

# 7.20 230V mains electrical equipment power consumption

### Please note:

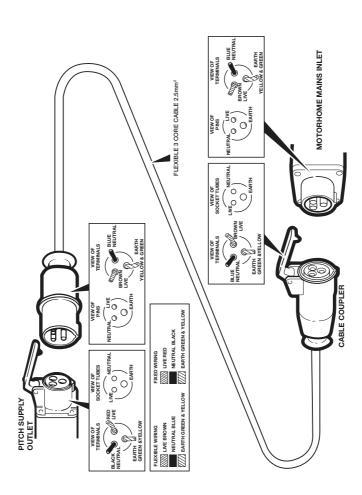
It is possible that the 230V mains electrical equipment may not all operate simultaneously. A typical UK motorhome site mains hook up point provides a maximum output of 10 amps and on some continental sites the available output may be as low as 5 amps.

If your loading exceeds the site supply it may trip the site circuit breaker. Please check the available mains output with your site operator.

Similarly loadings on each circuit breaker within the vehicle should be observed.

A label positioned close to the MCB's will identify which appliances within the vehicle are fed from which MCB. Consulting the table (Typical Appliance Consumption Figures) in conjunction with this label, will give an indication of which appliances can, and cannot, (site supply allowing), be operated simultaneously.

# Wiring of connecting cable and motorhome mains inlet



The legal length of the mains inlet cable is  $25 \pm 2$  metres. When in use it must be fully uncoiled and protected from traffic.

### 60

### 7.21 Connecting cable wiring

	230 Volt	/olt	12 Volt	olt	LP Gas
Appliance/ Item	Watts	Amperes	Watts	Amperes	grams/hour
Dometic Refrigerator	190 W	0.8 amp	Only when driving	driving	16 g/h
Truma Combi 6 Heating System	900 / 1800 W	3.9 / 7.8 amp	13 w	Up to 6.5 amps	480 g/h
Dometic hob and bowl hob burners	Not ap	Not applicable	Not app	Not applicable	73 – 160 g/h each
Triplex hob burners	Not ap	Not applicable	Not applicable	licable	70 – 161 g/h each
Triplex Grill	Not ap	Not applicable	Not applicable	icable	117 g/h
Triplex Oven	Not ap	Not applicable	Not applicable	licable	125 – 146 g/h
Battery Charger	690 W	3.0 amp	Not applicable	licable	Not applicable
12v LED lights (each, depending in size of light)	Not ap	Not applicable	0.4w - 6.1w	0.05 amp – 0.5 amp	Not applicable
USB socket or USB charging socket within light	Not ap	Not applicable	Up to 18w	Up to 1.5 amps	Not applicable
Water tank frost element (Winter pack)	Not ap	Not applicable	30 W	2.5 amp each	Not applicable
Pressure switched water pump	Not Ap	Not Applicable	24w	2.0 amp	Not applicable

illuminated control panels can have a low current consumption when in stand by mode, or have a constant low current draw in the background to run their displays and electronic systems - these figures are typically 0.4 amps or less, for each applicable item. These electronic items can in most cases be switched off individually, or, use of the System Shutdown button on the power supply unit isolates all of these items. Note: These are approximate figures for guidance only, and are subject to changes in specification. The figures show energy consumption when an item or appliance is operating - i.e. a light is illuminated, or a heating system is providing space heating or water heating. Appliances which feature LCD or

### 7.22 Typical appliance consumption

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### 8.1 Motorhome battery

Your motorhome has been fitted with a sealed, Absorbed Glass Matt leisure battery which is specially designed for installing on its side and without ventilation. The battery should only be positioned in the compartment under the driver's seat, and be properly secured before travelling.

It is recommended that a good quality leisure battery is always connected when the motorhome electrical system is in use.

Leisure batteries are a deep cycling rechargeable heavy duty 12v battery designed to provide power for lights and other electrical appliances. Replacement batteries should be a proprietary brand leisure battery with a 85amp -110 amp capacity.

A WARNING: When renewing a leisure battery care should be taken ensuring that a fully sealed Absorbed Glass Matt battery, which can be fitted on its side is used. IF UNSURE SEEK ADVICE Other types of leisure batteries contain a liquid and electrolyte which will leak out if laid on its side. CONTACT WITH THE LIQUID ACID CAN CAUSE SEVERE INJURIES AND DAMAGE TO THE VEHICLE.

**Note:** Replacement batteries should be checked dimensionally before purchasing, to ensure fitment within the battery compartment, as brands vary in size.

It should be remembered that batteries suitable for the electrical demands of a motorhome differ in design from those for use with a car, and whilst the system may operate with a car battery it is strongly recommended that only a rechargeable leisure type battery, maintained in good condition is used.

A WARNING: When connecting the battery, ensure that the correct polarity is observed (black is negative and red/brown is positive) and that the terminals are securely fastened. Under normal circumstances it should not be necessary to remove the battery other than for routine inspection of terminals.

Your motorhome has been fitted with an in-line 40 amp fuse between the battery terminal and the power supply unit. Do not use a higher rated fuse as this may cause damage to your motorhome.

A WARNING: Switch off all appliances and lamps before connecting or disconnecting the battery. Open flames and smoking are prohibited around the battery compartment.

To preserve the life of your leisure battery and charger please observe the following:

- 1. Do not leave all 12v lights powered at the same time as this will drain your leisure battery more rapidly.
- 2. If all 12v lights must be powered together, ensure the battery is 'in-circuit' and that the battery charger is turned on.
- 3. For optimum performance use the transformer/charger unit with a leisure battery attached.

Please note the auxiliary battery or batteries supplied with your motorhome may not be fully charged and should be charged for a minimum of 24 hours before use.

Battery performance may be affected by a number of things such as ambient temperature, age, state of charge etc.

A WARNING: It is imperitive that the battery is correctly secured as any movement could cause wear to the casing and cause electrolyte to leak.

A WARNING: For your own safety do not store anything other than the leisure battery in the battery compartment under the driver's seat.

### 8.2 Battery removal

### Step one

Remove the lower front seat fascia by pulling on the clip feature located centrally on the upper edge of the fascia. Using a small amount of the force the fascia can be pulled in upwards direction to fully detach it from the two lower clip positions.





### Step two

Release the battery harness by carefully cutting the zip ties which are securing it to the lower seat frame. Then disconnect the battery harness connector by pulling firmly on each of the large black connector plugs.





Step three

Remove the two fabric straps by loosening the straps through the buckles.



### Step four

Pull the battery forward out from under the seat frame.



### Step five

Carefully cut through the zip ties which are securing the battery terminal covers in place and remove the covers. Demount the battery terminals using a 10mm spanner taking care not to short the terminals.





### 8.3 Battery replacement

### Step one

Place the new battery on the cab floor and remount the battery terminals using a 10mm spanner, taking care to observe the positive and negative terminals. Refit the terminal covers and secure in place using new zip ties.



### Step two

Ensuring that the buckle are face down. Feed the two fabric straps under the lower front and back bars. Hook the rear of the strap over the front top bar – this will prevent the strap being dragged backwards when sliding the battery into place.

### Step three

Lie the battery on its side with the terminals closest to the floor. Slide the battery into position taking care not to drag the straps backward.



### Step four

Reach up above the battery and up through the centre of the seat base to draw the strap back from the top bar. Now the strap is located on top of the battery re-secure the straps through the buckles.



### Step five

Tighten the strap as far as possible then slide the seat forward and passing the tails through the hole in the seat base. Then fully tighten the straps and place the tail straps under the seat when fully tightened. Ensure that the straps are located next to the battery terminals to limit movement of the battery.



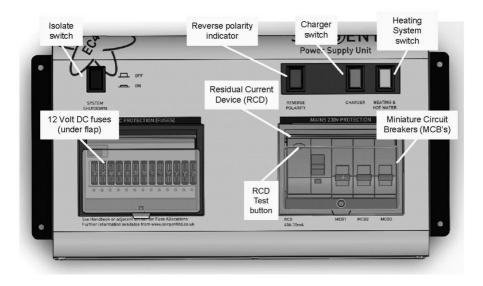
### Step six

Reattached the battery harness by firmly pushing the electrical connector back together, stow cable and secure using zip ties across the front the seat frame.

### Step seven

Reattach the lower front seat fascia by pushing into lower clip positions first then rotating the fascia until the upper central clip engages.

**Note:** Any replacement auxiliary battery shall be of the same type and specification as the original fitted or specified by Swift.



### 8.4 EC400+ Motorhome Power Control System

### 1. Introduction

This section of the handbook will guide you through the operation of the electrical system. All details are correct at the time of going to press. Please also see the online version which will include any later updates or amendments.

Further technical details are contained in section 3 or in the supporting technical manual available from www.sargentltd.co.uk

For the safe operation of all electrical equipment within your Leisure Vehicle it is important that you read and fully understand these instructions. If you are unsure of any point, please contact your dealer / distributor for advice before use. The system has a number of key components that you will need to be familiar with before attempting to use the system, these are:

- The EC454PSU or EC456PSU Power Supply Unit - a combined mains consumer unit and 12V controller usually located in a storage area (lower bed box, wardrobe or similar).
- The EC463 Control Panel a remotely located user control panel used to turn circuits on and off and to display battery, water tank and other system information.
- The PX300 Intelligent 300W Battery charger.

### 8.5 Using the System

# Power Supply Unit - Component Layout (see image on previous page)

The PSU is located in the front offside bed box area.

### Activating the System

The system has a shutdown feature that can be used when the vehicle is in storage. This allows the leisure electronics to be turned off when not required to save battery power. When in the off state the alarm and tracking system supplies are still active, all other supplies are turned off.

Before using the system, please ensure the system shutdown switch is in the on position (button in) the system is now active.

### Connecting to the Mains 230V supply and Safety checks

For your safety it is IMPORTANT that you follow these connections instructions each time your Leisure Vehicle is connected to a mains supply. This section assumes that the system is complete and that a Leisure battery has been installed (see 3.4).

### A) Ensure suitability of the Mains Supply.

Your Leisure Vehicle should only be connected to an approved supply that meets the requirements of BS7671 or relevant harmonised standards. In most cases the site warden will hold information regarding suitability of supply. If using a generator, you also need to comply with the requirements / instructions supplied with the generator. Please note that some electronic generators may not be compatible with your leisure system. Further generator operational information is contained in section 3.2.

# B) Switch the PSU Battery Charger / Power Converter OFF.

Locate the green 'Charger' power switch on the PSU and ensure the switch is in the off position (button out) before connection to the mains supply.

### C) Connect the Hook-up Lead.

Firstly, connect the supplied hook-up lead (orange cable with blue connectors) to the Leisure Vehicle and then connect to the mains supply.

### D) Check Residual Current Device operation.

Locate the RCD within the PSU and ensure the RCD is switched on (lever in up position). Press the 'Test' button and confirm that the RCD turns off (lever in down position). Switch the RCD back to the on position (lever in up position). If the test button failed to operate the RCD see section 3.1.

### E) Check Miniature Circuit Breakers

Locate the MCB's within the PSU (adjacent to the RCD) and ensure they are all in the on (up) position. If any MCB's fail to 'latch' in the on position see section 3.1.

### F) Turn the PSU ON.

Locate the black 'Shutdown' button and ensure it is in the on position (press button in). Locate the green 'Charger' switch on the PSU and turn to the on position (press button in). The charger switch will illuminate when turned on.

### G) Check correct Polarity.

Locate the 'Reverse polarity' indicator on the PSU and ensure that the indicator is NOT illuminated. If the indicator is illuminated see section 3.2.

### H) Check operation of equipment.

It is now safe to operate the 12V and 230V equipment.

### **Operation while driving**

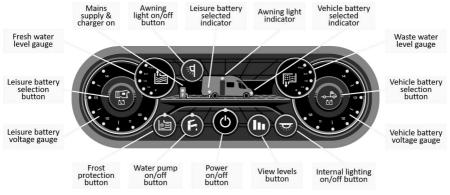
The power control system is designed to shutdown parts of the system while the engine is running. This is to meet Electro Magnetic Compatibility (EMC) regulations and to ensure the safe operation of the motorhome. With the engine running the control panel will flash the leisure battery and vehicle battery LEDs to indicate that the batteries are being charged.

Please ensure the system shutdown switch on the PSU is in the on (button in) position before driving (see 2.2). This will ensure the electronic system is active and will therefore be able to control the charging process, supply the refrigerator and monitor other system circuits.

If / when fitted, designated 12V sockets, enroute reading lights and en-route heating will remain operational while the engine is running.

### 8.6 Control Panel - Component Layout

Your control panel will have an appearance as below, but depending on your specification of the vehicle the control panel features will vary. Not all features are present in all vehicles.



EC463 Control Panel

### 8.7 Control Panel - Key Features

	,
٣	<b>Power Button.</b> Press the power button to turn the leisure power on. Press the button again to turn the power off. The adjacent indicator will illuminate when the power is on, and also the voltage of the selected battery will be displayed on the voltage gauge.
F	<b>Pump Button.</b> With the power on, press the pump button to turn the water pump on. Press the button again to turn the pump off. The adjacent indicator will illuminate when the pump is on, and also the level of the water tank will be displayed on the water gauge (if a tank with level sensor is fitted)
	<b>View Levels Button.</b> To display the battery voltage levels and the water tank levels on the control panel gauges, press the levels button. The display will remain illuminated for 10 seconds. It is possible to lock the display 'on' to allow continuous display. This can be achieved by pressing and holding the view levels button for 2-3 seconds until you hear a beep. To turn this locked feature off, either press and hold the view levels button again for 2-3 seconds or turn the power off and back on.
	Leisure Battery Button. To select the Leisure battery as the source of power, press the leisure battery select button. The Leisure battery indicator with then illuminate, confirming the selected battery. Note: By default, the leisure battery is selected as the source of power (if no mains supply is available), or as the battery to be charged (when a mains supply is available).

¢₂	<b>Vehicle Battery Button.</b> To select the Vehicle battery as the source of power, press the vehicle battery select button. The Vehicle battery indicator with then illuminate, confirming the selected battery.
• •	Mains On Indicator. When connected to a 230V supply and the battery charger is turned on this indicator will illuminate.
*	<b>Charging when the vehicle engine is running</b> . When the vehicle engine is running both the vehicle battery and the leisure battery indicators will flash in unison to indicate that they are connected together and are being charged by the vehicle.
	<b>Internal Lights Button.</b> With the power on, press the internal lights button to turn the main lighting supply on or off.
	<b>Awning Light Button.</b> With the power on, press the awning light button to turn the awning light on or off.
	<b>Frost Protection Button (if fitted).</b> With the power on, press the frost protect button to turn on the water tank heating system. The adjacent indicator will illuminate to show that the tank heating system is on.

Further information relating to the control panel features can be found in the following sections.

# 8.8 System Warnings

The system incorporates a number of warnings that are active at specific times. These are summarised below, and also covered by relevant sections of this manual.

When a warning is active a warning box will appear on the control panel screen containing a description of the warning along with an audible beeping sound.

Warning	When Type			
Fresh water level low	With pump turned on and fresh water level low (less than 25% full)	Audible beep and the Fresh gauge empty indicator will flash		
	Only available when an on-board tank is fitted	(To cancel press Levels Button)		
Waste water level full	With pump turned on and waste water level full.	Audible beep and the Waste gauge empty indicator will flash		
	Only available when an on-board tank is fitted	(To cancel press Levels Button)		
	With control panel power on and leisure battery selected (as active	Audible beep and the Leisure battery gauge 10V indicator will flash		
	battery) and the voltage level falls below 10V	(To cancel press Levels Button)		
Leisure battery	With control panel power on and leisure battery selected (as active battery) and the voltage level is below 9V	Audible beep and Leisure battery gauge 10V indicator will flash. If the warning is not cancelled the control panel will be turned off.		
voltage low		(To cancel press Levels Button)		
	Note: This is an emergency cut off level to protect the battery from severe damage. You should not rely on this cut off level during normal operation, but manage your power consumption to a discharge level of 11.5V or above.			
	This cut off only applies to power drawn from the battery by the leisure equipment that is controlled by the control panel power switch; it will not protect the battery from discharge by permanently connected equipment.			
Leisure battery voltage high	With control panel power on or off and leisure battery is selected (as active battery) and the voltage	Audible beep, the Leisure battery gauge 14V indicator will flash, and the control panel power will be turned off.		
	level rises above 15V	. (To cancel remove the high voltage source)		

Warning	When	Туре	
Vehicle battery warnings	If the vehicle battery is selected instead of the leisure battery, then similar warnings to those described above are applied to the vehicle battery. The vehicle battery low warning level is 10.9V		
Vehicle battery warnings	If the vehicle battery is selected instead of the leisure battery, then similar warnings to those described above are applied to the vehicle battery. The vehicle battery low warning level is 10.9V		
Engine running	When the engine is started the system power will be turned off		
Engine running,	Step extended and engine started	Short warning beeps before the step is automatically retracted	
Step extended	Step jammed or obstructed	Continuous warning beeps	
Engine running, Mains lead (hook-up cable) still connected / plugged in	When the engine is started and the mains cable is still plugged in and the charger is switched on	Continuous warning beeps	

## 8.9 Water System Operation

The control panel pump button operates the internal (onboard) water pump.

The system also incorporates a separate powered water inlet that can be used with an external filler pump to fill the internal (onboard) water tank.

The water tanks (fresh & waste) incorporate a level warning feature to warn the user when the fresh water level drops below 25% or when the waste water level reaches 100%.

If the water pump power is turned on and the fresh water level drops to below 25% a warning beep will be heard and the fresh gauge empty indicator will flash. To cancel the warning, press the levels button.

If the water pump power is turned on and the waste water level rises to full (100%) a warning beep will be heard and the waste gauge full indicator will flash. To cancel the warning, press the levels button.

These warnings will not be repeated unless the water pump power switch is turned off and on again. This is to ensure the warning does not become a nuisance.

# 8.10 Frost Protection Operation (where fitted)

On vehicles fitted with water tank frost protection, the control panel frost protect switch can be used to turn the feature on or off.

With protection on, the system monitors the external temperature and will control the tank heaters accordingly. The heaters will switch on at 4-5 Deg C and off at 8-10 Deg C. If the fresh or waste water levels are less than 25% the appropriate heater will be turned off to prevent overheating or damage to the element.

## 8.11 Solar Charge Management (where fitted)

The Power Supply Unit incorporates a built-in solar charge management feature, which will control the input from a separate solar panel and regulator. Depending on the charge state of the batteries, the solar power will be directed to the required battery, and continuously monitored to ensure optimum operation. For this system to operate intelligently, the shutdown button should be left switched on. If the shutdown button is turned off then the solar panel will charge the vehicle battery only.

# 8.12 Smart Charging

The Power Supply Unit incorporates a smart charge feature, which monitors both leisure and vehicle batteries and automatically adjusts and directs the charger power (and solar power if a solar panel is installed) to maintain the leisure and vehicle batteries at an optimal level.

Note: If the vehicle battery is isolated using the Fiat ignition key isolator or similar, some smart charging functionality will be lost, and the available charge will be directed to the leisure battery.

# 8.13 Electric Step Operation (where fitted)

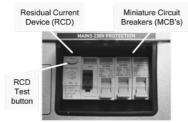
On vehicles fitted with an electric step, this is operated by a button near the entry door. Press and release the button to move the step in or out. One press of the button will move the step out; a further press will move the step in again.

If the engine is started the step will move in automatically, after a short warning buzzer. If this operation fails due to an obstacle a buzzer will sound continuously to warn that the step is still out, and therefore requires your attention.

# 8.14 System Technical Information

The following section provides further technical information relating to the electrical system. You can also access the supporting technical manual from <u>www.sargentltd.co.uk</u>

#### Residual Current Device & Miniature Circuit Breakers



The Residual Current Device (RCD) is basically provided to protect the user from lethal electric shock. The RCD will turn off (trip) if the current flowing in the live conductor does not fully return down the neutral conductor, i.e. some current is passing through a person down to earth or through a faulty appliance.

To ensure the RCD is working correctly, the test button should be operated each time the vehicle is connected to the mains supply (see section 2.3)

The Miniature Circuit Breakers (MCB's) operate in a similar way to traditional fuses and are provided to protect the wiring installation from overload or short circuit. If an overload occurs the MCB will switch off the supply. If this occurs you should investigate the cause of the fault before switching the MCB back on.

MCB Rating **Output Wire Colour** Description 1 10 Amps White 230V Sockets 2 White (Yellow for heater) Extra 230V Sockets / Heating System 16 Amps 3 Black (Blue for Whale Fridge / Charger / Auxiliary devices / Whale 10 Amps water heater) Water Heater

The following table shows the rating and circuit allocation for the three MCB's

# 8.15 Generator Usage

Caution should be used before connecting a generator to your motorhome.

AWARNING: Never start or stop the generator while electrical loads are connected and switched on. Start the engine, let it stabilise and then connect the electrical load. When stopping the generator, disconnect the electrical load and let engine stabilise before switching off.

Whilst some generators use electronic inverter technology, others use a more basic principle to generate the 230V supply. Preference should be to choose a generator which produces a consistent sinusoidal wave form with accurate voltage control.

The Reverse Polarity warning light on the PSU may illuminate when using a Generator. This is a normal side effect when using some types of generator. Instead of connecting the neutral conductor to earth, some generators centre-tap the earth connection making both neutral and live conductors 110V above earth. This 110V difference causes the neon polarity indicator to illuminate.

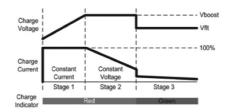
In most cases it is safe to use a generator, but please consult the generator handbook for further information.

# 8.16 Battery Charger

The system incorporates an intelligent threestage battery charger.

During stage 1 the battery voltage is increased gradually while the current is limited to start the charging process and protect the battery. At stage 2 the voltage rises to 14.4V to deliver the bulk charge to the battery. When the battery is charged, the voltage is decreased at stage 3 to 13.6V to deliver a float charge to maintain the battery in the fully charged state. The charger can be left switched on continuously as required. The battery charger / power converter also provides power to the leisure equipment when the mains supply is connected. This module supplies DC to the leisure equipment up to a maximum of 25 Amps (300 Watts), therefore the available power is distributed between the leisure load and the battery, with the leisure load taking priority as per the following example:

Leisure	Available power for battery	
Load	charging	
5A	20A	
10A	15A	
15A	10A	
20A	5A	



A WARNING: Under heavy loads the Battery Charger case may become hot. ALWAYS ensure the ventilation slots have a clear flow of air. Do not place combustible materials against / adjacent to the charger.

## 8.17 Leisure Battery A) Type / Selection

For optimum performance and safety, it is essential that only a proprietary brand LEISURE battery is used and it is suggested to select a battery from the NCC Verified Battery Scheme with a typical capacity of 75 to 120 Ah (Ampere / hours). Depending on the prospective use of the vehicle, the correct type should be selected (A, B or C, according to the NCC Verified Battery Scheme). A normal car battery is NOT suitable. This battery should always be connected when the system is in use.

The PSU is configured to work with standard lead acid leisure batteries, and in most cases is also compatible with the latest range of Absorbed Glass Matt (AGM) batteries. The system is also suitable for Lithium batteries with built-in Battery Management Systems BMS. Before fitting non-standard batteries, please check that the charging profile described in 3.3 is suitable for the type of battery by referring to the battery documentation or battery manufacturer.

Some vehicle installations can cater for two leisure batteries connected in parallel. In these cases, it is recommended that two identical batteries are used.

The battery feed is fitted with an inline fuse between the battery and the electrical harness, and is usually located immediately outside the battery compartment or within 500mm of the battery. The maximum rating of this fuse is 40A per battery.

#### B) Installation & Removal

Always disconnect the 230V mains supply and turn the PSU green charger switch to the off position (button out) before removing or installing the battery.

When connecting the battery, ensure that the correct polarity is observed (black is negative [-] and red is positive [+]) and that the terminals are securely fastened. Crocodile clips must not be used.

A WARNING: Explosive gases may be present at the battery. Take care to prevent flames and sparks in the vicinity of the battery and do not smoke.

#### C) Operation / Servicing

Under normal circumstances it should not be necessary to remove the battery other than for routine inspection of the terminals and "topping up" of the battery fluid where applicable. Please see instructions supplied with the battery.

**Note:** Do not over discharge the battery. One of the most common causes of battery failure is when the battery is discharged below the recommended level of approximately 10V. Discharging a battery below this figure can cause permanent damage to one or more of the cells within the battery.

To prevent over discharge, the power control system incorporates a battery protect circuit that warns the users and then disconnects the batteries when they fall below set values.

If a warning is active a beep will be emitted by the control panel. To cancel the warning, press the Levels Button. These warnings will not be repeated unless the power switch is turned off and on again. This is to ensure the warning does not become a nuisance.

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Battery	Voltage	Action after	Notes
	cut off	cut off	
Vehicle	10.9V	Battery selection is changed from Vehicle battery to Leisure battery. If the leisure battery is below 9V then a further warning will occur (see below).	This cut off level is designed to protect the vehicle battery from over discharge. The 10.9V level ensures there is sufficient power in the battery to run the vehicle electronics and start the vehicle. This cut off only applies to power drawn from the battery by the leisure equipment; it will not protect the battery if you leave vehicle circuits switched on, such as the road lights.
Leisure	9V	Power is turned off	This is an emergency cut off level to protect the battery from severe damage. You should not rely on this cut off level during normal operation, but manage your power consumption to a discharge level of about 11.5V.
			This cut off only applies to power drawn from the battery by the leisure equipment that is controlled by the control panel power switch; it will not protect the battery from discharge by permanently connected equipment.

## 8.18 12 Volt DC Fuses

A WARNING: When replacing fuses always replace a fuse with the correct value. NEVER replace with a higher value / rating as this could damage the wiring harness. If a replacement fuse 'blows' do not keep replacing the fuse as you could damage the wiring harness. Please investigate the fault and contact your dealer.

The following table shows the fuse allocation for the 13 fuses fitted to the PSU. Please note that fuses are dependent on PSU versions, so not all fuses may be present.

Fuse	Rating	Fuse Colour	Description
1	25 Amps	White	Battery Charger
2	7.5 Amps	Brown	Fridge Controls / Alarm
3	10 Amps	Red	12V & USB Sockets / TV Amp
4	10 Amps	Red	Extractor, Cooker hood, Heki powered skylight. Alde or Truma Combi Heating (Not En-Route), Whale Water Heater
5	10 Amps	Red	Appliances, Cooker, Toilet, Whale Space Heater, Locker Mount USB, Tank Valves
6	10 Amps	Red	Water Pumps / Tank Heaters
7	7.5 Amps	Brown	Main lighting (not including spotlights with USB), Rear ambient lighting, Offside awning light
8	7.5 Amps	Brown	Entry lights, Front ambient lighting
9	10 Amps	Red	Alde or Truma En-Route Heating, Marker Lights, En-Route lighting, 12V Sockets, WiFi & Satellite supply
10	10 Amps	Red	Awning Light (Doorside) / Electric Step
11	20 Amps	Blue/Yellow	Fridge 12V: 15A for undercounter fridge, 20A for tall fridge freezer
12	15 Amps	Blue	Towing 12V
13	15 Amps	Blue/Yellow	Fridge D+: 15A for undercounter fridge, 20A for tall fridge freezer

**Note:** Fuses (2-13) have a Red LED below them which provides indication that the fuse has blown. The charger fuse has a green LED which Indicates that the charger is working.

	ĺ	1	1
Battery 1	40 Amps	Orange	Fuse remotely located near battery
Battery 2	40 Amps	Orange	Fuse remotely located near battery 2 (where fitted)

# 8.19 Common Fault Table

Fault	Possible Cause	Proposed Fix	
	Connecting lead between the site and Leisure Vehicle not connected	Check and connect lead as per 2.3C	
	RCD switched off	Reset RCD as per 2.3D	
No 230 Volt output from PSU	RCD not operating correctly	Check supply polarity; if the RCD continues to fail contact your Dealer as there is probably an equipment or wiring fault.	
250	MCB switched off	Reset MCB by switching OFF (down position) then back ON (up position), if the MCB continues to fail contact your Dealer as there is probably an equipment or wiring fault.	
	No or deficient supply from site	Contact site Warden for assistance.	
	Another fault	Contact your Dealer	
Reverse Polarity light is illuminated on PSU	Mains Supply reversed?	The reverse polarity light is designed to illuminate when the Live and Neutral supply has been reversed / crossed over. If the light illuminates there is a problem with the site supply or the cable connecting the supply to your vehicle. The light is designed to work on UK electrical supplies (where the neutral conductor is connected to earth at the substation). If you are using your vehicle outside the UK this light may illuminate when no fault exists. In these cases, consult the site warden for advice.	
	Generator being used	'The Reverse Polarity warning light is on when using my Generator'. This is a normal side effect when using some types of generator. Instead of connecting the neutral conductor to earth, some generators centre-tap the earth connection making both neutral an live conductors 110V above earth. This 110V difference causes the neon polarity indicator to illuminate. In most cases it is still safe to use the generator, but please consult the generator handbook for	

Fault	Possible Cause	Proposed Fix	
	Control Panel has no display	Check batteries and fuses, turn PSU isolate switch and charger switch on and ensure mains supply is connected. Check control panel connecting lead at	
		PSU and behind Control Panel.	
		Contact your Dealer.	
	12V Power turns off	Battery protect feature has operated to protect the Vehicle battery and or the Leisure battery. See 3.4C	
Control Panel Problems		Over voltage protection has been activated, control panel is beeping, 14V LED is flashing (leisure or vehicle). A number of things can cause this but the most common is the solar panel, it is worth checking the regulator is connected correctly and operating within the correct parameters.	
		Engine has been started; all equipment has been disconnected to meet EMC requirements. See 2.4	
	Control Panel locked / erratic function	Observe control panel handling instructions.	
		Control panel software may have crashed. Reboot control panel by turning off the PSU isolate switch. Wait 30 seconds then turn the switch back on. Check with your dealer that your system has the latest software installed, as an update may be available.	
	No 230V supply	Check all above	
	Charger not switched on	Turn charger switch on, switch will illuminate	
	Battery not connected and / or charged	Install charged battery as per 3.4	
No 12 volt	Power button on control panel not switched to on	Turn power on at control panel	
output from PSU	Battery flat / Battery fuse blown	Recharge battery, check fuses, check charging voltage is present at battery.	
	Fuse blown	Check all fuses are intact and the correct value fuse is installed as per fuse table.	
	Equipment switched off / unplugged	Check equipment is switched on and connected to the 12V supply	
	Other fault	Contact your Dealer	

Fault	Possible Cause	Proposed Fix
Pump not	Fuse blown	Replace fuse with correct value as per fuse table
working	Pump turned off	Turn pump on by pressing the pump button at the control panel
Lights not	Fuse/s blown	Replace fuse with correct value as per fuse table.
working	Lights turned off	Turn Lights on by pressing the lights button, use dimmer at the control panel.

# 8.20 Contact details

Sargent Electrical Services Limited provide a technical help line during office hours. Please contact 01482 678981 if you require technical help.

For out of hour support please refer to the support section of the Sargent web site www.sargentltd.co.uk

# 8.21 Technical Data

## Equipment - EC652, EC653, EC800, EC635 & PX300

Outline Specification				
Input 230V	230 Volts / 0 to 16 Amps	+/-10%		
Output 230V	RCD protected, 2 x MCB outputs of 10A & 1 x MCB output of 16A Separate switched channels for heating system and charger			
Input 12V	2 x 20A battery inputs via 2 x 4-way connectors			
Solar Input	1 x Dedicated solar panel input capable of supporting 10A of solar power input (typically 180 to 200W) via a 2-way connector	Check the solar panel rating plate to ensure the maximum current is <= 10A		
Output 12V	25A total output via multiple switched channels protected by 13 fused outputs			
Dattany Charger	Input 220-240 Volts AC +/- 10%, Frequency 50 Hz +/- 6%, Current 3A max.			
Battery Charger	DC Output 13.6 to 14.4 Volts nominal, Current 25 Amps max (300 Watts).			
Signal Input	4 x Fresh water level, 4 x Waste water level, 1 x Engine running, plus multiple vehicle connections, sensor inputs for temperature & humidity	Fresh water negative sensed Waste water negative sensed		
Data In / Out	CANBUS Data communication and power to Control Panel via 6 way connector CI-Bus Data communication to CI-Bus enabled devices via RJ11/12 connector			
IP rating	IP31			
Operating temperature	Ambient 0 to 35° Celsius Charger case temperature with full load 65° C Max	Automatic shutdown and restart if overheated /overloaded		
Dimensions				
EC454PSU, EC456PSU	Overall size (HxWxD) 180 x 305 x 135mm Clearances 75mm above, 50mm left & right	Weight 3.8 Kg		
Power Supply Unit				
EC463 Control Panel	Overall size (HxWxD) 87 x 250 x 15mm Cut-out size (HxWa) 70 x 233mm	Fixing centres 130*75mm Weight 114 g		

# 8.15 Cab Radio - Timer Settings

Depending on the model of Fiat entertainment system fitted, it may be possible to adjust the amount of time the unit will stay ON, after the vehicle ignition is switched OFF. The example description below relates to systems that have this feature.

- Switch on Radio
- Press MENU to access the menu
- Turn Right hand dial and select SYSTEM SETTINGS
- Turn right hand dial to select POWER OFF 180MIN DELAY
- Press right hand dial to select (tick box fills)
- Press BACK to exit menu system

For further details of the features within the Fiat entertainment systems, please follow the links below, or see the paper copy supplied with the vehicle.

Fiat U-Connect Radio 3.0 (without satellite navigation)

<u>http://aftersales.fiat.com/eLumData/ EN/77/290\_DUCATO/77\_290\_</u> DUCATO\_530.07.530\_EN\_01\_03.14\_SI\_ UCR5/77\_290\_DUCATO\_530.07.530\_ EN\_01\_03.14\_SI\_UCR5.pdf



#### Motorhome radio aerials

Your motorhome is fitted with a base vehicle aerial located in the passenger wing mirror. Any issues with your radio reception should be referred back to you Fiat dealer.

**Note**: Some customers may wish to fit an aftermarket radio unit to the base vehicle. While this is possible, customers should note this may affect steering wheel-mounted controls and increase power consumption.

# 8.22 Approvals

**System:** BSEN 1648-1, BS EN1648-2 compliant, BS 7671: 2018 compliant

Residual Current Device: RCD 40A 30mA trip to BS EN 61008

Miniature Circuit Breakers: MCB's type C 6000A breaking capacity to BS EN 60898 Electro Magnetic Compatibility (EMC) directive 2014/30/EU, BS 2014/30/EU

Battery Charger: BS EN 60335-1/2.29, 2014/35/ EU, BS 2014/35/EU, IEC61000-3.2/3:2018.1 Low Voltage Directive: 2014/35/EU, BS 2014/35/ EU, TUV-014900-A1, EN55022, Class B, EN55024/ Level 2

# 8.23 Declaration of Conformity

Equipment: Leisure Power Control System

Model name: EC463, EC454PSU, EC456PSU & PX300

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced approvals. The unit complies with all essential requirements of the Directives.

Signed	Name	Position	Manufacturer
SSS	I L Sargent	Technical Director	Sargent Electrical Services Ltd Unit 35, Tokenspire Business Park Woodmansey, Beverley East
Date: 27/04/2021			Yorkshire, United Kingdom

Whilst every effort has been made to ensure the accuracy and completeness of this document, no guarantee is given against errors or omissions. This document may be updated / improved over time therefore please check with your dealer / supplier for update information or visit www.sargentltd.co.uk

# 9. Fitted equipment

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**Note:** The instructions covering fitted equipment to your motorhome were correct at the time of going to print, and where possible, hyperlinks and QR codes have been used, which provide links

to online versions of user instructions. Owners handbooks are updated annually and we take great care to try and ensure their accuracy. However, the Swift Group Limited cannot accept responsibility for any changes that may be made in specification or operating instructions to the equipment described in this section after the time of going to press.

Every care is taken to ensure that the information provided in this handbook is correct and easy to understand.

Separate manufacturers' leaflets on many of the components are also included in the Owner's Pack provided with this motorhome and we recommend that you compare the instructions provided via the handbook with the component manufacturers literature, to ensure the information provided is as accurate as possible.

If you are in any doubt as to how to operate the equipment in your caravan, please contact the component manufacturer's service department on the telephone number shown on their component leaflet. If you remain in any doubt, please contact your supplying dealer.

**Notice:** In the interest of safety, replacement parts for an appliance shall conform to the appliance manufacturer's specifications and should be fitted by them or their authorised agents.

#### **Equipment Specification**

For details on type of equipment fitted in your vehicle, please refer to the Sales Brochure or Dealer.

WARNING: To maximise the use and life of all fitted equipment in your vehicle it is essential that any accompanying manufacturers' literature is read fully. All recommended maintenance and preparation procedures should be followed. The information provided in this handbook is only intended as a guide. If in any doubt consult your manufacturer appointed dealer, particularly before attempting to install EXTRA EQUIPMENT.

### 9.1 Truma Combination Boiler



The Truma Combination Boiler can be used in the following ways:

To provide combined room heating and water heating.

 Simultaneous heating of the room, and water contained within the appliance. Often referred to as Winter Mode.

To provide water heating only.

• Heating of the water within the appliance, without room heating. Often referred to as Summer Mode.

To provide room heating only, without water heating.

 If the water system has not been primed, meaning that there is no water within the appliance, it is still possible to use the Combination Boiler to heat the room.

#### **Dual Fuel operation**

The Truma Combination boiler has been designed to run on gas or electric power, and the optimum performance is obtained when used in dual fuel mode, that is running on gas and electric at the same time.

Running in dual mode has the following benefits:

- The fastest possible heat up time, as the gas burner combines with an electric element to provide energy to heat your hot water and warm your caravan.
- The intelligent heat management system automatically senses when the water and room are nearing the required temperature and then automatically turns off your gas burner and operates solely on electric power, conserving your gas.
- As hot water is used or the room cools the Truma combination heater will continue to operate on electric only, until a point where the demands necessitate that additional gas power is also required. An example for such a demand could be for instance if the exterior door was left open and the room temperature dropped by 10 degrees in the space of a few minutes, in this case the intelligent heat management system would decide the best way to get the room back to the required temperature, would be to use both gas and electric at the same time.

Operating the Truma Combination system on electric or gas only will result in longer heat up times for hot water, and room temperature, in comparison to operating on dual fuel.

Operating on electric only may not in all cases maintain a comfortable room temperature especially in colder conditions.

Whilst taking energy consumption and the environment into account, consider using the Combi in Summer mode (water heating only) when room or space heating is not required, but may be needed in the near future. This ensures the appliance is held at the same temperature as the hot water setting chosen, and this can reduce the time taken to provide warm air into the living area, when room or space heating is then selected.

#### **Truma Heating System and Air Flow**

The Swift Group undertakes considerable testing of our products in cold chambers to ensure they meet the BS EN 1646 Grade 3 standard and are usable in cold temperatures

#### **Butterfly outlets**

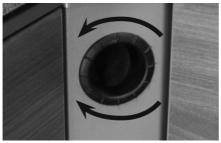
The majority of air ducting outlets on models equipped with Truma Combi heating systems, are of the butterfly type. These may be opened or closed by moving the flap within the fitting, to adjust the balance of the heating output throughout the caravan. This can help offset differences in blown air output, between outlets close to the heating appliance, and those greater distance away from the heating appliance. This can also help adjust the temperature of the bathroom, relative to the temperature of the main living area and/or bedroom.

When these butterflies are closed in conjunction with a high heating system output, and therefore a high fan speed, a slight whistling sound can occur. In this case, opening the outlet slightly will reduce or remove the noise.

Closing too many outlets when the heating system is producing a high output, can cause the appliance to reach high operating temperatures. This does not in general terms effect the appliance, but can cause the appliance to automatically shut down. This can cause an interruption of the heating of the motorhome, however heating will resume when the appliance temperatures have reduced to a lower level.

The output of the appliance, and therefore the output of the blown air outlets, will generally be higher when using Gas or Duel Fuel operation. Electric only operation of the heating is rated at up to 1.8kW, whereas Gas (or Dual Fuel) operation is rated up to 4kW (3.8kW) or 6kW (6.9kW), depending which model or Combi is fitted.

The blown air fittings can also be rotated to adjust the direction of air leaving the outlet, as shown in the photo.



# Truma Combination Boiler Control Panel and appliance instructions

Please read the user instructions before using the heating system. The instructions include warnings regarding the safe use of the system, and no liability whatsoever can be accepted for damage or injury resulting from failure to observe the instructions.

For use of the CP Plus controller, and general user instructions for the heating system appliance, please read the Truma information available at the following locations:

#### **CP Plus Controller**

https://www.truma.com/downloadcenter/ cp plus installation operating de gb fr\_it.pdf



# Combi 4 Gas/Electric and Combi 6 Gas/ Electric appliances

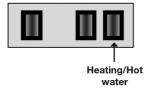


#### https://www.truma.com/int/en/products/ truma-heater/combi-4e

If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

# Electrical Operation of Truma Combination Boiler

Before the heating system is used for heating using electrical (230v) energy, the 230v isolation button on the Sargent Power Supply Unit must be switched ON, as shown in the image below. To confirm a supply is available, the button will be illuminated when a power supply (mains hook up) is connected and the button is ON.



#### Troubleshooting instructions (Combi heater)

In the event of a problem occurring, a warning or error code will be displayed on the Truma CP Plus control panel, along with a warning triangle. Further warning information will also be displayed on the Swift Command control panel.

The Truma combi boiler (heater and water) has two styles of error code warnings which are shown on the CP+ display panel. Depending on the nature of the fault, the boiler will require resetting in a slightly different manner, depending on the fault.

- Solid error warning code
- Flashing error warning code

Before trying to reset any faults please check that the 12v supply is on, and depending on which energy source is going to be used for heating, either mains electricity is available and switched on, and/or that the gas bottle is open and ready to dispense gas.

The following table on the next page describes causes and remedies to the various fault codes that may be displayed on the Truma control panel.

Once the fault has been rectified the fault can be reset via the control panel

#### SOLID CODE

Using the control dial on the cp+ panel scroll down to the bottom line where the triangle appears.

- Press this button to acknowledge the error
- The error code and triangle should disappear if the fault has been rectified

#### **FLASHING CODE**

- Scroll round (as above) to acknowledge the error on the panel
- Leave the panel UNTOUCHED for 15 minutes
   This allows the user to check that fuel sources are available, and is a regulatory time frame
- After 15 minutes the triangle will become solid
  - The panel can be reset as per the above process for SOLID

If the CP+ panel is reset 5 times, without the fault being rectified the fault will become a 'FLASHING' CODE and will be locked for 15 minutes. If the control panel (cp+) is touched within 15 minutes, the 15 minute 'count' will restart. It is imperative that the panel is left untouched during this time.

Truma Customer Service can be contacted on 01283 587960 or technical@trumauk.com if you require further assistance

Error code	Cause	Remedy				
#17	Summer mode with empty water container	Switch heater off and allow to cool. Fill boiler with water				
#18	Warm air temperature exceeded	Warm air temperature exceeded:				
	Not all warm air ducts are connected	Check whether the 4 warm air ducts are connected				
	Circulated air intake blocked	Remove the circulated air intake blockage				
#21	Room temperature sensor or cable faulty	Inspect the room temperature sensor cable, replace if faulty				
		Check the resisitance of the room temperature sensor.				
		15°C - 16.2 kOhm / 20°C - 12,6 kOhm / 25°C				
		- 10.0 kOhm				
		Replace room temperature sensor if faulty				
#24	Risk of low voltage. Battery voltage is too low < 10.4V	Charge battery				
#29	Frost Control heating element has a short circuit	Disconnect heating element plug from electronic control unit. Replace heating element				
#42	Open window above cowl (window switch)	Clode window				
#43	Overvoltage > 16.4V	Check battery voltage / voltage sources such as the charger				
#44	Low voltage. Battery voltage is too low <10.0V	Charge battery. If necessary replace old battery				
#45	No 230 V operating voltage	Restore 230 V operating voltage				
	230 V fuse defective	Replace 230 V fuse (see Combi operating instructions)				
	Overheating protection has been triggered	Reset overheating protection (see Combi operating instructions)				
#112	Gas cylinder empty Replacing a gas cylinder					
#121 #122 #202	Gas cylinder or quick-acting valve in the gas supply line closed	Check gas supply and open valves				
#202 #211 #212	Gas pressure regulation system iced up	Use regulator heater (EisEx)				
<i>π</i> ∠ι∠	Butane content in the gas cylinder too high	Use propane. Butane is unsuitable for heating, particularly at temperatures lower than 10 °C.				
	Combustion air infeed or exhaust outlet is sealed	Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions				
	Gas pressure regulation system faulty	Inspect / replace gas pressure regulation system				

Error code	Cause	Remedy	
#255	Heater has no 12 V power supply	Ensure 12 V power supply	
	No connection between heater and control panel	Make connection between heater and control panel	
# 301 # 417	Risk of low voltage. Battery voltage is too low < 10.4 V	Charge battery	
# 401	Summer mode with empty water container	Switch heater off and allow to cool. Fill boiler with water	
#412	Open window above cowl (window switch)	Close windows	
#419	Overheating protection has been triggered	Reset overheating protection (see Combi operating instructions)	
		(gas heating continues in Mix mode)	
# 507	Gas cylinder empty	Replacing a gas cylinder	
#514	The 12V supply has been interupted	Ensure the control panel of caravan / motorhome is switched on. Ensure charger is switched on and / or battery is connected	
#516	Gas cylinder or quick-acting valve in the gas supply line closed	Check gas supply and open valves	
#517	Gas pressure regulation system iced up	Use regulator heater (EisEx)	
	Butane content in the gas cylinder too high	Use propane. Butane is unsuitable for heating, particularly at temperatures lower than 10 °C.	
	Combustion air infeed or exhaust outlet is sealed	Inspect openings for obstructions (slush, ice, leaves, etc.) and remove any obstructions	
	Gas pressure regulation system faulty	Inspect / replace gas pressure regulation system	
# 607	Max. number of fault resets reached	Wait 15 minutes and reset fault	
# 621	Room temperature sensor or cable faulty	Inspect the room temperature sensor cable, replace if faulty	
		Check the resistance of the room temperature sensor.	
		15 °C – 16.2 kOhm / 20 °C – 12.6 kOhm / 25 °C – 10.0 kOhm	
		Replace room temperature sensor if faulty	
# 624	FrostControl heating element has a short circuit	Disconnect heating element plug from electronic control unit. Replace heating element	

If these measures do not remedy the fault or if fault codes are displayed that you cannot find in the troubleshooting guide, contact Truma Service.

# 9.2 Dometic Absorption Refrigerator

Your motorhome is fitted with a DometicRM8406 absorption refrigerator.

Using this model number, please read theuser instructions for the refrigerator, which areavailable from the following location:

http://td.dometicgroup.com/swift.php



If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

#### Note: Gas operation of fridges - gas lockout

If the fridge makes three unsuccessful attempts to switch to gas mode, further action may be required before gas operation is possible. This could occur if a gas bottle is empty, or if the fridge is switched on before the valve on the gas bottle is opened. The display on the fridge will show flashing LED's against the gas symbol and the warning symbol.

If this does happen, first check that a gas supply is available: After checking the valve on the gas bottle is open, and that the taps on the gas manifold are in the correct position, light one of the gas burners on the hob for a few seconds to confirm gas is available.

Next, at the fridge, press the power ON/ OFF button for 2-3 seconds until the fridge beeps, this will clear the warning, and normal automatic selection of energy sources will resume. If the button is pressed for slightly longer, the fridge will switch off. In the event of this happening, simply use the same power button to turn the fridge back on, then press again for 2-3 seconds to clear the warning.

Please note the fridge also has a TANK STOP feature, which prevents gas operation for 15 minutes immediately after 12v operation, this prevents the fridge from attempting to light the gas while re-fuelling mid journey. Please take this 15 minute delay into account if the fridge switches from 12v operation to gas operation.

# 9.3 Dometic mini grill

# Use the appliance only in a well ventilated space.

The ventilation openings must remain open when the appliances are operating.

#### Ignition of the appliance

#### 1. Manual ignition: oven - grill

- Push in control knob, slightly turn to ignition position, light burner with match or lighter and keep knob pushed for 5 - 10 sec.
- b. Release knob and turn it lo required position.

#### 2. Automatic ignition: oven - grill

- a. For igniting oven or grill, open oven door completely
- b. Push In control knob, slightly turn to ignition position keeping it pushed in for 5 10sec.
- c. Release knob and turn it to designed position.

**Note:** Oven and grill burners will not light, if door is not completely open.

#### 3. Ignition of appliances with thermostat

Proceed according to paragraphs 1 and 2, with or without electronic ignition. The ignition position is obtained by turning control knob on a position between 1 and 6 for the oven and grill position (see symbol **v v v**)



For ovens with thermostat the different positions of the knob correspond to the following temperatures in °C of the oven.

POS	1	2	3	4	5	6
TEMP	130	160	180	200	220	240

WARNING: If ignition is unsuccessful, repeat operation from beginning; if necessary have the appliance checked if a gas and/or electricity failure in the appliance. If appliance absolutely does not work, close gas inlet tap and contact retailer. Before using oven for the first lime, let it run at maximum temperature for the duration of 20 mins without foodstuffs inside:

**WARNING:** Use gloves when handling hot elements!

In the event of the burner flames being accidentally extinguished, turn off the burner control and do not attempt re-ignite the burner for at least 1 min.

#### **Operation of the grill**

- a. Pull out heat protection plate
- b. Light grill burner.
- c. Keep oven door half-open
- d. Do not use for more then 20 minutes.

#### Use of the rotisserie

Insert dripping-pan with the rotisserie installed as indicated in (fig 5a). Push in the appropriate button (fig 4a) in order to set going the rotisserie motor.

#### Use of the Grill

- a. Slide out heat protection plate.
- b. Light grill burner
- c. Keep oven door in half-open position.

#### Use with Oven:

- a. Light oven burner
- b. Position control knob on desired temperature
- c. Close oven door.

# ITTED EQUIPEMNT

#### 9.4 Dometic Hob and Bowl



#### Fig 1 Safety Warnings

A WARNING: This warning is affixed to the appliance. This appliance must be installed in accordance with regulations in force and only used in an adequately ventilated area. Always read the instructions provided in full before installing and using this appliance. This appliance must be installed by specialist gas service engineers.

A WARNING: This appliance is designed and manufactured for cooking food only. Any other use is considered improper and incorrect creating hazardous conditions. The manufacturer declines all responsibility for damage to things or injuries to persons caused by incorrect installation and / or incorrect and improper use.

▲ CAUTION: Before installing check that the local gas available (gas type and pressure) and the appliance regulators are compatible with the appliance itself. Gas regulating specifications for this appliance are provided on the label affixed to the appliance (or on the serial plate). This appliance is not connected to a fume extraction flue for extracting products of combustion therefore it must be installed and connected (fitted) conforming to installation regulations in force for appliances of this type it is of utmost importance to respect legislation regarding ventilation.

#### Warnings

CAUTION: This appliance must only be used by responsible adults. during use and immediately after use the burner and other accessible parts may be hot; do not touch these parts and always keep children at a safe distance. after using the appliance ensure the knob/knobs are off. After use always shut off the gas supply at the main gas tap.

A WARNING: The use of gas appliances generates heat and moisture in the immediate area. always ensure a good ventilation in the cooking area: keep all air vents open for natural ventilation or install an extractor fan (cookerhood). Due to intensive use of the appliance it may be necessary to increase ventilation such as opening a window or increasing cookerhood (extractor fan) speed. For models mo8800 the drainer must be removed when utilising the hob burner/s.

CAUTION: This warning is affixed in visible location on the hob glass lid. Glass hob lids may shatter when heated. Always raise the lid before igniting a burner/s (hob, oven and grill) and turn off all burners (hob, oven and grill) and let them cool down before lowering the hob glass lid.

CAUTION: This warning refers to models with incorporated sink unit and hob and with glass lid divided between sink and hob. this warning is affixed in a visible position on the sink unit glass lid. When using the hob with the glass lid on the sink unit closed, always keep pans on hob at a distance of 10 mm minimum from sink unit glass lid.

#### Controls

The following symbols indicate the burner corresponding to the control knob.

This symbol is placed next to the hob burner knobs. Full dot refers to the corresponding hob burner.



The following symbols indicate the burner regulation corresponding to the knob position.

**Note:** Different models may have different knobs and different symbols.

GAS OFF

HIGH FLAME

LOW FLAME

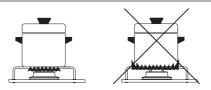
#### Other symbols



PUSH BUTTON ELECTRONIC IGNITION

#### Selecting burner

**WARNING:** The flame must never extend beyond the edge of the pan. Centre the pan over the burner ensuring stability on the pan support.



Burner	Pan Diameter
AUXILIARY	from 6 to 16cm
Ø 47mm	
SEMI-RAPID	from 16 to 22cm
Ø 62mm	
RAPID	from 16 to 22cm
Ø077mm	

#### Electronic Ignition Hob (Depending on model)

A WARNING: Make sure there are no pans or other any objects on the burners when igniting.

To ignite burner, gently push-in and turn the control knob to position HIGH FLAME and maintaining the knob pushed at the same time press the electronic ingnition pushbutton. Once the burner is alight maintain the knob in this position for a few seconds to ensure the flame remains alight.

CAUTION: If the burner does not ignite immediately repeat ignition after having followed each step below:

- Turn the knob to "small flame"
- Proceed with manual ignition
- Check there is sufficient gas in the gas bottle.

If the appliance still does not ignite shut off the gas supply at the main gas tap and contact your local dealer.

#### **Manual Ignition Hob**

Manual ignition when the appliance is not fitted with the electronic ignition feature or in the event of failure in the electronic ignition.

WARNING: Make sure there are no pans or other any objects on the burners when igniting.

To ignite burner, gently push-in and turn the control knob to position HIGH FLAME and maintaining the knob pushed at the same time light the burner with a match or gas lighter. Once the burner is alight maintain the knob in this position for a few seconds to ensure the flame remains alight.

A WARNING: If the burner does not ignite immediately check there is sufficient gas in the gas bottle. If the appliance still does not ignite shut off the gas supply at the main gas tap and contact your local dealer.

#### **Hob Flame Regulation**

To regulate flame turn the knob to the desired cooking flame.

#### Visual Flame Control

Depending on the type of gas used the flame should be:

Propane (G31): blue flame without yellow tips.

Butane (G30): flame with yellow tips when ignited which becomes more intense in colour as the burner heats.

# 9.5 Gas Cylinders/Bottles

A WARNING: Never operate the appliance with gas and or at gas pressures different to those indicated by Dometic as this could cause irregular and incorrect operation. Dometic declines all responsibility for damage or injury caused by an incorrect or improper use of the appliance.

The appliance runs off standard gas bottles which can be found in the country of use. The type of gas to use is clearly marked on the packaging and on the specifications label affixed to the rear of the appliance. However always respect the following instructions: gas bottles must always be located and positioned in the compartment provided for this purpose. They must always be vertical and fitted with a valve and pressure regulator. Do not obstruct or impede access to the gas bottle to permit quick and easy access when replacing. **WARNING:** When replacing the gas bottle always take the following precautions:

- a. close all gas knobs;
- b. make sure there are no flames or fires in proximity of the gas bottle;
- c. close the gas valve on the bottle to be replaced;
- d. unscrew the pressure regulator on the empty bottle and remove the bottle from the purpose compartment. This procedure is inverted for fitting a new bottle. Check for gas leaks utilising a non-corrosive fluid. Do not use a water and soap solution.

# NEVER USE A FLAME TO CHECK FOR GAS LEAKS;

e. ignite the burners to check they function correctly. If there are problems call in an authorised gas service engineer.

After appliance use always turn off the gas tap on the bottle

#### GAS LEAKS:

We recommend the use of an electronic and homologated gas detector for checking ambient air.

If there is a smell of gas;

- a. immediately open the windows and evacuate the motorhome.
- b. do not turn on or off light switches or other electronic appliances, do not light matches or lighters or anything that could cause the gas to ignite;
- c. put out any flames
- d. shut off the valve on the gas bottle or cylinder. Do not re-open this valve unless the gas leak has been identified and eliminated.
- e. contact a specialised gas service engineer

#### Cleaning

AWARNING: Before cleaning the appliance always turn it off and disconnect from power supply and wait until it has cooled down.

CAUTION: Surfaces that are still hot can be damaged if they come into contact with cold water or a damp cloth. Never use abrasive, corrosive or chlorine based cleaning products. Never use steel or plastic scouring pads. Never leave deposits of acid or alkaline substances (vinegar, salt, lemon juice etc.) on the appliance. Stainless steel or enamelled surfaces must be cleaned only with water and soap or a neutral detergent, thoroughly rinse and dry. Use clean sponges or cloths to clean.

#### Injectors

A WARNING: Cleaning or replacing gas injectors must only be performed by authorised and qualified gas service engineers.

Burner	Injector (mm)	Stanped N.
Auxiliary 47mm	0.50	50
Semi-Rapid	0.67	67
Rapid	0.75	75

# 9.6 Thetford oven

A WARNING: Before using the appliances for the first time, remove all accessories and packing in the grill and oven, including any surface protection film, i.e. plastic coating. Clean all interior surfaces with hot soapy water to remove any residual protective covering of oil and rinse carefully.

Accessible parts may be hot when the grill is used, young children should be kept away. When cooking always ensure young children are kept away.

Ensure the gas cylinder is turned on. In the event of a gas smell, turn off at the cylinder and contact supplier. The burners on this appliance have fixed aeration and no adjustment is required. Depending on the gas being used, the burners should flame as follows:

**Propane:** The flames should burn quietly with a blue/green colour with no sign of yellow tips.

**Butane:** Normally on initial lighting, as small amount of yellow tipping will occur and then slightly increases as the burner heats up.

A WARNING: The control tap on this appliance operates both the grill and oven burners. To ensure safe operation it is not possible to operate both burners at the same time.

#### Using the hob burners

- Ensure gas cylinder/supply is connected and turned on. In the event of a gas smell turn off at gas cylinder/mains and contact supplier
- 2. Flame supervision: Each burner is controlled individually and is monitored by a thermocouple probe. In the event of the burner flames being accidentally extinguished, turn off the burner control and do not attempt to re-ignite the burner for at least one minute.
- 3. To light: Push in the control knob and turn to full rate - see Fig.2. Hold a lighted match or taper to the burner and push the control knob in and hold. It is necessary to hold the knob depressed after the burner has ignited or approximately 10-15 seconds, to allow the thermocouple probe to reach temperature, before releasing the knob. Should the flame go out when the knob is released, the procedure should be repeated holding the knob depressed for slightly longer.

- 4. For models fitted with spark ignition the procedure is similar except that the burner can be ignited by depressing the ignition button, which is located on the fascia. If the burner has not lit within 15 seconds the control knob should be released and the burner left for at least 1 minute before a further attempt to ignite the burner.
- 5. For simmering, turn the knob further anticlockwise to the low rate position.
- 6. To turn off: Turn the control know until the line on the control knob is aligned with the dot on the control panel. Always make sure the control knob is in the off position when you have finished using the hotplate burners.

A WARNING: The two in line hob burners on this appliance will support pans from 10cm to 20cm. The single hob burner will support pans from 10cm to 22cm.

A WARNING: Glass lids may shatter when heated. Turn off the hotplate and allow it to cool before closing the glass lid. Remove all spillage from the surface of the glass lid before opening.

A WARNING: The use of the electric

hotplate and gas hobs will generate heat. We recommend, to avoid excess build-up of heat around the cooker area, the window is left opened when cooking to allow for additional ventilation.

# 9.7 Using the hotplate

Ensure the electricity is switched on.

The hotplate control is numbered from 1 to 6. To turn it on, rotate the knob either clockwise or anti-clockwise to the required position.

Position 1 is the coolest setting. To turn the hotplate off, rotate the knob until the line or pointer on the knob lines up with the zero on the control panel.

The hotplate is a sealed construction and transfers heat through conduction. For maximum efficiency a correctly sized pan with a flat heavy gauge base should be used. Pan size should be the same or slightly larger (up to 1"/2.5cm oversize).

Before using your hotplate for the first time, we recommend that you prime and then season it.

To prime the Hotplate

Switch 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. A non toxic smoke may occur during this process. Allow it to cool, then season.

#### To season the Hotplate

First heat the hotplate for 30 seconds on a medium setting, then switch 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.

#### Using the grill

A WARNING: The grill must only be used with the door open. The heat deflector below the fascia should be pulled out prior to lighting the grill. Never adjust the heat deflector position without using hand protection i.e. oven gloves.

- 1. Ensure gas cylinder/supply is connected and turned on. In the event of a gas smell turn off at gas cylinder/mains and contact supplier.
- To light: Open door, push in the control knob and turn to full rate - see Fig 2. Hold alighted match or taper to the burner and push the control knob in and hold. The burner should ignite and the control knob should be held in for 10-15 seconds before release. If the burner goes out, repeat procedure holding control knob for slightly longer.
- 3. For models fitted with spark ignition the procedure is similar except that the burner can be ignited by depressing the ignition button, which is located on the fascia. Ignition must be carried out with the door open, and if the burner has not lit within 15 seconds the control knob should be released and the grill left for at least 1 minute before a further attempt to ignite the burner.
- 4. On first use of the grill, it should be heated for about 20 minutes to eliminate any residual factory lubricants that might impart unpleasant smells to the food being cooked. An non-toxic smoke may occur when using for the first time so open any windows and turn on mechanical ventilators to help remove the smoke.
- Although the grill does heat up quickly, it is recommended that a few minutes pre-heat be allowed.
- 6. Flame Failure Device (FFD): The grill burner is fitted with a flame sensing probe, which will automatically cut off the gas supply in the event of the flame going out. In the event of the burner flames accidentally being extinguished, turn off the burner control and do not attempt to re-ignite the burner for at least one minute.
- It is normal for the flames on this burner to develop yellow tips as it heats up, particularly on Butane.
- 8. A reversible grill pan trivet enables the correct grilling height to be achieved

Fast toasting - trivet in high position Grilling sausages - trivet in high position Grilling steak/bacon - trivet in high position Grilling chops, etc. - trivet in low position Slow grilling - trivet removed

To turn off: Turn the control knob until the line on the control knob is aligned with the dot on the control panel. Always make sure the control knob is in the off position when you have finished grilling.

A WARNING: The pan supplied with the appliance is multi functional, for use either whilst grilling or when using the oven. The handle design allows removal or insertion whilst the pan is in use.

#### Using the oven

- 1. Ensure gas cylinder/supply is connected and turned on. In the event of a gas smell turn off at gas cylinder/mains and contact supplier.
- To light: Open door, push in the control knob and turn to gas mark 9. Hold a lighted match or taper to the burner and push the control knob in and hold. The burner should ignite and the control knob should be held in for 10-15 seconds before release. If the burner goes out, repeat the process holding control knob for slightly longer.
- 3. For models fitted with spark ignition the procedure is similar except that the burner can be ignited by depressing the ignition button, which is located on the fascia. Ignition must be carried out with the door open, and if the burner has not lit within 15 seconds the control knob should be released and the oven left for at least one minute before a further attempt to ignite the burner.
- 4. Place the oven shelf in the required position and close the door. Set control knob to approximately gas mark 5 and heat the oven for about 30 minutes to eliminate any residual factory lubricants that might impart unpleasant smells to the meals being cooked. A non-toxic smoke may occur when using for the first time so open any windows and turn on mechanical ventilators to help remove the smoke.
- Although the oven does heat up quickly, it is recommended that a 10 minute pre-heat should be allowed. The oven should be up to full temperature in about 15-20 minutes.

- FITTED EQUIPEMNT
- 6. To turn off: Turn the control knob until the line on the control knob is aligned with the dot on the control panel.
- Shelf: The shelf has been designed to allow good circulation at the rear of the oven and are also fitted with a raised bar to prevent trays or dishes making contact with the back of the oven. To remove a shelf, pull forward until it stops, raise at front and remove.

#### **Oven temperature control**

The temperature in the oven is controlled by a thermostatic gas tap and is variable over the range 130°C to 240°C. Approximate temperatures for the settings on the control knob are shown in the table below. The temperatures indicated refer to the centre of the oven and at any particular setting the oven will be hotter at the top and cooler towards the base.

The variation between top and centre, and centre to bottom is approximately equivalent to one gas mark. Good use can be made of the temperature variation in 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. Care should be taken not to overload the oven, adequate spacing being used to allow free circulation for heat.

# 9.8 Cooking guidelines

See user instructions.

Do's and Don'ts

**Do** read the user instructions carefully before using the appliance for the first time.

**Do** allow the oven to heat before using for the first time, in order to expel any smells before the introduction of food.

**Do** clean the appliance regularly.

Do remove spills as soon as they occur.

**Do** always use oven gloves when removing food shelves and trays from the oven.

**Do** check that controls are in the off position.

**Don't** allow children near the cooker when in use. Turn pan handles away from the front so that they cannot be caught accidentally.

**Don't** allow fats or oils to build up in the oven tray or base.

**Don't** use abrasive cleaners or powders that will scratch the surfaces of the appliance.

**Don't** under any circumstances use the oven as a space heater.

**Don't** put heavy objects onto open grill and oven doors.

#### Leaks

If a smell of gas becomes apparent, the supply should be turned off at the cylinder IMMEDIATELY. Extinguish naked lights including cigarettes and pipes. Do not operate electrical switches. Open all doors and windows to disperse any gas escape. Butane/ Propane gas is heavier than air; any escaping gas will therefore collect at low level. The strong unpleasant smell of gas will enable the general area of the leak to be detected. Check that the gas is not escaping from an unlighted appliance. Never check for leaks with a naked flame, leak investigation should be carried out using a leak detector spray.

# 9.9 Thetford toilet

#### Cassette C260S

Your motorhome is fitted with a Thetford C260 toilet, which is plumbed directly into the motorhome water system, and does not have its own flush tank. Using the C260 model number, please read the user instructions for the toilet, which are available from the following location:

https://thetford-europe.com/gb/products/ toilets/cassette-toilets/c262-cwe-plastic-bowl



If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

# 9.10 Windows



To open, turn knobs anti-clockwise and open catches. Swivel the window pane open to the desired position and close knobs clockwise to lock in the open position.

To close, reverse the operation.

All opening windows have two catch positions. The first position is for ventilation the second seals the window from ventilation and rain.

#### **Operating instructions for blinds**



#### To operate the Blind

The blind is housed at the bottom of the cassette and flynet at the top. The metal bar can be pulled up or down as required. On some models there is a silver retaining clip that holds the two together. Rock the clip back to release. **Care instructions:** Clean the blind only with a damp sponge. Clean on a regular basis to avoid dirt particle build up as this can damage the blind material. Use only water or with mild suds or a vacuum cleaner.

In order to avoid material fatigue, do not leave the flynet closed for a long time.

#### To adjust the tension of the Horrex blind:

Trim panels or window surround will need to be removed before the blind can be re-tensioned.



In each corner piece there is an cord tensioner (see photo). By unscrewing the hexagon screw, the cord can move through the cord tensioner. When you pull the cord, the tension will get higher, when you let it move back the tension will get less.

#### **Roof lights**

When opening the roof lights, care must be taken to release the locking mechanism as the unit is raised.

Roof lights must be fully closed when driving. Roof lights provide essential fixed levels of ventilation.

#### Mini Heki Rooflight

To open depress button and push bar upwards. The rooflight has two open ventilation positions and a fully open position.

The blind and flynet operate independently of each other and are engaged by connecting to each other and sliding.

Heki care instructions: Clean the blind only with a damp sponge. Clean on a regular basis to avoid dust/ dirt particle build up as this can damage the blind material. Use only water or with mild suds or a vacuum cleaner. In order to avoid material fatigue, do not leave the flynet closed for a long time.

Midi Heki Rooflight



With operating bar: To open, depress button and push bar to required position. The rooflight has two open ventilation positions and a fully open position.

To close, reverse the operation and then check if locked into position.



**With crank:** To open, rotate the crank until a resistance is noticeable during the operation.

To close, reverse the operation and then check if locked into position.

## 9.11 Blind and Flyscreen



The blind and flyscreen operate Independently of each other and are engaged by connecting to each other and sliding.

#### Safety precautions:

- 1. Repairs should be carried out only by trained personnel.
- 2. Inform an approved dealer in case of defects and malfunctions.
- Before starting off, check the rooflight for damage in the acrylic dome (tension cracks) and the winding mechanism which could arise owing to, for example, branches and other natural causes.
- 4. Do not step in the acrylic dome.
- 5. Close the roof light before starting off (check whether it is locked).
- 6. Do not leave the vehicle with the rooflight open (danger of burglary or from rain).
- 7. Do not open in strong wind or rain.
- 8. Before opening, remove snow, ice, dirt, etc. from the acrylic dome.
- 9. Malfunctions are to be repaired by an approved dealer at once.
- 10. Do not use caustic detergents (danger of tension cracks in the acrylic dome).
- 11. Do not operate whilst the vehicle is moving

#### **Care instructions:**

- Please clean the acrylic panes with the Seitz Acrylic Cleaner.
- Stains and light scratches on the acrylic pane can be removed by using the Seitz
- Acrylic Polish and the Seitz special polishing cloth.
- Use talcum powder (4 times yearly) to care for the rubber seals
- Clean the blinds only with water and mild soap suds

• The guarantee becomes null and void if these instructions are not followed.

#### Sunroof blind



The sunroof blind is operated by pulling the leader rail down. It will then engage into the lower channel. Clean blind with a mild water soapy solution only.

#### 9.12 For those cabs with swivel seats



To turn the swivel, slide the BLACK lever rearwards and adjust to the required angle. Before driving off ensure the locking mechanism is fully secure.

## 9.13 Omnistep slide-out step Operation

Press the "step out" key to bring the step out until it reaches the end of its run or comes up against an obstacle. The step does not come out if the engine is running. Press the "step in" key to take the step back until it reaches the end of its run or comes up against an obstacle. The step goes back in automatically when the engine is running. In this situation the buzzer sounds until the step is fully closed.

#### Maintenance

Dirt and frost can prevent the step from operating properly. In this case the rails and moving parts should be cleaned or defrosted.

#### In case of electric break down

#### If the step does not retract by the motor

- Remove the front plate of the step. (Fig. 1)
- Remove the connection between the footboard and the arms (with screwdriver and wrench S10).
- Slide out the footboard.
- Reinstall the front plate.

#### **Current drawn**

- Working current: 5 A
- Blocking current, when fully extended or retracted: 14 A



Fig. 1 Front plate

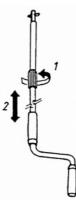
# 9.14 Thule 6300 Awning

#### General remarks:

- An awning is a sun and not a rain protection. The awning should be in closed position in case of storm, snowfall or heavy rainfall.
- The awning can not be used without putting out the support arms.
- The fabric may not be rolled up wet for a longer period.
- Clean the awning only by using water or OMNI CLEANER.

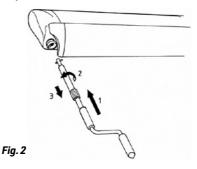
#### Users instructions:

1. Adjust the crank to the required height.

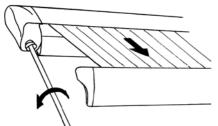


#### Fig. 1

2. Introduce the crank arm into the bayonet joint.

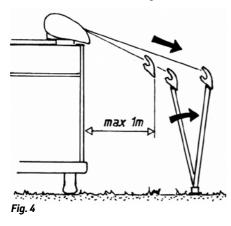


3. Unroll the awning while keeping the crank down. The awning will only open after a couple of turnings.

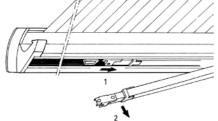


#### Fig. 3

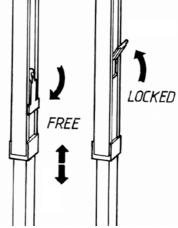
4. Unroll till 1 m max. Then put out the support arms before further unrolling



5. Slide the support arms out of the front profile



6. Adjust them to the required height. The fabric can be tightened by rolling up a little.



#### Fig. 6

**Note:** Never put out the support arms that high, that the fabric jams between the arms and the box.

7. Fasten the support arms.

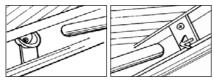






8. Install the tension rafter (for 3.75 m awning).



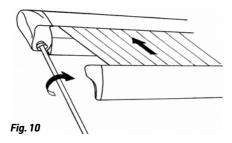


### Fig. 8

 When raining, lower one side of the awning in such a way that the water can run down the fabric. Prevent the fabric from flying up by a sudden wind blow by using the hold down kit (optional).



10. The front profile locks automatically when rolling up



# 9.15 Status 570 Digital antenna system

### Travelling

### Do not travel:

- with the antenna raised
- with the antenna set for vertical signals

To reduce the possibility of damage when travelling, point the antenna backwards.

The RED SPOT on the bottom of the mast indicates the front of the Antenna.

Your motorhome is fitted with a Status 570 TV aerial. Please read the user instructions for the TV aerial, which are available from the following location:

http://www.visionplus.co.uk/assets/pdfs/2019/ ANTENNAS.pdf



If you are unable to view the documents on line, please contact the supplier, your dealer or Swift for an electronic or paper copy.

# 9.16 Care of laminate tops, tables, furniture and doors

DO NOT use abrasives, chemically treated cloths or aggressive detergents as these may cause damage.

DO NOT place hot objects on laminated surfaces i.e. tops, tables. Any temperatures 70°C and over will cause permanent damage.

Clean worktop surfaces, furniture and door fascias with a soft, slightly damp cloth, dry off with a soft cloth.

### 9.17 Furniture doors

During normal travelling, vehicle vibration and flexing may cause some of the furniture doors to become out of alignment. For your convenience many hinges are adjustable.

### 9.18 Table storage

Forward Dining tables should be left in the fixed position in front of rear traveling seats when in transit.

Other additional tables have their specific stored positions either inside wardrobes or on the side of wardrobes. Ensure all are securely clipped ino place whislt in transit.

To avoid damage, care must be taken when removing tables from thier stored positions.

### 9.19 Shower

When using the shower, always ensure that the shower door is fully closed thus avoiding water spray on unprotected areas.

### **Trigger shower heads**

- Squeeze trigger to release water. Release trigger to top. Twist trigger up to gain permanent water flow, lower to stop.
- Care should be taken as water may become hot temporarily when switched on until it mixes and regulates.
- Small children should be supervised at all times when using the shower.
- We recommend unfastening the trigger shower head before travelling and storing safely to prevent it becoming detached whilst travelling.

### 9.20 Colour reference

The colour code for touch ups or resprays for all Fiat cab components Lanzarote Grey 385. Some dealer special cabs may have their own colour specified from the Fiat standard range. For Fiat cabs other than specified above contact your dealer to obtain a colour match.

Please be aware that colours can fade over time, and therefore, if the vehicle is more than a few years old, it is suggested a colour match be obtained.

### 9.21 Sliding Door Flyscreen (if fitted) Operation

The sliding door flyscreen (if fitted) runs on tracks mounted to the floor and the Control panel and moves from left to right. It is tensioned with cords that are fixed at floor level near to the passenger seat.

When the vehicle sliding door is open pull the blind from the central part of the vertical handle avoiding twisting to close the blind.

Ensure flynet is open before closing the vehicle sliding door.

### Care

Clean only with a damp sponge ensuring dirt build that would affect the running tracks is removed. Use only clean water with mild suds or a vacuum cleaner. In order to avoid material fatigue, do not leave the flyscreen closed for a long period. Take care with high winds when the flynet is closed.



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### **10.1 Winterisation**

The Swift Group recommends the following winterisation points for customers:

### Servicing

Arrange (in advance) the yearly service and habitation check, if the motorhome's next service is due while the vehicle is stored.

### Plumbing

Water expands as it is frozen, and so trapped water, when it expands, can damage the tap/ valve /pump or pipe it is trapped within. For this reason, (in addition to reasons of hygiene), the water system should be fully drained when not in use, particularly in colder weather.

- Use the switches located in the upper locker in the vehicle to open both the fresh tank and water waste tank drain valves. Ensure that waste water drains into a designated waste water collection area, either directly or by collecting the water in a container for later disposal.
- Open the drain valve (yellow handle) next to water heater, and leave open. See section 7.2.
- Fully open all the taps and shower mixer, move mixer position to the middle, and leave all taps in the open position.
- Unscrew the shower head and shower hose, shake out remaining water and allow water to drain. It is advised to leave the shower head and hose disconnected.
- Run pump for a short time, until all water is expelled.
- After a short while the majority of water will have left the plumbing system. At this point however it is still important to ensure that the pump itself is 'dry'. During this part of the winterisation, a suitable absorbent cloth or container should be used to catch a small amount of spilled water that will result.

Disconnect the pipe work from the pump by pulling the blue quick release tabs, at either side of the pump, at right angles to the pipe work, then pulling the pipe and connectors from the pump. See Fig.1 Run the pump for a short while to expel any remaining water within the pump.

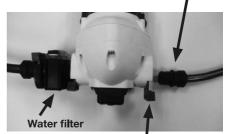
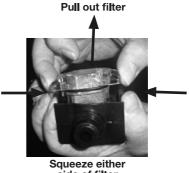


Fig.1

Pull quick release tabs

Pull pipe out

• This is a good time to de-assemble and clean the pump filter (if fitted). Squeeze either side of the filter housing to release the retaining tabs and pull the filter cassette out of the housing. See Fig 2



side of filter housing

### Fig.2

• Open the waste tank drain valve, collecting the waste water in a suitable container, and leave open. Dispose of the waste water in a designated waste water area, clean waste pipes and tanks using a sterilising fluid. See "Waste Tank" section under services.

### Electrical

- If vehicle is being stored while connected to 230v Mains Hook-up:
- Ensure that the leisure battery is connected and the 40A local fuse(s) is connected.
- The isolator switch on PSU should be in the 'ON' position, however. the control panel should be switched 'OFF'.
- If Alde system is installed, there is a frost protection setting, which can be used. See Alde user instruction manual.
- Vehicles can be left in this condition for extended periods, with the charger
- operating to maintain the battery. However, periodic maintenance and inspection is recommended, this should include the battery condition.

If vehicle is being stored not connected to 230v Mains Hook-up:

- Charge the leisure battery for 24 hours prior to placing motorhome in storage.
- Ensure the isolation button on PSU is in the 'OFF' position.
- The battery should not be adversely affected by winter temperatures but the level of charge should be maintained to maximise the life span of the battery. This can be achieved using an automotive type battery charger as and when required.
- Disconnect the vehicle battery negative terminal. Check the charge of the battery every three months. (See Vehicle Inactivity section in the Fiat handbook). Alternatively put the ignition into the 'Isolation Mode'

### Gas system

- Ensure the gas supply is isolated at the gas bottle, and ensure that the gas manifold taps are off.
- Check the age and condition of the high pressure gas hose and regulator, and replace if required.

### Appliances

Check the battery expiry date on the smoke alarm and CO detector and replace or remove as required.

- Ensure the fridge is turned off.
- Clean the inside of the fridge.
- Prop the fridge door open, and if possible, the internal freezer compartment door for ventilation.
- Fit fridge vent winter covers (if available).
- Ensure all hob / oven / microwave surfaces are clean.
- If the motorhome is going to be left connected to 230v supply while not in use, ensure the microwave is unplugged.
- Clean the toilet and empty the cassette and lubricate the seals with an acid free lubricant such as Thetford High Grade Seal Lubricant. See Thetford toilet Users manual

### Exterior (Body / Chassis)

- Ensure that all windows, skylights and access doors are closed and secured.
- Ensure all fixed ventilation points (high and low) are clear from debris and obstructions.
- Ensure the vehicle is not parked where falling debris (i.e. leaves, tree sap) could cause damage.
- Avoid leaving the vehicle parked in soft ground, long grass or a potential area where standing water may form.
- Lubricate relevant points on the chassis.

### Wheels and Tyres

- Do not store in one position with partially deflated tyres. The tyre walls will suffer and do present a real danger of blow outs, especially when travelling at faster speeds than are allowed in the UK. The wheels should be turned every couple of weeks. If you are removing the wheels, follow the jacking procedure for changing a wheel. Check your tyres regularly for signs of age and deterioration, particularly wear, cracking and blistering. If in doubt consult a reputable tyre fitter.
- A purpose made cover maybe used, but please ensure the cover is a good fit, breathable and securely fitted.

**Note:** A poorly fitted cover can rub and damage the bodywork. Non-breathable covers will encourage mould to grow.

### Interior (Furniture / furnishings)

- Open all lockers and internal doors, to ensure good circulation.
- Remove cushions and store them in a dry location or ensure all cushions are placed in a well ventilated area.
- Close all blinds and curtains. Customers are reminded to check the tension on blinds after storage if left closed for long periods.
- Thoroughly ventilate the motorhome by opening doors or windows periodically.
- Placing water absorbent crystals in the van during the winter months, will help reduce moisture levels and mould growth.
- We do not recommend leaving portable heaters in the van unattended.

### **Recomissioning the Water System**

Re-connect the water pump by positioning the pipe connectors into the pump housing and pushing the blue tabs into position. It is advisable, after a period on non-use, to flush the water system with a sterilising fluid such as Milton 2. Fill the fresh water tank with water and sterilising fluid (Refer to sterilising fluid instructions for the amount to use). Turn the pump on and open all the taps, ensuring that the water drains away safely to the waste tank.

When the waste tank is full empty the fluid into a designated waste water area. Re-fill the tank with fresh water and flush through the system as described above; repeat this until all traces of the sterilising fluid have been flushed out. (See "priming the Water System page 45" and "Waste Tank" sections on page 46)

Prepare the toilet system by adding water and Thetford fluid to the toilet waste tank. See Thetford instructions page 109.

### Appliances

Before starting motor caravanning after storage, check all gas appliances and electrical points.

**Note:** Preferably not less than once a year, the electrical installation should be inspected and tested by a qualified electrician.

After storage it is advisable to air the Motorhome and clean throughout, especially cooking appliances and the refrigerator.

Replace the bedding if they were removed for storage.

AwarNING: Always follow the manufacturers recommended procedures after use of fitted equipment in the Motorhome, before storing for any length of time.

### 10.2 General care

### For care of the vehicle battery please refer to the Fiat handbook in section 'Trouble Shooting'.

All moving parts should be checked for free operation.

Clean all cooking appliances and refrigerator. Lubrication should be carried out at the points illustrated in the general notes on chassis maintenance.

Charge up the on-board battery every 2 months.

Leave the refrigerator door open. Leave furniture doors and lockers open to allow air to circulate fully.

### **Modifications - DIY work**

Owners need to be aware that carrying out DIY modifications to your motorhome may in certain instances, invalidate the warranty cover and could also affect the safety and structure of the vehicle.

WARNING: WD40 is not recommended for external or internal use

WD40 attacks paintwork and sealants. If a lubricant is required for Interior hinges, Sliding door tracks, Bottle box hinges, Exterior door hinges, Plastic tracking etc. We recommend "Ambersil 40+" this is readily available from most DIY/Automotive retailers including Halford's.

Before carrying out any DIY work within the warranty period, please check with your nearest dealer or contact Supercare customer services on 01482 875740 for advice.

#### Paintwork

Proper care involves washing the motorhome regularly with a mild detergent rinsing with cold water and leathering off. A good quality, similar coloured car wax may also be applied which will make washing even easier.

Please note: Do not use abrasive-eleaning agents, on the exterior of your motorhome. Stubborn stains may be removed using a soft cloth and mild detergent.

WARNING: Overzealous use of detergents may loosen the decals and / or badges.

### Acrylic Windows

The windows in your motorhome are fully double glazed and, with care, will remain sparkling and scratch free.

### Acrylic (Plastic) Window Condensation

Unlike domestic double glazed windows, your caravan / Motorhomes window are not vacuum sealed instead the double panes of acrylic plastic with are fitted with a breathable plug on the inner pane. It is possible, in weather where extremes in temperatures occur between night and day, that customer will notice condensation between the panes. The same phenomenon may also occur when washing your vehicle on a hot day.

The condensation should clear itself when the ambient conditions return to normal and the air between the panes dries. However, if this is taking a longer time than required, the breathable plug (normally located in the top corner of the window) can be removed, with a pin or sharp object, and replaced when the panes are dry. Care should be taken when doing this.

### Acrylic (Plastic) Window Cleaning

The material used to produce most caravan and Motorhome windows is acrylic plastic. While the acrylic used is very durable, it is able to be scratched with relative ease and therefore, care must be taken when clearing your vehicle not to use aggressive clearing products. Equally, care should be taken when using a drying cloth that it is clean and free from grit.

Keeping Your Acrylic Windows Sparkling For small scratches, it is possible to use a liquid metal polish or a proprietary acrylic polish of a suitable grade dependant on the severity of the scratches.

### **Cleaning Windows**

Wash down as you would your car. Do not use a sponge on dirty windows. When all the dirt has been removed, dry with a leather or similar type of cloth. The catches and stays do not require lubricating.

### **Removing Tar**

Use a proprietary tar remover on your double glazed windows; (available from most leading car accessory or do-it-yourself shops). Do not use petrol or other chemicals.

**Note:** The use of a pressure washer on the exterior of your motorhome is not recommended as this may damage the transfers.

### 10.3 Condensation

### What is condensation

Condensation is the process of change of water from its gaseous form (water vapour) into liquid water when it comes into contact with a surface that is cold. Condensation generally occurs when warm air cools quickly and looses its capacity to hold water vapour, and as a result water vapour condenses to form droplets.

### Why condensation occurs

Condensation occurs when warm moist air meets a cold surface. The level of condensation will depend upon humidity levels, how moist the air is and how cold the surfaces are they come into contact with.

If the temperature falls below the dew point temperature, it is quite normal for condensation to occur on any material within the motorhome that is cold, for example the external walls, plastic windows etc.

### When condensation occurs

Condensation occurs usually in winter months, because ambient temperatures are colder (leading to cold surfaces) and windows and roof vents are opened less so the moist air cannot escape.

### Where condensation occurs

Condensation will occur where warm moist air is put into the atmosphere in areas such as in bathrooms (during showering) and in kitchen areas (during cooking).

In the enclosed space of a motorhome, the moist air from the kitchen or bathroom areas will inevitably transfer to the rest of the vehicle, which in turn condenses on cold surfaces leading to visible water droplets. This issue is compounded by warm moist air being generated from normal breathing.

Condensation will also form in cold areas where air movement and ventilation is restricted (e.g. cupuboards, wardrobes, under beds, etc.)

### What is important

It is important to provide ventilation and air flow, so that warm moist air can escape, or

be externally cooled, and to use the heating reasonably by not making the motorhome too warm such that people perspire, as this will only serve to generate more moist air and therefore more condensation.

However, in particularly cold periods, where the external ambient temperatures are low, condensation may still form on external walls as the insulation levels may well not be thermally able to cope with the difference between the internal and external temperatures.

### How can you prevent condensation

# Provide ventilation so that moist air can escape.

- Good ventilation of the vehicle when cooking or when drying clothes, footwear or pets is essential. Observe when windows begin to show signs of misting and increase ventilation by opening a window slightly by 1 cm or opening a roof vent, as these will help, but keep the habitation door closed as much as possible to retain heat.
- If drying damp clothes or towels, open a window to ventilate the area and allow the moist air to escape.
- c. Try to make sure that the caravan is partially heated. It can take a long time for a cold caravan to warm up, so it is better to have a small amount of heat for a long period than a lot of heat for a short time.
- d. After showering, keep the bathroom window or skylights open, and shut the bathroom door long enough to dry off the room.
- e. Fixed ventilation is provided in the vehicle, specifically through high level vents within the skylights and low level vents through the floor, it is important not to block these.
- f. Electrical heating is dryer than gas heating, and introduces less moisture into the atmosphere. Do not use additional portable paraffin or flue-less gas heaters at all.
- g. If left unoccupied and unheated for long periods of time the temperatures can soak down thermally into the entire product and become very cold. Whenever possible, put the heating on at a low level before use by pre heating in cold weather.

 Even with reasonable ventilation it is likely if the temperature is less than 5oC and the humidity is high that condensation will occur. Ideally the temperature should be kept about 20oC when occupied.

### **Mould Growth**

Any sign of mould growth is an indication of the presence of moisture and if caused by condensation gives warning that heating or ventilation may require improving.

### **New vehicles**

New products take a long time before they are fully 'dried out' because of the moisture in the materials used during manufacture. While this is happening extra heat and ventilation will be required.

### **10.4 Changing Exterior Bulbs** ALWAYS REPLACE LIKE FOR LIKE

For individual replacement bulb specification, refer to your base vehicle Handbook.

### **REAR ROAD LIGHT CLUSTERS**

Bulb access is from the rear of the cluster. Please see the Fiat handbook for specific details of the clusters and individual lights contained within them.

The rear road light clusters are secured to the rear of the motorhome via nuts located on the rear of the cluster. To access these fixing nuts, an internal panel must be removed.

Two angled panels can be found at the rear of the motorhome, close to the rear door hinges. In the upper sections of these panels, a removable section exists (the removable panel may also house remote thermostats, light switches etc).

To remove the panel, first locate single screw cover caps at the top of the panel, using a flat bladed screwdriver or similar. Removing the screws will then allow the panel to be pulled up away from the corner of the vehicle, exposing a void with access to the rear of the lamp clusters.

Reverse the procedure and push fit the screw cover cap back into place once complete.

### 10.5 Interior

Follow these guidelines to ensure your investment is receiving the very best attention.

### 10.6 Side Walls, Roof Lining

A simple wipe over with a damp cloth and a very mild detergent is all that is needed.

### **10.7 Soft Furnishings**

Should be vacuumed occasionally to remove grit and sand and help to keep its smart appearance and ensure long life. The upholstery can be cleaned with a mild, reputable upholstery cleaner. It is recommended that the curtains and pelmets are specialist cleaned only. The foam used in cushions are manufactured to meet fire regulations. It requires time to return to its normal position after prolonged use.

Clean and dust the upholstery and if possible remove before placing the Motorhome into winter storage. Alternatively, stand the cushions on their edges to allow circulation of air. This will reduce the possibility of dampness from condensation. Keep curtains or blinds closed, to minimise fading of furniture.

If the blinds and/or flyscreens remain down for a prolonged period of time, re-tensioning of the springs will be necessary before re-use.

### 10.8 Leather care

- Leather furniture, if fitted in your vehicle, requires little maintenance. Regular care of leather does ensure its lasting quality and some general rules for regular cleaning and maintenance are:
- Clean the leather with a soft damp cloth taking care not to soak the leather
- For a more thorough clean, use the Bridge of Weir Leather cleaning and protection kit available directly from the distribution centre
- Do not use saddle soap, wax polishes or spray polishes
- Do not use any product or any method of cleaning not recommended by the manufacturer
- Avoid letting buckles, studs and zips come into any direct contact with the furniture
- Avoid drying out the leather by taking extra care where there is heating or blown air outlets

### 10.9 Work Surfaces

You should not stand very hot items on any of the work surfaces.

### 10.10 Cupboard Catches

It is advisable to lightly oil all cupboard catches, sliding bolts and hinges from time to time.

### 10.11 Bathroom, Shower Room and Kitchen Equipment

All the Thermoplastic parts in these areas have easy clean surfaces. To ensure long life and prevent damage you must not use any cleaning materials at all and ensure water temperatures do not exceed 70°C, (putting cold water in first is suggested). After every use, it is essential that you rinse with clean water only and wipe with a soft damp cloth.

Failure to follow these simple instructions may result in premature failure or cracking which will not be covered by any guarantees (including extended warranties).

### 10.12 Furniture

A simple wipe over with a damp cloth should be all that is required. Polishing with a proprietary brand of wax polish enhances and maintains furniture in showroom condition.

It must be remembered that because the frames of some doors are made of ash, which is a natural product, they can be affected by temperature and humidity and may bow under certain conditions. As conditions change they should revert to their original positions.

### 10.13 Kitchen Drainer and Cutting Board

You should not stand hot items on to these items. To wash use only warm soapy water, do not use chemicals and bleach.

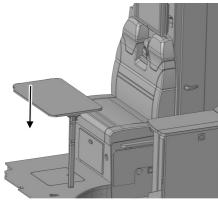
### 10.14 Changing interior light fittings

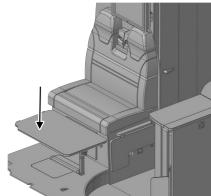
The light fittings in your motorhome are LED, with no user serviceable parts. In the unlikely event of failure of one of these lamps, the entire lamp will need to be replaced - several types of LED lights are intended for semi-permanent installations using self adhesive mounts etc., and dealer assistance may be required should damage or other need for replacement occur.

# 10.15 Select 184 Double bed make up instructions (with safety seat)

### Step 1

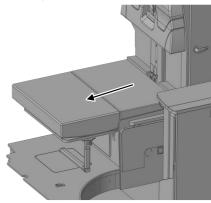
Move the table into the low position





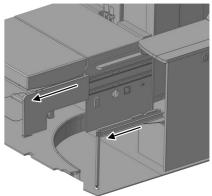
### Step 2

Put the seat base cushion upside down on the table. Lift the kitchen work top and remove the infills. Place the cushion infill on the seat base. (this cushion does not have rails on the underside).



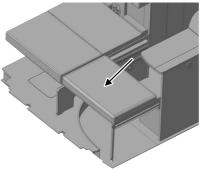
### Step 3

Pull the side of the seat base fully out. So it sits on the retaining foot on the floor. Then slide out the support leg from the base of the cushion storage.



### Step 4

Select the cushion make up piece with the tabs on the metal rails. Position the cushion on the slide out leg ensuring that metal rail sits between the nylon spacers on the slide out leg. The opposite side will sit on the Forward facing seat pullout.

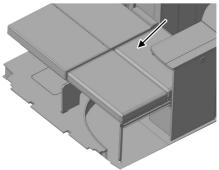


### 10.16 Caring for the environment

After many years of service you may decide that your motorhome has become beyond economic repair and should be disposed of. Please ensure that you comply with the end of life vehicle legislation and take it to an authorised treatment facility where it will be properly dealt with to minimise any negative environmental impact. The transaction will be logged at the DVLA, identifying that you are no longer the owner of the vehicle.

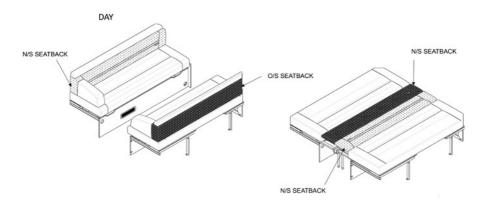
### Step 5

The final make up piece rests on the side of the forward seat and a metal bracket in the kitchen storage compartment.

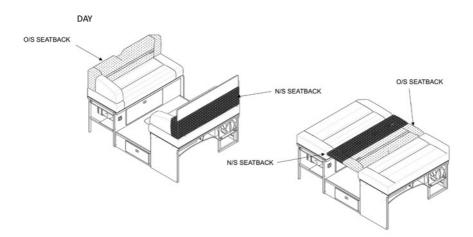


### 10.17 Bed makeups

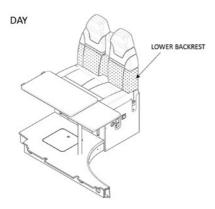
### Bed make up in Select 122 rear bed

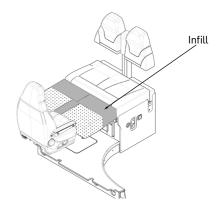


### Bed make up in Select 144 rear bed

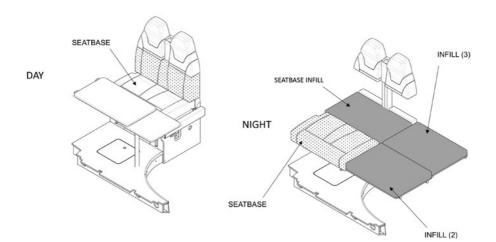


### Select 144 and 164 front bed

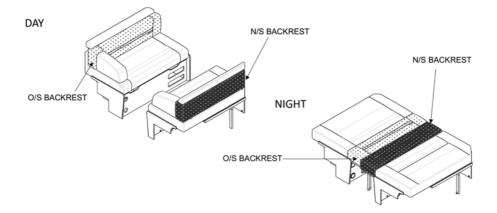




### Bed make up in Select 184 front bed



### Select 184 rear bed



# TECHNICAL INFORMATION

### 11. Technical information

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### **11.1 Specification**

Model	Select 122		Select 144		Select 164		
Roof Profile	Panel Van		Panel Van		Panel Van		
Engine Power	120/140 MJT	140 MJT Auto	120/140 MJT	140 MJT Auto	120 / 140 MJT	140 MJT Auto	
Engine Capacity	2.2L		2.2L	2.2L		2.2L	
Chassis	Ducato 35L		Ducato 35	Ducato 35L		L	
Wheelbase	4.04m/13'3	"	4.04m/13	4.04m/13'3"		4.04m/13'3"	
Designated Passenger Seats excluding Driver	1		3		3		
Berths (sleeping positions)	2		3		3		
Overall Length (no ladder)	6.00m/19'8	"	6.00m/19	3″	6.36m/20'	11″	
Overall Width	2.05m/6'9"		2.05m/6'9'	ı	2.05m/6'9		
Overall Width (mirrors folded)	2.26m/7'5"		2.26m/7'5'	ı	2.26m/7'5"		
Overall Width (mirrors extended)	2.51m/8'3"		2.51m/8'3'	ı	2.51m/8'3		
Overall Height	2.72m/8'11		2.72m/8'1	1″	2.72m/8'1	2.72m/8'11"	
Maximum Technical Permissible Laden Mass (A)	3500kg		3500kg		3500kg		
Mass in Running Order (B)	2912kg	2945kg	2970kg	3003kg	2998kg	3031kg	
Maximum User Payload (A-B)	588kg	555kg	530kg	497kg	502kg	469kg	
Unladen Weight	2769kg	2802kg	2827kg	2860kg	2855kg	2888kg	
Essential Habitation Equipment	0kg		Okg		Okg		
Thermal Insulation Grade	Three	Three Three Three		Three			
Bed Sizes							
Front Double (Travel seat option only)							
Front Offside Single (Travel seat option only)			170cm x 90 /5'7" x 2'11		170cm x 90cm/54cm /5'7" x 2'11"/1'9"		
Rear Double	186cm x 18 / 6'1" x 6'2"	Bcm	183cm x 135cm / 6'0" x 4'5"		185cm x 130cm / 6'1" x 4'3"		
Rear Nearside Single	188cm x 65 / 6'2" x 2'2"	cm					
Rear Offside Single	188cm x 65cm / 6'2" x 2'2"						

#### Notes:

### 1. The Maximum User Payload includes:

Conventional load (this is the allowance for passengers)

Essential habitation equipment (items and fluids required for safe and proper functioning of habitation equipment)

Optional equipment (items available from the manufacturer over and above the standard specification)

Personal effects (those items not covered by the above)

- 2. The Mass in Running Order is the mass of the unladen vehicle including a 75kg allowance for the driver plus engine coolants and 90% of the fuel tank and 1 x 6kg Calor Lite LPG cylinder.
- 3. The Mass in Running Order is calculated with the fresh water tank and water heater empty. If you travel with water in the fresh water tank or water heater then the payload will reduce accordingly.

Model	Select 184	
Roof Profile	Panel Van	
Engine Power	120 / 140 MJT	140 MJT Auto
Engine Capacity	2.2L	
Chassis	Ducato 35L	
Wheel base	4.04m/13'3"	
Designated Passenger Seats excluding Driver	3	
Berths (sleeping positions)	4	
Overall Length (no ladder)	6.36m/20'11"	
Overall Width	2.05m/6'9"	
Overall Width (mirrors folded)	2.26m/7'5"	
Overall Width (mirrors extended)	2.51m/8'3"	
Overall Height	2.72m/8'11"	
Maximum Technical Permissible Laden Mass (A)	3500kg	
Mass in Running Order (B)	3033kg	3066kg
Maximum User Payload (A-B)	467kg	434kg
Unladen Weight	2890kg	2923kg
Essential Habitation Equipment	Okg	
Thermal Insulation Grade	Three	
Bed Sizes		
Front Double (Travel seat option only)	176cm x 122c / 5'9" x 4'0"	m
Front Offside Single (Travel seat option only)	170cm x 90cm / 5'7" x 2'11"/1	
Rear Double	186cm x 120c / 6'1" x 3'11"	m
Rear Nearside Single		
Rear Offside Single		

- 3. PLEASE TAKE CARE TO ENSURE THAT YOU HAVE ALLOWED FOR THE MASSES OF ALL ITEMS YOU INTEND TO CARRY IN THE MOTOR CARAVAN, e.g. passengers, optional equipment, essential habitation equipment and personal effects, such as clothing, food, pets, bicycles, sailboards, sports equipment etc.
- 4. **WARNING:** UNDER NO CIRCUMSTANCES SHOULD THE MAXIMUM TECHNICAL PERMISSIBLE LADEN MASS OF THIS MOTOR CARAVAN BE EXCEEDED.

Options	Mass Increase
140 MJT Automatic gear box	33kg
Drivers Pack	3kg
Lux Pack	5kg

### Notes for options:

The payload that can be carried will reduce by the mass of the options selected.

### **11.2 Water Tank Capacities**

	Fresh Water Tank	Waste Water Tank	Water Heater
164 & 184	59 litre	41 litre	10 litre
122, 144	93 litre	58 litre	10 litre

### 11.3 LPG Tank Capacity

	Capacity
All models	2 x 7kg

**Note:** For technical data on the base vehicle please refer to the manufacturer's handbook.

### 11.4 Van Conversion Towing Capabilities

Model	MTPLM	Permissible Front Axle Load	Permissible Rear Axle Load	Recommended Maximum Trailer Weight	Gross Train Weight
Select 122	3500kg	1850 kg Manual / 1960 kg Auto	2000kg	2500kg	6000kg
Select 144	3500kg	1850 kg Manual / 1960 kg Auto	2000kg	2500kg	6000kg
Select 164	3500kg	1850 kg Manual / 1960 kg Auto	2000kg	2500kg	6000kg
Select 184	3500kg	1850 kg Manual / 1960 kg Auto	2000kg	2500kg	6000kg

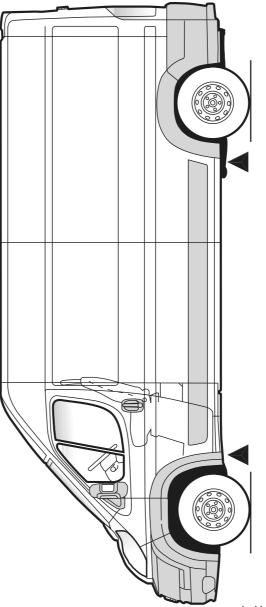
Please note that the additional weight of the tow bar and trailer nose weight increases the rear axle loading of the motor home so care should be taken that the rear axle load is not exceeded when towing.

To ensure adequate road holding, the load on the front axle, under all conditions, must not be less than 40% or more than 70% of the total weight.

Care must be taken when distributing loads. The loadings and weights above are maximums and must not be exceeded under any circumstances.

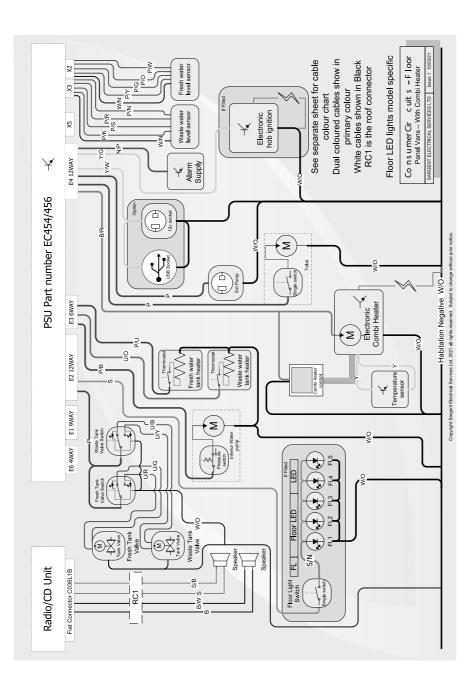
CAUTION: When fitting a towbar, it must meet certain minimum requirements as specified by Type Approval Regulations. The bar will have marked on it the approval standard (94/20/EC or 55R ECE) and the maximum download, or noseweight, that it can accept. It must fit the manufacturer's approved mounting points and must not obscure the towing vehicle's number plate.

### **11.5 Jacking Points**

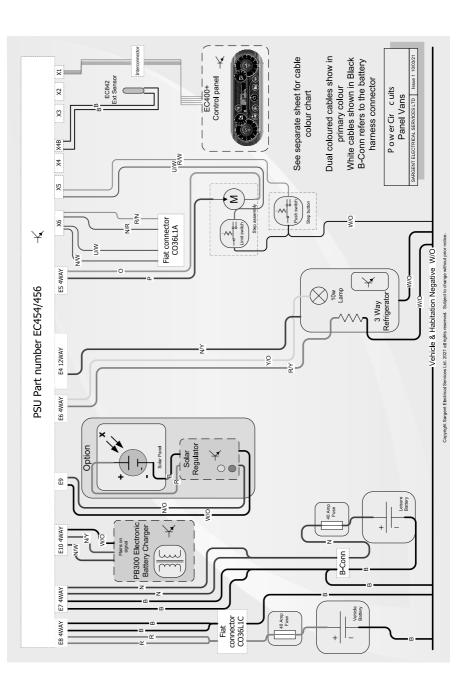


# ECHNICAL INFORMATION

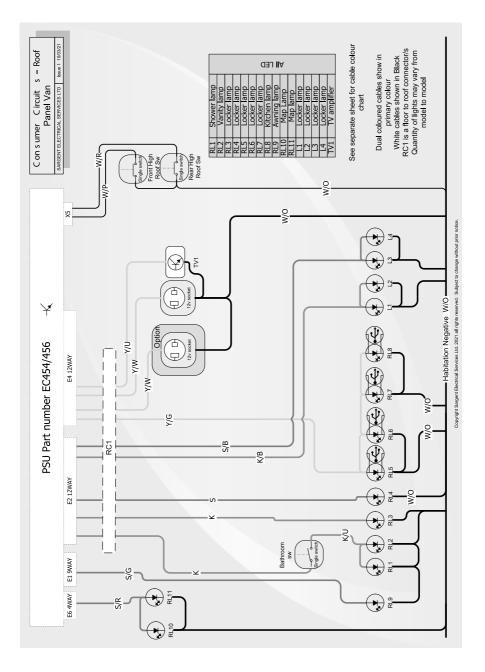
### 11.6 Consumer circuits floor with combi heater



# TECHNICAL INFORMATION



### 11.8 Consumer circuits roof

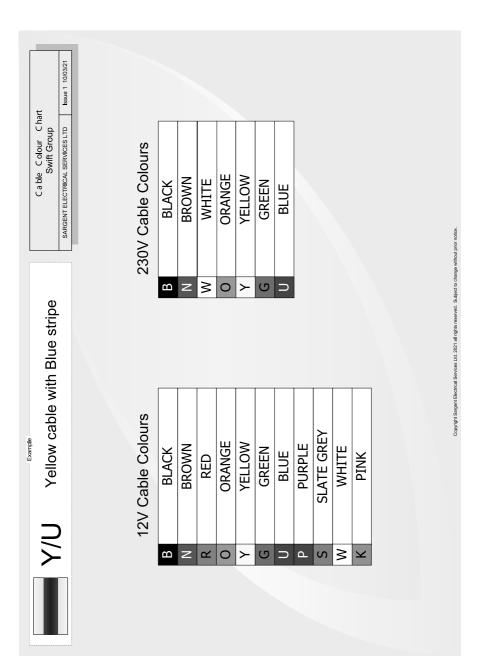


# **TECHNICAL INFORMATION**

### Issue 1 10/03/21 Quantities of sockets may vary See separate sheet for cable White cables shown in Grey Panel Vans – With Combi Heating from model to model colour chart SARGENT ELECTRICAL SERVICES LTD 230v socket 230 V Circuits 3 core 1.5mm White outer 230v socket Combi Heater Element $\leq$ Copyright Sargent Electrical Services Ltd. 2021 all rights reserved. Subject to change without prior notice. 3 core 1.5mm White outer 230v socke Combi heater Connector 2 (skts) Connector 3 3 core 1.5mm Yellow outer Vehicle chassis Earth **BP300 Electronic** ¥ Battery Charger 3 core 1.5mm Black outer hu m 10w Lamp PSU part number C454/456 ¥ Connector 4 3 Way Refrigerator 3 core 1.5mm $\sim$ E1 Earth bond Input connector Connector 1 (pins) 3 core 2.5mm Orange outer IEC309 Input Ĥ Gas pipe • Single core 4.0mm Green/Yellow £

### 11.9 230v circuits with combi heater

### 11.10 Cable colour chart



## 12. Useful information

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### 12.1 Owners club

The Owners Club is a completely independent organisation run for the benefit of the motorhome owners. They have numerous rallies during the year in various parts of the country. Apart from the friendliness and companionship the Club generates it is also actively engaged in charity work for those less fortunate than ourselves. The address of the Secretary of the Owners Club can be obtained from the Swift Group website.

# 12.2 Spares and after sales customer service

A catalogue of spare parts are available through our Swift Group Dealer Network, from door catches through to spare wheels. Please note, all parts enquiries must be directed through your dealer, as the Swift Group does not operate a direct retail service.

We endeavour to supply parts for vehicles up to 8 years old. If the original part is no longer available your dealer should be able to source a suitable alternative.

Note: Please remember to quote chassis VIN (Vehicle Identification Number) when ordering any items from your dealer. This can be found at the bottom of the front windscreen, on the plate on the front cross member within the engine compartment and on the Swift manufacturers plate situated on the bulkhead directly behind the front driver/ passenger seat.

### 12.3 Repair facilities

Should you be unfortunate to encounter damage to your vehicle, we have a number of approved workshops and dealerships with workshop facilities to undertake such repairs.

Details of which can be found via our website: www.swiftgroup.co.uk/find-a-dealer The enjoyment of motorhoming can be greatly enhanced by membership of one or more of the various motorhome/caravanning, motoring and holiday clubs. Here are some useful addresses:

### 12.4 Caravan Clubs

The Caravan Club, East Grinstead House, East Grinstead West Sussex, RH19 IUA Tel: 01342 326944 www.caravanclub.co.uk

### The Camping and Caravanning Club,

Greenfields House, Westwood Way, Coventry, West Midlands. Tel: 0845 130 7631 or 024 7647 5448 www.campingandcaravanningclub.co.uk

### 12.5 Motoring Associations

### Automobile Association (AA)

Fanum House, Basingstoke, Hants. RG1 2EA Tel: 08705 448866 www.theaa.co.uk e-mail: customer.services@theaa.com

### **RAC Motoring Services**

RAC Motoring Services 8 Surrey St Norwich Norfolk NR1 3NG Tel: 01922 437000 www.rac.co.uk

### The Society of Motor Manufacturers and Traders Limited (SMMT)

Forbes House, Halkin Street, London SW1X 7DS Tel: 020 7235 7000 www.smmt.co.uk Green Flag Tel: 0845 246 1557 www.greenflag.com

### **RBS** Insurance

Churchill Court Westmoreland Road Bromley Kent BR1 1DP Tel: 0800 158 2493

# 12.6 Trade Association

Catherine House, Victoria Road, Aldershot, Hampshire, GU11 1SS Tel: 01252 318251 www.thencc.org.uk www.motorhomeinfo.co.uk e-mail: info@ thencc.org.uk

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### 12.8 Change of ownership

### Notification of change of ownership

As the new second hand owner, please notify the Swift Group of the change of ownership by completing the following page and sending it to:

**Customer Services** 

Swift Group Limited, Dunswell Road, Cottingham, East Yorkshire HU16 4JX. **Note:** Warranties are only transferable providing the terms and conditions of the warranty have been met by the previous owner(s). Please see warranty information at the beginning of this handbook for full details. The 'Extended Body shell warranty' is a nontransferable warranty

Details of motorhome:	Model:	
	Chassis No:	
New owner:	Name:	
	Address:	
	Email:	
	Telephone:	
	Mobile:	
	Date of purchase:	
Previous Name: owner:	Name:	
owner.	Address:	
	Email:	
	Telephone:	
	Mobile:	
	Date of purchase:	







## **SWIFT GROUP**

Dunswell Road Cottingham East Yorkshire HU16 4JX **Tel:** 01482 875740 **Fax:** 01482 840082

### **Customer Experience Team**

enquiries@swiftleisure.co.uk

### FIND OUT MORE AT SWIFTGROUP.CO.UK

