benimar

USER'S MANUAL GB

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I. INTRODUCTION

Dear Customer:

You are the brand new owner of this benimar

We thank you for your trust in our brand and congratulate you on your choice.

We suggest that you get to know your new motorhome by reading this manual and hope that you are fully satisfied with it.

This user's manual gives you all the information you need about the equipment in the living compartment, precautions to be taken and instructions to be followed in using it. For any information about the basic chassis, please refer to the instructions and recommendations given by the manufacturer.

Follow our advice and leave without any worries.

In addition, the dealer who sold you the vehicle will be happy to give you advice based on thorough experience, in particular as concerns safety equipment or required equipment in your country and/or in the countries you want to visit (safety vests, triangle(s), etc).

Do not hesitate to contact him if you have any query.

N.B.: Please, keep a copy of the approval documents and all the invoices related to your camper (sales invoice, maintenance invoices, etc.). They will be requested in case of a warranty claim.

Good reading and enjoy your camper!

II. PREPARATION BEFORE LEAVING

A motorhome has two separate parts; firstly, the basic vehicle or chassis that provides the transport, and secondly the living compartment in which you will spend your holidays.

You should make a few standard verifications on both of these components before leaving.

CHASSIS PREPARATION

You should make the same verifications on the chassis before you leave as you would normally do for your car. This includes routine verifications, namely checks on the levels of your engine oil, cooling circuit water, windscreen washer fluid, and that all parking lights and indicators are working, without forgetting to adjust the two outside rear view mirrors that are very useful considering the width of the vehicle.

It is very important to check the level of the electrolyte in batteries that contain electrolyte.

Obviously, the tyre pressure should be checked too.

PREPARING THE LIVING COMPARTMENT (EXTERIOR)

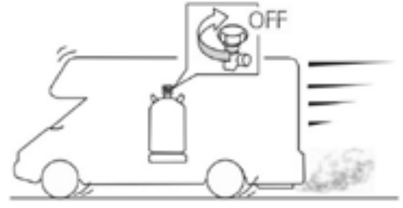
The first thing to do before you leave is to switch on the electricity power supply to the living compartment. A motor home has two batteries, one supplying the carrier (engine) and a second supplying the electrics in the living compartment.

The battery is located in a specific compartment.

The motorhome is further prepared for use by positioning the gas bottles (PROPANE only) in an externally-accessed watertight locker. Gas bottles must be turned off when vehicle is in motion.

When driving, gas cylinders must be closed.

Pictogram are placed in the appropriate location to remind you of this



II. PREPARATION BEFORE LEAVING

The clean water tank is filled through an external orifice marked by a special identifiable pictogram to distinguish it from the fuel tank on your basic vehicle.

Any covers or plugs on air intakes or orifices on all household appliances should be removed.

Blanking pieces for the fridge grills are supplied, by request and as an option by your dealer.

The WC cassette also needs to be put into service by adding a dose of the appropriate chemical without forgetting to add little water.

This operation is done through the outside door (access flap), but can also be done very easily from inside the living compartment.

PREPARATION THE LIVING COMPARTMENT (interior)

The first thing to do is to switch on the electrical circuit on the control panel.

Check that the water pump is working and purge any air in the circuit, for example by carefully opening the kitchen taps. All air is purged when water starts flowing. Do the same thing for the cold water and hot water circuits which are independent.

Air also needs to be purged in the gas circuit. Open the cylinder in the outside compartment, then open the red supply valves to the various appliances. Purge by opening the heater supply valve and switching the gas on. You will know that there is no more air in the circuit when it starts working (flame). Repeat the operation for each device that uses gas.

Your preparation operations will be finished when the water and gas are both working. Please refer to chapter XI for operation of each appliance.

PLEASE NOTE: More detailed information from the manufacturer of each of these devices is supplied with the vehicle.

III. CARRYING PASSENGERS

The number of authorized seated positions in your motorhome when driving on the Certificate of Conformity. When traveling, passengers must be seated with the safety belts securely fastened.



PLEASE NOTE:

A pictogram indicates the seats which must not be used when on the road.

Equipment and accessories in the living area of the motorhome **are designed for being used solely when the vehicle is stationary.**

This is particularly the case for the extensible television support which is only usable when the vehicle is completely stopped.

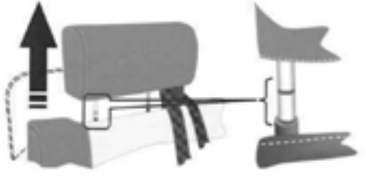
Their use while the vehicle is in motion may contravene road regulations and introduce risks about which the user should be aware.

Similarly, unexpected movements of the vehicle can make standing people fall over.

Therefore, the driver and passengers should evaluate these risks in each case.

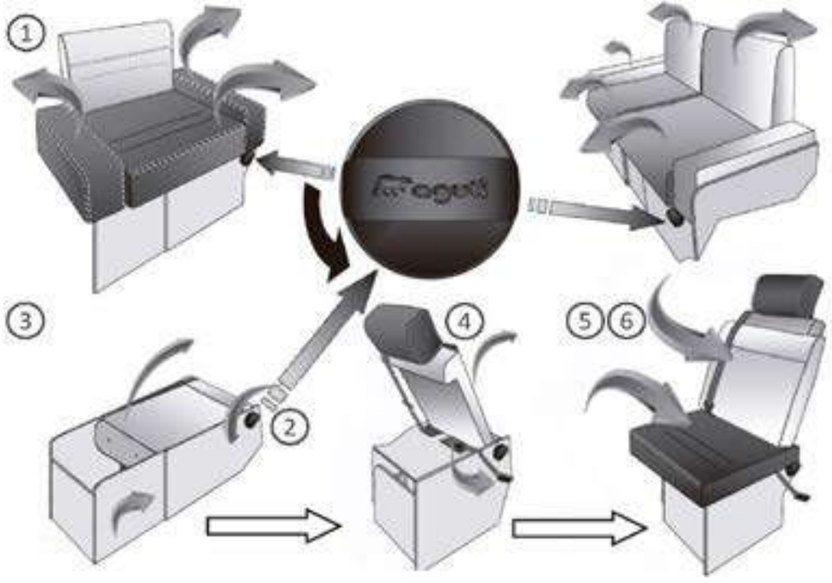
The manufacturer cannot be held responsible for incidents or accidents occurring whilst the motorhome is in motion.

IMPORTANT: When driving, the headrest from the seats must be at least at the first 'click' position.



III. CARRYING PASSENGERS

Some of our models have a folding seat for the transport of passengers. As they are not permanent seats, they need to be mounted previously



1. Remove cushions.
2. Turn the handle to allow raising the seat back.
3. Pull the seat back into an upright position.
4. Fold down the front bench flap.
5. Put the specific cushions for travel and the headrest.
6. Position the seat belt properly.

IMPORTANT : Before using them, please check that the back of the seat is locked in position.

IV. LOADS AND LOADED WEIGHT

The motorhome is a mobile home so everyone can enjoy it out as he or she wishes, but some rules have to be respected; these can be summarized as two main rules.

The first, is to **keep the centre of gravity low**. This is a safety advice to improve the road holding of your motorhome. You simply need to keep the weight in the lower part, in other words, put everything heavy in the lower compartments and lightweight articles in the top cupboards.

The second rule, is **the maximum authorised loaded weight**. This is noted directly on the motorhome Certificate of Conformity under 'Technically permissible maximum laden mass'.

You must respect this limit by reducing your load, simply by eliminating everything that is superfluous.

In addition, you must also respect the maximum authorised load on each of the front and rear axles, and a left/right weight distribution that as balanced as possible in regard to the vehicle axles (vehicle loaded and, of course, including the passengers).

The maximum permitted loads on each axle are noted down in the identification plate placed in the living compartment.

If you have a roof rack and you would like to use it to transport lightweight equipment (take in consideration centre of gravity problem), make sure your load is tied down firmly and to protect your 'roof plate' in order to avoid rubbing or other damaging actions, which would cause the roof covering (polyester skin) to deteriorate.

On the inside, take full advantage of the storage areas for clothing and utensils; when traveling, everything must be **perfectly wedged** in and furniture doors must be closed and locked.

To do this, use the special equipment present, straps, locks and/or bolts, in particular for the shower, toilet and closet doors.

MASS OF THE VEHICLE IN RUNNING ORDER :

The mass in running order includes the weight of the driver (75 kg) as well as a reserve of circulating water, 90% fuel and 100% gas. The indicated masses in running order have been considered only with the standard equipment when they leave the factory. The European regulation tolerates a difference of +/- 5% in the mass in running order. The vehicle manufacturer reserves the right to modify this list of equipment at any time.

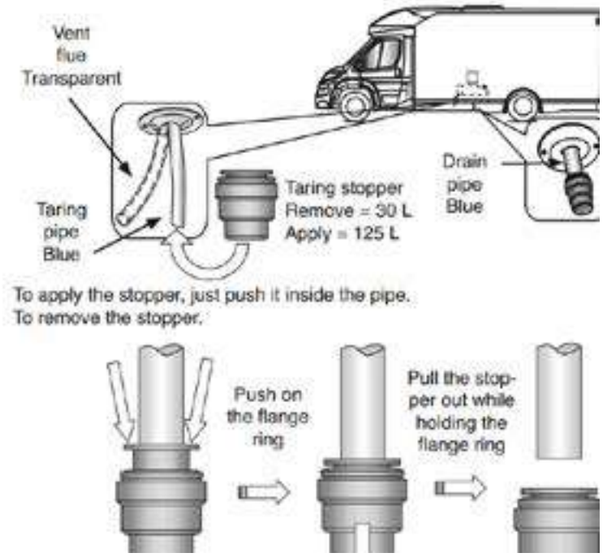
IV. LOADS AND LOADED WEIGHT

IMPORTANT :

Be sure that you have correctly assessed the weight of all objects you intend to transport in your vehicle, including passengers and fixed and movable accessories and options.

Your clean water tank was limited at the factory for a 30-liter capacity, in compliance with regulations concerning the **technically admissible maximum load weight for your motorhome when it is on the road.**

CAUTION: When you carry out manual configuration of the clean water tank (30 to 125 litres), you must recheck its load capacity. This check-up may require eliminating one seated place for travelling.



IV. LOADS AND LOADED WEIGHT

IMPORTANT:

The clean water tank must comply with regulations concerning the technically **admissible maximum load weight for the motorhome when it is on the road.**

You must calculate motorhome «weight» according to the number of people and the load.

If you want full capacity in the clean water tank, you must adjust your load and/or the number of people. This change may require eliminating one or two seated travelling places.

WARNING :

You must never exceed the technically admissible maximum load of your vehicle.

IMPORTANT :

Make sure you do not exceed the maximum authorized loads per axle which are listed on the vehicle's identification plate. Information related to the certified capacity of your clean water tank and the way to increase it for travelling are found on the gas certificate supplied with your vehicle.

IMPORTANT :

To install a tow bar or motorcycle carrier, specific stringers must be installed to transmit the effort/weight to the original chassis. Never fit them on the supports pre-installed by Benimar.

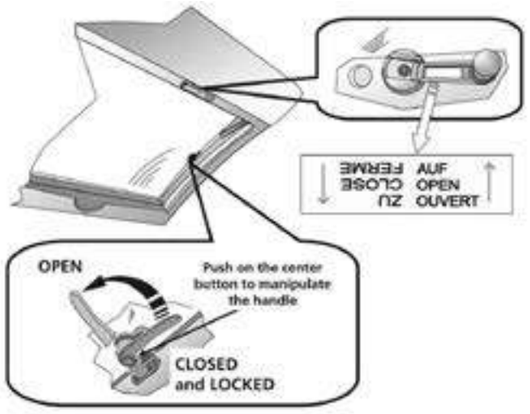
V. WINDOWS AND SKYLIGHTS

Our units are equipped with plastic windows (bays and skylight).

In most cases, your camper is equipped with push-out bay windows that open directly to the outside and skylights. All of them **must be closed and locked when the motorhome is being driven.**

It is strongly recommended not to use aerosols near the bay windows and skylights (risk of halo formation). The windows must be cleaned exclusively with water and mild soap. Never use detergent products, including those designed for everyday use. In particular, those based on hydrocarbons or alcohol as may alter window transparency and even cause cracking.

'SKYROOF' front panoramic skylight



V. WINDOWS AND SKYLIGHTS

Toilet window with extractor



Bathroom skylights



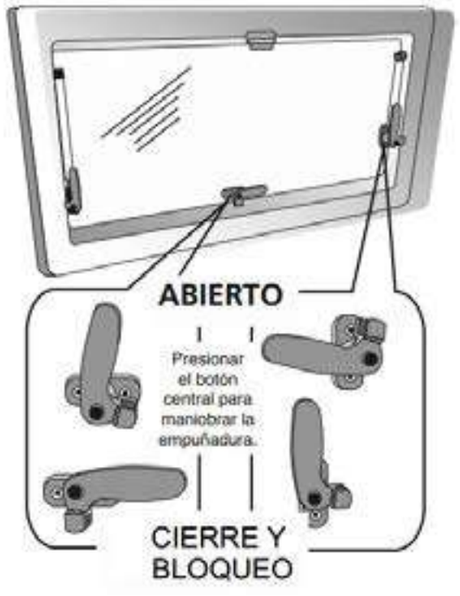
Panoramic skylight



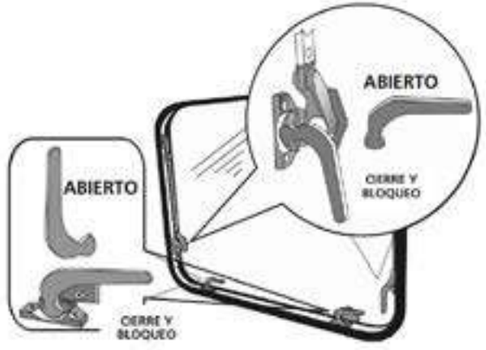


V. WINDOWS AND SKYLIGHTS

Type 1 Push-out Bay Window



Type 2 Push-out Bay Window



VI. DRIVING

General – overtaking

A motorhome is driven in much the same way as a car. However, the vehicle is larger, both in height and in width, and heavier; therefore, acceleration is not the same.

Therefore, the most important point is the size and you must respect road signs about size, particularly signs that control the height, width and maximum weight; your vehicle weights more than 2 T.

For the width, note that if your rear view mirrors pass, everything will pass.

Breakdown - Transport

When the camper is carried on a platform (truck, train, etc), it must be placed facing in the direction the carrier is headed.



When the camper is carried on a platform (truck, train, etc.), do NOT attach the camper to the platform by the camper body.

Make sure the vehicle is fixed by chocking and circling the 4 tires.

Precaution - Signaling

Avoid the following dangers:

- Underground car parks.
- Some service stations, which may have superstructures that are too low.
- Shop signs that protrude over the road.
- Tree branches that hang over the road.
- Passages under porches.
- Narrow roads.
- Bridges and narrow passageways and do not forget the speed humps and level crossings.
- etc.

If you park in reverse gear, do not keep going until the wheels touch the pavement, the overhang at the back can be long, so watch the back of your motorhome.

When driving, take care with the length on tight turns and do not hesitate to give yourself a little extra room.

VII. TYRES

Tyres

Verification of pressure should be done when the motor home is loaded (cold tyres).

Tyre pressure is given by the carrier manufacturer in the maintenance booklet and is also found on the front door frame.

In addition, the maximum tyre pressure authorised by the manufacturer is indicated in PSI on the side of the tyre (15 PSI ≈ 1 bar).

The chassis comes with parallelism made by the base vehicle's manufacturer. **It is the customer's obligation to do a new parallelism check at 1500 km**.

Spare tyre

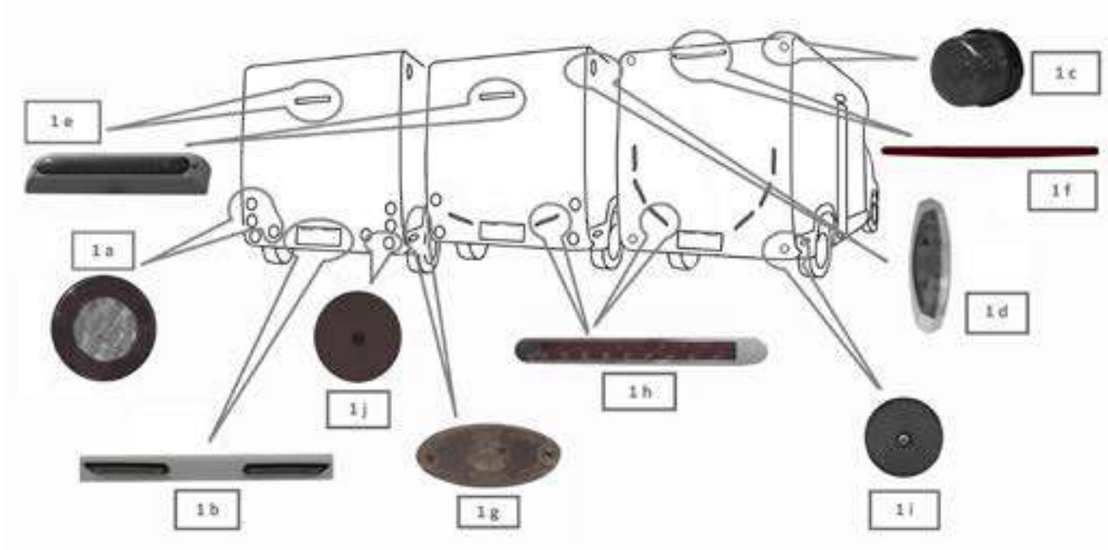
The Fix and Go Kit system has been adopted in place of the spare tyre.

In case of a flat tyre, please do the following:

- Completely remove the vehicle from the traffic area. If you are on the highway, pull off on the emergency stop area or onto a rest area.
- Put on safety clothing (safety vest) before getting out of the vehicle on the side opposite traffic.
- Ensure passenger safety by asking your passengers to go away from the vehicle and/or to the other side of the protective barrier if there is one.

VIII. SIGNALLING

· Placement of light and access



VIII. SIGNALLING

Lights

1A	**Feux Stop / Clignotants / Anti-Brouillard** Brake lights / indicator lights / fog lights: Remove the fixation screws. Remove the bulb from its housing. Turn the bulb support in the direction of the arrow. Replace the bulb and reassemble being careful to keep the same joint position.
1B	**Number plate light** Remove the fixation screw Push the bulb toward the screw to free the prong Replace the bulb and reassemble, being careful to keep the same joint position
1C **1D**	**Side marker lights** Remove the light cover with a screwdriver which fits into the slot. Replace the bulb, being careful to maintain the lens position. Replace the cap, red back.

1E **1F** **1G**	**3rd brake light and LED sidelights** Remove the two fixation screws Disconnect the wires Replace the light and the connector by crimping
1H	**Brake / position LED lights:** Removing the fastening screw Remove the light assembly cover with a screw-driver in the slot provided for this purpose Disconnect the wires Replace the light and the connector by crimping Replace the light assembly covers
1I **1J**	**Indicator LED lights:** Remove the light assembly cover with a screw driver in the slot provided for this purpose Disconnect the wires Replace the light and the connector by crimping Replace the light assembly convers

The signalling lights are standard bayonet lights

Stop / Road lights: white, 21 W / 5 W
Indicator (flashing) lights: orange, 21 W
Back-up lights: white, 21 W
Fog lights: white, 21 W
License plate lights: shuttle, 5 W

IX. PARKING MANOEUVRES

When you have found a place to park, you can position your vehicle using the rear view mirrors as a guide, but we suggest you call on someone to help you when backing up.

Some of our models are fitting with rear parking sensors.

The parking detector informs the driver of the distance of an obstacle by means of an audible signal, which makes parking safer. The system is automatically activated as soon as reverse gear is engaged.

Operation

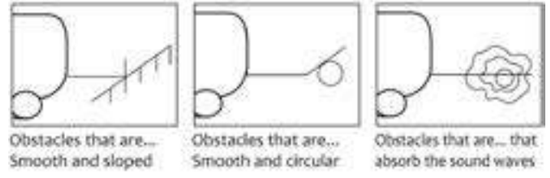
The parking detector emits ultrasonic sound waves that are reflected by an obstacle and generates an audible signal. The exact detection of the distance of an obstacle renders parking manoeuvres easier, even in restricted spaces. The frequency of the ultrasonic sound waves has been chosen to avoid interference and discomfort to people and pet animals.

Signalisations



In some circumstances the system may fail to detect or incorrectly signal obstacles:

- an obstacle with a complex shape, with hollows or projections;
- an obstacle that is very smooth and reflective (glass and mirrors), especially if it is located almost parallel to the motor caravan body.



IX. PARKING MANOEUVRES

IMPORTANT REMARKS :

This system is exclusively an aid to the driver and must never be considered to be infallible. You must always take care and use your judgement.

Carry out parking manoeuvres at low speed in order to ensure your own safety and that of others.

Stop your vehicle when audible signalling starts, to take into account the effects of inertia.

Regularly check that the detectors operate correctly and clean them carefully.

In the event of rain, snow, or ice, the sensitivity of the detectors can be temporarily reduced by up to 20%. Take even more care in these conditions.

Parking

To ensure perfect stability of your rear (*) jacks, remember to take along at least two wooden wedges to place on the ground under the jack shoe.

The jacks serve only to stabilize your motorhome and keep it from moving when you walk around on the inside; they should never be used to correct a slant or as for changing a tyre.

Make sure that the floor of your motor home is perfectly horizontal to ensure the correct operation of all the functions in your motor home's living compartment.

(*) A standard feature on some models and an option on others.

Operation of reverse camera

Depending on the model or option chosen, your chassis motorhome may have a reverse camera.

The screens differ according to models and options chosen.

FIAT Multimedia



FORD



We recommend extreme caution when using the reverse camera.

X. THE MOTORHOME DRIVER'S STATUTE

As with all types of vehicles, you need to follow the Highway Code when driving a motorhome. You must respect traffic rules applicable to private cars.

In town centres or suburban areas, you should park your motorhome:

- In areas with low population density
- where it will not obstruct visibility and access to shops
- so that it does not hinder traffic.

When staying in your motorhome in this type of area:

- Do not have anything projecting outside the vehicle
- Do not cause any nuisance for neighbours
- Do not monopolize public areas.

Drain waste water into appropriate locations such as special service areas, stands, public or private toilets, etc.

WARNING: Do not empty your waste water into rain water drain pipes (gullies) since not all of them are connected to a treatment plant.

WARNING : All water drain taps must be closed when traveling.

Put domestic garbage in bags and leave the bags in locations provided for them.

Following all these recommendations will make for good neighbourliness, help to protect the environment so that you can expect a warm welcome wherever you go.

EURO-RELAIS station

These stations are provided specially for motorhome enthusiasts.

It is fairly easy to find them, since all specialized press magazines print frequently updated guides telling you where to find them.

You can fill up with water in these stations, and also and especially you can empty your waste water and the WC cassette.

Please leave the area in a clean condition for the next user.

XI. OPERATION OF APPLIANCES

ELECTRICITY POWER SUPPLY

General

The electrical energy necessary for your lighting and for operation of all household appliances, water pump, WC, etc. in your living compartment is provided by a 12 V battery (2 on certain models).

All extra batteries are installed in addition to the basic vehicle battery.

A coupling relay is installed between the two batteries:

- When traveling, this relay couples the two batteries together so that they are recharged simultaneously.
- Separate the batteries when stopped. In this way, if your unit battery is completely flat, you can still start your vehicle engine.

The battery of living compartment is located:

- Generally inside a special box in a rear comportment of the motorhome.
- Under the front passenger seat.

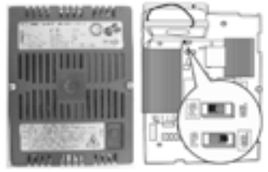
Additional battery

Our motorhomes use three types of batteries: lead-based, gel-based and AGM.

It is up to you to decide on their respective advantages; your selection criteria, in particular utilization, will determine your choice.

Depending on your choice, you **MUST** adapt the battery charger to the type of battery.

CB 516 charger: To access the contactor, open the hood (remove the two attachment screws) and look for it next to the fan.



NE143P charger: On the front next to the connections, a contactor lets you select the battery type: GEL for a gel type / PB for a lead type.



XI. OPERATION OF APPLIANCES

BATTERY

The natural phenomenon by which batteries discharge slowly and regularly means that they are often in a deep discharge situation.

It has been observed that only a very small percentage of batteries are capable of accepting charge and therefore operating satisfactorily, starting from this deep discharge condition.

In order to avoid this situation, you MUST:

- Either take out your batteries after charging them and storing them protected from frost.
- Or to leave the vehicle connected to the 230V supply and thus make sure that the living compartment remains charged.
- Or at least for short periods (1 or 2 weeks), disconnect the batteries and leave them in position after recharging them.

Given the diverse and varied conditions of use of cell batteries (not supplied by the manufacturer), its guarantee is excluded of global guarantee.

In the event that an auxiliary battery is replaced, the new battery must be of the same type and capacity as the auxiliary battery originally installed.

In the event that an auxiliary battery is replaced, make sure that the 230V battery charger selector is in the correct position for the type of battery.

Batter ylevel alarm

A buzzer is installed on certain models.

Fitting electrical options

We draw your WARNING to the need to connect the solar panel according to our recommendations. The connection is planned in the pre-equipment (see electrical diagram provided with the living compartment. Any direct connection to the battery may disrupt the correct operation of the electrical installation of our cell.

The same applies for all additional accessories and generators to be connected after the relay box.

Intervention on the auxiliary battery

For integrals, see the specific page for vans in the pertinent document.

The auxiliary battery is located under the passenger seat.

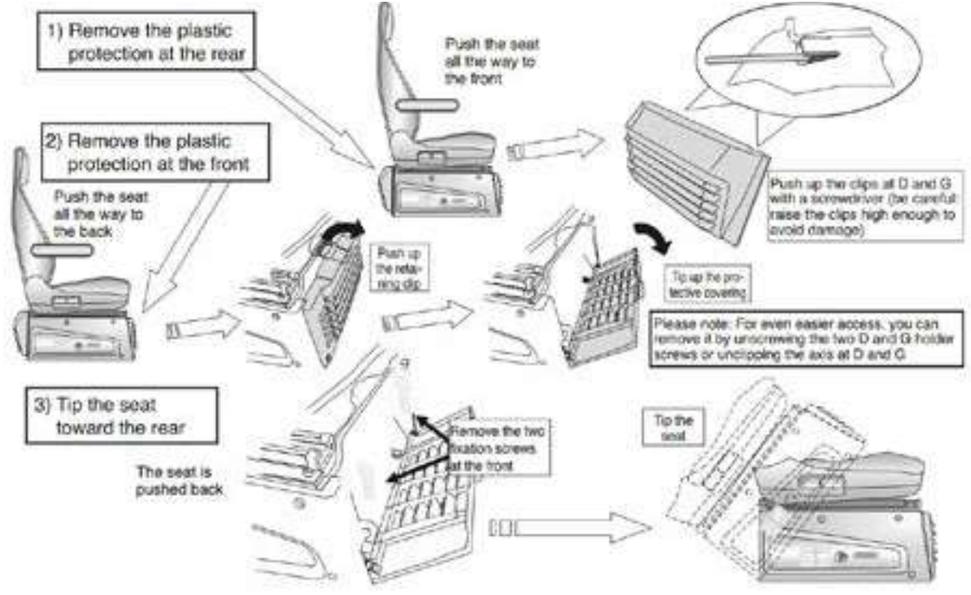
Please note: You must follow the instructions posted on the side of the passenger seat facing the door.

REMEMBER: Before intervening, you must:

- AVOID SMOKING.
- TURN OFF ALL DEVICES AND LAMPS BEFORE DISCONNECTING THE AUXILIARY BATTERY.

XI. OPERATION OF APPLIANCES

INTERVENTION ON THE AUXILIARY BATTERY FOR CAMPERS, EXCLUDING VANS AND INTEGRALS (CONT.)
Step for accessing the battery in a FIAT carrier



XI. OPERATION OF APPLIANCES

INTERVENTION ON THE AUXILIARY BATTERY FOR CAMPERS, EXCLUDING VANS AND INTEGRALS (CONT.)
Step for accessing the battery in a FIAT carrier

4) FREE THE BATTERY



For reassembly, do the steps in the reverse order; you MUST follow the instructions below:

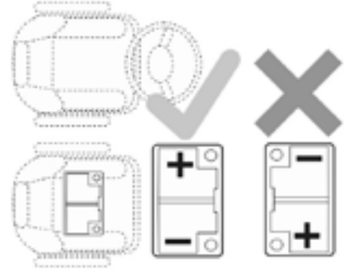
Check that the electrical wiring has not been damaged during the process. Lightly grease the terminals.

Reconnect the degassing tube well; check to see that the degassing tubes have not been damaged during operation and are not pinched.

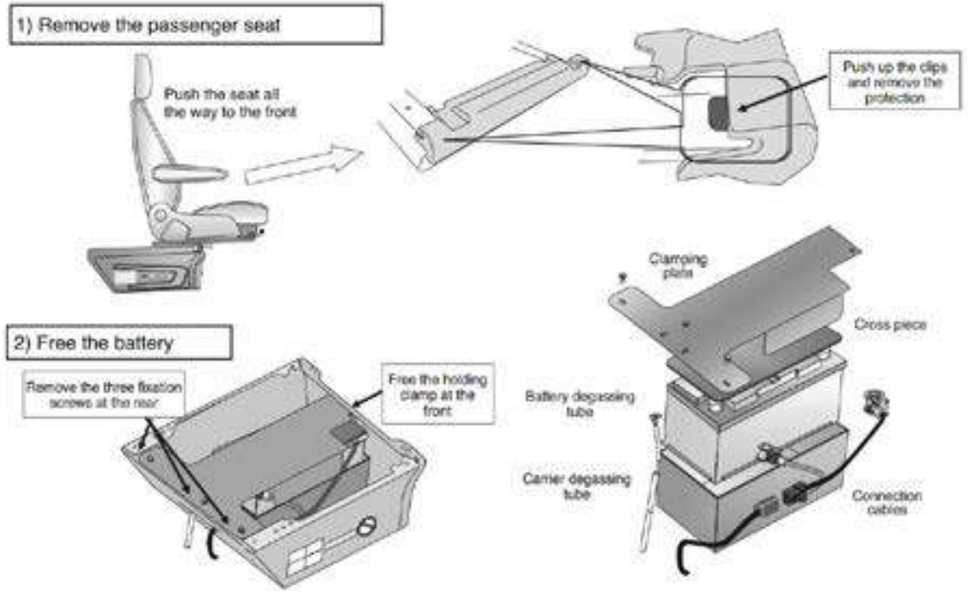
The + & - de la battery TERMINALS MUST face the front of the vehicle.

Please note: In case of difficulty or if you have questions, please consult your dealer/salesperson.





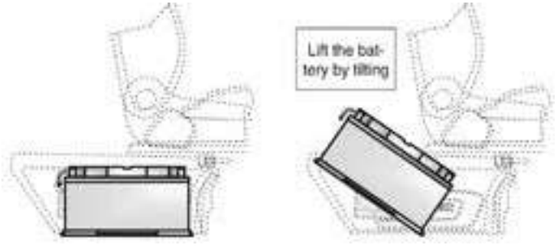
INTERVENTION ON THE AUXILIARY BATTERY FOR CAMPERS, EXCLUDING VANS AND INTEGRALS (CONT.)
Step for accessing the battery in a FORD carrier



XI. OPERATION OF APPLIANCES

INTERVENTION ON THE AUXILIARY BATTERY FOR CAMPERS, EXCLUDING VANS AND INTEGRALS (CONT.)
Step for accessing the battery in a FORD carrier

3) FREE THE BATTERY





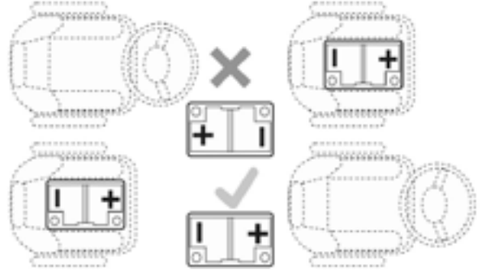
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Reconnect the degassing tube well; check to see that the degassing tubes have not been damaged during operation and are not pinched.

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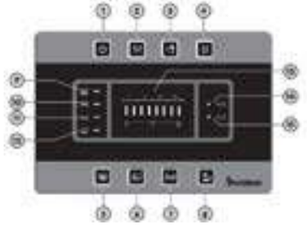


CONTROL AND INSTRUMENTATION PANEL

Our different models are equipped with different types of control panels; these are usually situated near the cooking unit.

IMPORTANT: to ensure all functions, battery charging, sensor, pump, etc. It is essential that the control panel is turned on (Table PC 180 TR, Button 1).

Model PC 180



Ref. 1: Main ON / OFF button for controlling uses and safety relays, the flashing of the LED indicates that the battery is flat and that the low-voltage control device is about to be activated. NB: when on, the panel carries out a function test on all the LEDs except for ref. 14 and 15.

Ref. 2: Light control button.

Ref. 3: Water pump control button; it controls the pump relay.

Ref. 4: Exterior light control button; it switches off automatically when the engine starts up.

Ref. 5: Button to control the auxiliary battery B2.

Ref. 6: Button to control the engine battery B1.

Ref. 7: Button to control the clean water tank and for the clean water tank filling function.

Ref. 8: Button with integrated twilight sensor to control the intensity of the LED back-lighting at night; see too the 'TWILIGHT' function.

Ref. 9: This symbol flashes to indicate that the engine battery B1 is flat.

Ref. 10: This symbol flashes to indicate that the auxiliary battery B2 is discharged

Ref. 11: This symbol flashes to indicate that the clean water tank is empty.

Ref. 12: This symbol flashes to indicate that the dirty water tank is full.

Ref. 13: LED display:

- Voltmeter to show the voltage of the engine and auxiliary batteries (scale from 0 to 100%)
- Level of clean water tank (reserve, 1/3, 2/3, 3/3).

Ref. 14: Visual signal of connected 230 V system.

Ref. 15: Indicates the charging of the auxiliary batteries by the engine alternator.

LCD XI. OPERATION OF APPLIANCES

B1 engine battery alarm:

When the engine battery reaches a voltage below 12 V, the self-discharged battery alarm is automatically activated and the symbol ref. 9 flashes.

B1 engine battery charging:

Function not available.

Auxiliary battery alarm:

When the auxiliary battery reaches a voltage below 11 V, the self-discharged battery alarm is automatically activated and the symbol ref. 8 PC150TR / ref.10 PC180TR flashes.

B2 auxiliary battery charging:

- a. with the alternator, by the isolator relay when the engine is running. When the engine is running, this function allows the fridge, the exterior light etc. to operate.
- b. with the 230 V system, by the battery charger.
- c. with the solar panel, by the solar regulator.

WARNING: If the main button is off, the battery is disconnected from the installation and it can be recharged only when the engine is running.

WARNING: Battery charging by the system and the solar regulator can take place only if the control panel is on.

Low voltage control:

An electronic device cuts out all 12 V uses when the auxiliary battery reaches the minimum level of 10 V.

It is possible to restore the uses for one minute by pressing on the ON / OFF button.

Electronic battery isolator:

An electronic device, controlled by the function: key contact and engine ignition connects the auxiliary battery to the alternator at a voltage above 13.3 V and disconnects it at a voltage below 12V.

Furthermore, this device controls the relays for the exterior light which should work only when the engine is off.

Filling the clean water tank:

This function is used when the clean water tank is filled with water; it indicates the water level during the filling process.

To activate this function, press the button ref. 2 for more than 5 seconds, until the LEDs on the LED display start to flash.

To leave this function, press one of the arrow buttons ref. 1 or 2.

This function activates the LED on the tank filling stopper which lights up when the tank is full.

(See section entitled 'WATER CIRCUIT / Filling').

Twilight function:

In a 'night-time' situation, thanks to a sensor located behind the button ref. 8, the LED back-lighting intensity is automatically reduced to the level previously set by the user (to adjust it, press and hold the button ref. 8 for more than 3 seconds until the desired level is reached).

LCD XI. OPERATION OF APPLIANCES

CONTROL AND INSTRUMENTAL PANEL

Our different models are equipped with different types of control panels; these are usually situated near the door.

Model PC260-OC



1. “TEMP/PROG” button to check both internal and external temperature and for system setting.

2. Button to check the car battery (B1) and the leisure battery B(2) and for the regulation of the programmable parameters’ setting.

3. Button for the control of fresh water tank (in %), for fresh water refilling function operation.

4. On/off main button (to turn on/off press for 2 seconds): at the start-up the display carries out a functioning test and shows all symbols (including unused symbols).

5. “12V” button to switch the lights and the heating/boiler on and off.

6. Button to switch the pump on and off.

7. Awning light button; the awning light switches automatically off when you start up the engine.

VISUALIZATIONS

Ref 1. “B2” leisure battery status displays.

Ref 2. Fresh water tank status display.

Ref 3. It shows the car battery (B1) test, the blinking indicates the discharged battery alarm.



Ref 4. It shows the leisure battery (B2) test, the blinking indicates the discharged battery alarm.

Ref 5. External temperature digital indicator.

Ref 6. Internal temperature digital indicator.

Ref 7. It displays the setting menu.

Ref 8. It displays the clock and the required test.

Ref 9. It shows the unit of measure.

Ref 10. It shows the fresh water tank test, the blinking indicates the empty tank alarm.

Ref 11. It displays that the water tank is full.

Ref 12. It shows that the minimal voltage device has switched on.

Ref 13. It displays the batteries’ paralleling when engine is on.

Ref 14. It indicates that the engine is on.

Ref 15. It displays that the tones are off.

Ref 16. It displays that the 230V net is connected.

Ref 17. It displays that the car battery recharging unit is on.

LCD XI. OPERATION OF APPLIANCES

Model PC260-OC FUNCTIONS

CAR BATTERY ALARM (B1)

When car battery voltage gets under 12V, car Battery Discharge alarm goes on and the symbol ref. 3 starts blinking. Alarm goes off when the voltage gets over 12.5V.

LEISURE BATTERY ALARM (B2)

When leisure battery voltage gets 11.5V the Leisure Battery Reserve alarm goes automatically on, the symbol ref. 4 starts blinking and you hear a short beep. When the leisure battery voltage gets 10.5V, the Leisure Battery Discharge alarm goes automatically on, the symbol ref. 4 starts blinking and you hear two short beeps. Alarms go off when the voltage gets over 12.5V.

MINIMUM VOLTAGE CONTROL (BATTERY PROTECTION)

The electronic battery protection device cuts off the12V users when leisure battery reaches 10V and disables: pump, lights, awning light, and stove. Symbol ref. 12 is the visual alarm signal. It is possible to reactivate all users for one minute by pressing the on/off button (ref. 4 on control panel).The control panel automatically turns off with a voltage lower than 9.5V.

Users are automatically reactivated when voltage is bigger than 13.5V.

This device doesn’t control the functions: fridge, step and the auxiliary exit(direct B2)

TANKS

- a) Fresh water tank with electronic probe: levels are displayed numerically in % (steps of 10%) and graphically by the level guage ref. 2.
- b) Waste water tank with screw probe.

FRESHWATER TANK REFILLING

This function is used during the fresh water refilling and indicates the water level during refilling. To activate this function press the “test tank” button ref. 3 for more than 4 seconds, until the “water refilling”is displayed on the screen. The control panel beeps in order to warn that tank is getting filled: one short beep at 75%, two short beep at85% and a long beep at 95%. To exit this function press buttons ref. 2 or 3 .

FRESHWATER TANK ALARM

Alarm turns on when fresh water level is lower than 10% of the tank capacity and automatically turns off when level exceeds 20%. Alarm is shown acoustically (when engine is off) and visually with the symbol ref. 10 blinking.

WASTE WATER TANK ALARM

Alarm turns on when the waste water level exceeds the screw sensor level. Alarm is shown acoustically (when engine is off) and visually with the symbol ref.11 blinking.

AWNING LIGHT AUTOMATIC TURN OFF

An electronic device switches off the awning light when engine is turned on.

TEMPERATURE

Both int. and ext. temperatures are measured by sensors placed inside and outside of the vehicle. The precision of the temperature value is ± 1°C.

TWILIGHT FUNCTION

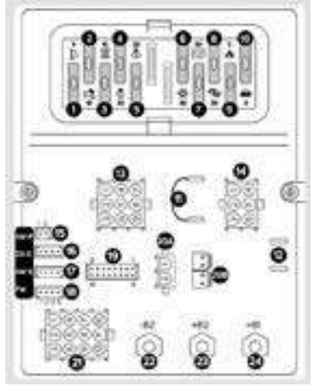
In a “night” situation, a sensor positioned near the display causes the intensity of the LED back light to automatically be reduced to the level pre-set by the user.

LCD XI. OPERATION OF APPLIANCES

FUSE BOX. Fuse distribution box.

LOW VOLTAGE CONTROL

An electronic device cuts off all 12 V power supplies when the service battery drops to the minimum voltage of 10 V. It is possible to manually re-establish functioning for roughly one minute by shutting off the overall power switch and turning it on again. The fridge, the electrical step-plate and the functions supplied directly by B2 (unit battery) are excluded from this arrangement.



- **1.** 5 A fuse to give power to the awning light, it depends on the awning button and it switches automatically off when the engine is started.
- **2.** 10 A fuse to give power to the water pump; it depends in the pump button.
- **3.** 10 A fuse to give power to the heating/ boiler; it depends on the main button ON/OFF.
- **4.** 10 A fuse to give power to the lights group 'A', it depends on the lights button.
- **5.** 20 A fuse to give power to the lights group 'B', it depends on the lights button.
- **6.** 30 A fuse to give power to 12 V AES or 3-way function fridge. The 3-way function fridge switches automatically off when the engine is off.
- **7.** 20 A fuse for the auxiliary power supply (limiting the charge of solar regulator); it depends on the main button ON/ OFF, auxiliary 1.
- **8.** 20 A fuse for the power to the electric step, main ON / OFF button, auxiliary 2, heating.
- **9.** 3 A fuse for the gas power supply (fridge, kitchen, boiler valve, etc..), it depends on the main button ON/OFF.
- **10.** 3 A fuse for OUT D+ simulated exit protection

WARNING: In case of replacement of faulty observe the values for each fuse fuses.

XI. OPERATION OF APPLIANCES

FOOD SAFETY

Warning about the use of your fridge:

When storing your food, be particularly careful about the special conditions of use of a fridge located in a vehicle. The conditions inside the vehicle are indeed changing a lot depending on:

- The weather conditions
- The high temperature inside the vehicle especially if the vehicle is parked in the sun. The temperature may then reach 50°C.
- The use of the 12 V source during a long trip.
- The fridge being located behind a window facing the sun.
- In using the fridge too quickly after power-optimal temperature

Under those circumstances, the fridge may not keep the temperature low enough for the food preservation (especially highly perishable food).

List of highly perishable food: meat, fish, poultry, pork butchery precooked dish and all the products which need to be stored at 4 °C max.

Always remember:

- Wrap up separately raw food and cook food in aluminium or plastic wrap.
- Do not remove the packing if useful information about the product is written on.
- Do not leave refrigerated products outside the fridge too long.
- Put the products that have to be eaten first in the front of the fridge.
- Put left-overs in sealed boxes and eat them rapidly.
- Wash your hands carefully before touching any food and before eating.
- Wash regularly your fridge. Use soap and water to wash it and bleach to rinse.

The use by date appears as follow: 'Best before…' followed by the date or the information to know where the date appears on the labeling.

See the chapters in the fridge instructions concerning cleaning and storage of food.

Please keep the instructions carefully. If others use the fridge, please enclose the instructions.

XI. OPERATION OF APPLIANCES

FRIDGE

Our products are fitted with several different fridge models.

The following is an overview of their operation. If you would like further information, please refer to the instructions written by the manufacturer of the fridge located inside your vehicle.

Common rules and instructions

Fridge start-up

- Before using the fridge, we recommend that you clean the inside.
- When you use the appliance for the first time, allow it to cool for at least eight hours before putting food inside.
- The low-temperature compartment should be cold one hour after the fridge has been turned on.

Use

The fridge may operate (230 V), power supply, 12 V power or liquefied gas. Use the controls A shown in figure 1 to change from one operating mode to another.

⚠

Never cover the ventilation grills on the motor home walls. The absorption systems must be well ventilated to operate correctly.

- Any water ingress through the ventilation grills may damage your fridge permanently. We recommend great care when washing your motor home.

Winter operation

1. Check that the ventilation grills and the extractor have not been blocked by snow, leaves or similar.
2. When the outside temperature drops below 8°C, the optional winter protective device must be used. This is available from your sales outlet.
3. Affix the cover and fasten it. It is advisable to use the winter protection when you do not intend to use your vehicle for an extended period (optional).

Defrosting

As time goes by, frost builds up in the freezer walls. When the layer of frost is about 3mm thick, the fridge should be defrosted.

1. Switch off the fridge.
2. 2Remove the ice cube tray and food.
3. Leave the fridge door open.
4. After defrosting (freezer compartment and walls free of frost), dry the compartment dry with a cloth.
5. Use a cloth to mop up the water from the freezer compartment.
6. Switch the fridge back on again

⚠

The layer of ice must never be removed forcibly, nor may defrosting be accelerated using a heat source.

N.B.: Water thawing in the main compartment of the fridge runs into an appropriate container at the back of the fridge. From there, the water evaporates

XI. OPERATION OF APPLIANCES

Switching OFF

1. Set energy selector switch (A) to position '0' (OFF). The device is completely stopped.
2. Secure the door open by means of the door stop. The door will be slightly. This is to prevent mould from forming inside the appliance..

⚠ **Switching off gas operation!** If the fridge is to be taken out of service for an extended period of time, the on-board shut-off valve and the cylinder valve must be closed.

Maintenance

Works on gas components and electrical installation may only be carried out by authorised personnel. We recommend to contact your Dometic Service Centre. EN 1949 stipulates that the appliance's gas equipment and its associated fume system must be inspected after installation and a certificate issued. Afterwards a qualified technician must inspect according to EN 1949 every two years and a certificate issued.

It is the user's responsibility to arrange for inspections after purchase.

- It is recommended that the gas burner be inspected and cleaned as necessary at least once a year.

Energy-saving tips

- It is sufficient to operate the refrigerator at the middle thermostat setting at an average ambient temperature of approx 25 oC, (for both gas and mains voltage).
- Where possible, always store goods that have previously been cooled down.
- Do not position the fridge under direct sunlight.
- Constant circulation of air must be supplied to, the fridge unit.
- Defrost regularly.
- Open the door only for a short time when removing goods from the fridge.
- Run the fridge for about 12 hours before filling it (in 230 V).

STORING FOOD

Turn the fridge on about 12 hours before filling it with food. If possible, only put cold foodstuffs inside. Always store food in closed containers, or wrapped in aluminium foil etc.

- Always store food in sealed containers, aluminium foil or similar.
- Never put hot food into the fridge, always let it cool down first.
- Product that could emit volatile, flammable gases must not be stored in the fridge.
- Store quickly perishable foods directly next to the cooling fins. The freezer compartment is suitable for making ice cubes and for short term storage of frozen food. It is not suitable as a means of freezing foods.
- Do not expose the fridge to direct sunlight.
- Take account of the fact that the temperature inside a closed vehicle left in the sun can rise to a high level and affect the fridge´s performance.
- Do not obstruct air from circulating around the fridge aggregate.

These tips apply only to highly perishable products.

XI. OPERATION OF APPLIANCES

BEWARE:

- Flammable material should be kept well away from the fridge.
- The gas cylinder must be changed outside, away from any ignition source.
- It is forbidden to run the fridge on gas when travelling. If there should be a fire following an accident this could cause an explosion.
- It is also forbidden to run it on gas in the vicinity of service stations

WARNING:

If you remain a long time without using the fridge, it is necessary to close the valve of the gas cylinder and the gas taps.

WARNING:

You should always start and cool down the fridge by connecting it to gas or the mains. Running it on the 12 V battery only serves to keep it and the foodstuffs inside it at the correct temperature once it is cold.

XI. OPERATION OF APPLIANCES

Energy

12 V - operation (DC)

The fridge should only be used while the motor is running, otherwise the on-board-battery would be discharged within a few hours!.

Mains power

This option should only be selected where the supply voltage of the connection for power supply corresponds to the value specified on the data plate. Any difference in values may result in damage the appliance.

Gas operation
Manual lighting:

1. Open the valve on the gas cylinder and the gas valves.
2. Press the gas feed selection button.
3. Put the gas control button on the maximum position and hold it in.
4. Press repeatedly on the manual lighting button at 1-2 second intervals.
5. Let go of the gas control button when:

- THETFORD = the flame controller reaches the green area.
- DOMETIC = after 10 to 15 seconds while looking for the presence of the pilot light inside the fridge at the bottom.
- Do the preceding operations once again if the flame controller does not reach the green area.
- Adjust the temperature using the thermostat (B). The bigger the mark, the stronger the power.

Electric / automatic lighting:

1. Open the valve on the gas cylinder and the gas valves.
2. Press the gas feed selection button.
3. Put the gas control button on the maximum position and hold it in.

- Lighting will occur automatically. You will hear a clicking noise that stops when lighting has occurred. The flame controller then turns green (THETFORD) or the tick-tock and the blinking light stop (DOMETIC).
- You can let go of the gas control button.
- If the flame goes out, lighting will repeat automatically.
- Adjust the temperature using the thermostat. The bigger the mark, the stronger the power.

The gas fridge must not be used while the motorhome is moving. Nor must it be used in service stations.

BEWARE!

Never press the gas control knob several times consecutively for more than 30 seconds. If the pilot light does not appear, wait at least five minutes before repeating the operation. Gas could accumulate and result in a fire or explosion if this rule is not observed.

XI. OPERATION OF APPLIANCES

DOMETIC fridge



1. ON / OFF button
2. 230V power selection button
3. Gas power selection button
4. 12V power selection button
5. AUTOMATIC power selection button (depending on model)
6. Frame heating (depending on model)
7. Temperature threshold control button
8. Temperature threshold display
9. GAS FAULT / reinitialization

N.B.: it is essential to consult the manual for your fridge for detailed information.

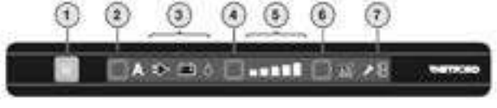
THETFORD fridge

LED control panel



1. On / Off switch
2. Directional button
3. Confirmation button
4. Directional button
5. Symbol for 230V / 12V / gas power sources
6. Cooling level indicator
7. Anti-condensation symbol
8. 'Flat batteries' symbol

Control TOUCHSCREEN



1. On / Off switch
2. Selector for 230V / 12V / gas power sources
3. Symbol for 230V / 12V / gas power sources
4. Cooling level selector
5. Cooling level indicator
6. Activation of anti-condensation and its symbol
7. Fault code symbol

XI. OPERATION OF APPLIANCES

GAS OVEN (OPTIONAL MOUNTING ON CERTAIN MODELS ONLY)

The appliance can only be used for cooking and must never be used as a heater.
Use of this appliance can generate heat and humidity. This means that proper ventilation of the kitchen must be provide.

Use

To light the oven or grill, the door must be completely open.

- The push button must be pressed gently then turned to the left to the lighting position. When the flame has lit, the button must be held down for about 10 seconds. If a grill is fitted, this is lit by turning the button to the grill position on the right-hand side.
- Stop pressing the button, and turn it to the desired setting.

The appliance is fitted with an automatic thermostat for temperatures of up to 250°.

IMPORTANTLY:

If the oven or grill fails to light, the entire procedure must be repeated. If the appliance fails to function after 3 attempts, you should contact your sales outlet. Before using the oven for the first time, you must operate it for half an hour at the highest temperature setting.

Cleaning

Only clean the oven with cleaning products designed for domestic use.

XI. OPERATION OF APPLIANCES

MINI GRILL (UK MOTORHOME VERSION ONLY)

Manual lighting of the oven-grill

Push slightly on the control knob and turn it to the lighting position.

Push the button all the way in, then light the burner with a match or a gas lighter.

Maintain pressure on the knob for 5-10 sec.

Release the oven knob and turn it to the desired setting.

N.B. Manual lighting must be done only by an adult.

Automatic lighting of the oven-grill

To light the oven or the grill, open the door completely. Lightly press the control knob and turn it to the lighting position. Push the knob in all the way and maintain pressure for 5-10 sec. N.B. The oven burner and the grill will not light if the door to the oven is closed or only partially open.

Lighting of the appliances with thermostat:

Proceed as described in paragraphs 1 and 2, with or without electronic lighting. Lighting position is chosen by turning the command button between positions 1 and 6 for the oven and to the only position (▼▼▼▼) for the grill.

In ovens with a thermostat, the different positions of the knob correspond to the following oven temperatures in Centigrade.

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

IMPORTANTLY : If the oven does not light the first time, repeat the operation from the beginning and, if necessary, check to see that the appliance is supplied with gas or electricity. If the appliance does not work at all, close the gas supply valve and contact your dealer. Do not use the appliance to heat the air.

If the burner flame goes out accidentally, close the gas knob and wait at least 1 minute before re-lighting the burner.

Use gloves to manipulate hot elements.

Functioning of the grill:

- Completely remove the heat-protector plate.
- Light the grill burner.
- Leave the oven door halfway open

XI. OPERATION OF APPLIANCES

HEATING PLATE



Various Brand-name heating plates are installed in our different models.

Operation

Open the valve of the gas tank, as well as the safety lock of the cooking plate.

On the cooking plate, turn the corresponding knob from the closed position (position 0) to the maximum position (full flame), push the knob in and maintain it in this position while igniting the burner with a match or lighter.

The knob may be released after around 10 seconds, after the burner has been lit.

Set according to the heat desired. (On certain 3 burner models, the most powerful burner is a different colour).

Burners should always be lit without a cooking recipient on top of them.

Shutting off

Turn the knob to the stop position (0). Close the cooking plate valve.

Breakdown

If the appliance no longer works, turn it off and consult a specialist.

⚠

It is forbidden to use the cooking plate during refilling of the gas containers or inside a garage.

Care and cleaning

This must be done only when the appliance is turned off and has cooled down.

Do not use abrasive or corrosive products, products based on chlorine, steel wool or a knife blade.

Do not leave acid or alkaline substances (vinegar, salt, lemon juice, etc.) on the surface of the cooking plate.

For the surfaces in stainless steel and the enamelled parts, wash with soapy water or detergent, rinse and wipe.

Use a sponge or a clean cloth. From time to time, check the combustion air input and clean it if necessary

WARNING : The glass covers can break if they are heated. Turn off all burners before closing the cover. Turn off all the burners and wait until they have cooled to ambient temperature before closing the lid.

WARNING : On the models with a built-in sink and cooking area that includes a glass cover over both these areas, please note that when the cooking area is being used and the cover over the sink is closed, you must maintain a minimum distance of 10 mm between the pan and the sink cover.

WATER HEATER (BOILER)

Our different models are equipped with different types of appliances: simple boilers for heating water only and combined appliances for heating both water and the mobile home unit.

If there is any risk of frost, drain the boiler. The guarantee does not cover any damage caused by frost.

The following describes the user instructions for this appliance. However, you will have been provided with specific instructions for this appliance when your motorhome was delivered. It will give you details of how to make the best use of your boiler.

Filling the water heater (see next page)

Check that the safety / drain valve in the cold water inlet pipe is closed: lever horizontal, position «e».



The electric immersion heater is fitted with an overheating controller. In the event of an anomaly, de-activate at the controls, wait for 10 mins. and re-activate

Operating instructions – gas option

- A = red LED ‘Failure’
- B = Boiler turned ON, 50°C or 70°C
- C = Boiler turned OFF

Operation instructions - 230V electric option (depending on country:

- G = Boiler turned ON, 850W or 1300W
- H = Boiler turned OFF



The water temperature cannot be pre-selected; it is limited automatically to around 70°C.

To heat the contents of the water heater more quickly, it can be heated with gas and electricity simultaneously.

XI. OPERATION OF APPLIANCES

Security/drainage valve (FrostControl)

FrostControl is an autonomous security/drainage valve that operates without electrical current. If there is a risk of freezing, the valve automatically evacuates the contents of the boiler via a purge hose. Automatic pressure compensation by pulsations takes place via the safety valve in case of excess pressure in the system.



a = rotating changeover switch in ‘on’ position

b = pressure button in ‘off’ position

c = pressure button in ‘purge’ position

d = purge hose (goes through the vehicle floor pan to the exterior).

1) Closing the drainage valve:

Check to see if the rotating changeover switch is in the ‘on’ position (a); that is, it is parallel to the water connection and in operation.

The drainage valve can be shut off manually with the pressure button (position b) and the boiler filled only when the temperature on the evacuation valve is above 7°C.

Shut the drainage valve by pushing on the pressure button. The pressure button should lock in position (b) ‘off ‘.

2) Automatic opening of the drainage valve:

If the temperature is less than 3°C on the drainage valve, it

will open automatically and the pressure button will pop out (position c); the water from the heater will drain via the purge hose (d).

3) Manual opening of the drainage valve:

Turn the rotating changeover switch 180° until becomes fixed in place; the pressure button pops out (position c). The water from the heater drains via the purge house (d).

To ensure proper drainage, the purge hose (d) of FrostControl must always remain free of obstructions (melting snow, ice, dead leaves, etc.).

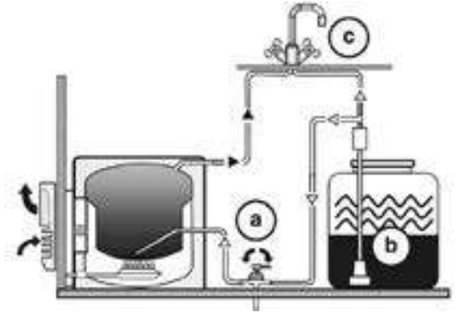
The warranty does not apply in the case of damage due to freezing!

XI. OPERATION OF APPLIANCES

Filling the water heater

Before starting your water heater for the first time and after draining:

1. Check to see that the security/drainage valve (14) is closed (a).
2. Switch the water pump on (main switch or pump switch) (b).
3. Open the hot water taps in the wash-room or in the kitchen (mixer tap or single control mixer in the « hot » position) until the water heater is full of water, all air has escaped and water is running freely.
4. If there has been a frost, it is possible that filling will not take place due to an ice plug formed in remaining water.



Start up

WARNING: never operate the water heater without water

Remove the outside cover from the flue.

Open the gas cylinder and gas supply pipe taps.

Switch the water-heater on by placing the selector switch figure (A) onto required temperature (b).

If the gas pipe is full of air, it will take about one minute before the gas reaches the burner. If the appliance indicates ‘failure’ (red light) repeat the process by switching off the appliance.

Waiting for 5 minutes and then starting again.

XI. OPERATION OF APPLIANCES

Switching off

Use control knob (a) to switch your water heater off (fig. A). Fit the chimney cover. Empty the water heater if there is any danger of frost.

If the heater will be shut down for a long period, close the fast closing valve in the gas pipe. Close the gas cylinder valve.

Red ‘failure’ indicating light

The red indicating light comes on if there is a failure. Possible reasons include no more gas, air in gas pipes, fault in safety element, etc.

To clear the ‘failure’, switch the apparatus off - wait for 5 minutes - and then start again.

Emptying the water heater

1. Switch off the electricity power supply to the water pump (main switch or the pump switch).
2. Open the hot water taps in the wash-room and in the kitchen.
3. Open the security/drainage valve (14).
4. Then drain the water heater using the safety valve (14) towards the outside. Check to make sure that all water runs out (10 or 14 litres depending on the model).

Maintenance

When you want to remove scale from the water heater, use wine vinegar or formic acid, putting it into the appliance through the water inlet. Allow the product to act and then clean the water heater thoroughly with fresh water. We recommend that you use ‘Certisil’ to determinate the appliance since other products, and particularly products containing chlorine, are unsuitable.

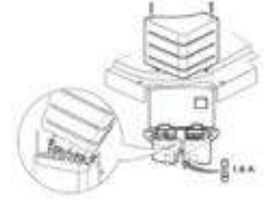
To prevent the spread of micro-organisms, you should heat the water heater regularly to 70 °C.

The water contained in the tank is not drinking water.

Your gas fittings must be checked regularly by a registered workshop. The owner is responsible for having these checks done.

Fuses

The appliance’s fuse is located on the appliance’s electronic command unit. Only replace the fuse with an identical model and rating of fuse: 1.6 A (slow blow)



XI. OPERATION OF APPLIANCES

COMBI TRUMA

An specific user's manual will be provided with the motorhome.

Operating instructions

The Combi D diesel heater is a warm air heater with a built-in water heater (10 litre volume). Burner operation is fan-assisted which ensures trouble-free operation even when on the move.

In winter mode, the heater heats the living compartment whilst simultaneously heating the water. Hot water only can be produced in summer operation.

- In summer mode, the water is heated using the smallest burner flow rate. The burner shuts down once the water temperature is reached.
- In winter mode, the unit selects the power level required automatically based on the difference between the temperature set on the control panel and the current room temperature. The water is heated automatically when the water heater is filled. The water temperature depends on the selected mode and the heater output.

At a temperature of approximately 3°C at the automatic FrostControl safety/ drain valve, the valve will open and drain the water heater.

An additional altitude kit is required for long periods of heater use at altitudes of 1500 to 2750 m.

Fuel supply

Fuel quality:

The heater requires diesel to operate according to DIN EN 590. The use of biodiesel is not permitted.

Fuel at low temperatures:

Refineries and even filling stations will automatically make adjustments for normal winter temperatures (winter diesel). Temperatures below freezing can cause problems if the vehicle still has summer diesel in its tank.

Temperature:

0°C to -20°C Winter diesel

-20°C à -30°C Polar or Arctic diesel

It is forbidden to mix used oil!

Operating instructions

INFO: It is essential to flush the entire water supply system through with clean water before using for the first time. Always drain the water heater when not in use if there is a risk of frost!

We will not accept any responsibility for damage caused by frost!

INFO: The materials in the equipment that are in contact with the water are suitable for drinking water

XI. OPERATION OF APPLIANCES

COMBI TRUMA

Control panel type 1:



- a. Rotary switch to adjust the temperature (1-5)
- b. Green LED lit «operation» green LED blinking: «shut-down time-out» to lower the unit's temperature is operational.
- c. Summer operation (water temperature 40°C or 60°C)
- d. Winter operation (heating without water temperature control or with bled water installation)
- e. Winter operation (heating with water temperature control)
- f. Rotary «Off» switch
- g. Yellow LED lit: «water heater heating phase»
- h. Red LED lit, red LED blinking: «Fault»

Control panel type 2:



1. Display
2. Status line
3. Menu line (top)
4. Menu line (bottom)
5. 230V mains voltage display
6. Timer display
7. Controls / Values
8. Rotary button / push-button
9. Back button

With the rotary button / push-button (8), you can select the menus on the lines (3 + 4) and make adjustments. The result is displayed on a backlit display (1). Use the back button (9) to jump back to the previous menu.

Room Thermostat:

An external room temperature sensor is located in the vehicle to measure the room temperature. The position of this sensor is determined individually by the vehicle manufacturer based on the vehicle type.



The thermostat setting on the control panel (1-5) must be determined individually based on the heat requirements and the vehicle type. We recommend a thermostat setting of about 4 for an average room temperature of about 23°C.

Start up:

In principle, heating is always possible without restriction, with or without water.

Check that the cowl is not obstructed. You must remove any lids.

Summer mode operation (water heater only)

Move the rotary switch on the control panel to position (c - summer operation) 40 °C or 60 °C. The green (b) and yellow LEDs (g) light up.

The burner shuts down and the yellow LED (g) is extinguished once the set water temperature is reached (40 °C or 60 °C).

Winter mode operation (Heating with controlled water temperature)

Move the rotary switch to operational setting «e».

Turn the rotary switch (a) to the desired thermostat setting (1-5). The green operating LED (b) lights up and simultaneously displays the selected room temperature setting. The yellow LED (g) displays the water's heating phase.

The unit selects the power level required automatically based on the difference between the temperature set on the control panel and the current room temperature. Once the room temperature set on the control panel has been reached, the burner switches back to its lowest power level and heats the water to 60°C. The yellow LED (g) turns itself off once the water temperature has been reached.

The warm air fan can continue to run to cool the unit (shut-down time-out).

Heating without controlled water temperature.

Move the rotary switch to operational setting «d».

Turn the rotary switch (a) to the desired thermostat setting (1-5). The

green operating LED (b) lights up and simultaneously displays the selected room temperature setting. The yellow LED (g - water heating phase) only lights up when the water temperature is below 5°C).

The unit selects the power level required automatically based on the difference between the temperature set on the control panel and the current room temperature. The burner shuts down once the room temperature set on the control panel is reached.

The warm-air fan continues to run slowly as long as the blowing temperature (on the unit) is less than 40°C.

The water is also heated automatically when the water heater is filled. The water temperature then depends on the heater output and the time taken for the heater to reach the desired room temperature.

Heating with purged water system.

Move the rotary switch to operational setting «d».

Turn the rotary switch (a) to the desired thermostat setting (1-5). The green operating LED (b) lights up and simultaneously displays the selected room temperature setting. The yellow LED (g) only lights up when the water temperature is below 5°C!

The unit selects the power level required automatically based on the difference between the temperature set on the control panel and the current room temperature. The burner shuts down once the room temperature set on the control panel is reached.

XI. OPERATION OF APPLIANCES

COMBI TRUMA

Shutting down

Shut the heater down with the rotary switch (position f). The green LED (b) will turn itself off.

INFO: If the green LED (b) blinks after the power is switched off, this means that a shut-down time-out to lower the unit temperature is running. This stops after a few minutes and the green LED (b) goes out.

Always drain the heater if there is a risk of frost!

Maintenance:

It is mandatory to use original Truma parts for all maintenance or repair work.

The water tank is made of steel used for alimentary applications.

To protect the apparatus from colonisation by micro-organisms, use chemical methods to remove biofilms, deposits and scale. To avoid damage to the apparatus, use only non-chlorine containing products.

If necessary, regularly reheat the water in the water heater to 70° C to maintain the effectiveness of the chemical method for combating micro-organisms inside the apparatus. Adjust the rotating switch on the thermostat control to position 'c' (summer mode, 60° C). The green (b) and the yellow (g) LEDs will light up.

INFO: When the water in the water heater reaches a temperature of 60° C, the burner will stop and the yellow LED (g) will turn off. The apparatus should remain lighted for at least 30 minutes and no hot water should be used. Residual heat from the thermal exchanger will heat the water to a temperature of 70ºC.

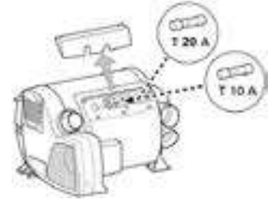
When the water in the water heater reaches a temperature of 60° C, the burner will stop and the yellow LED (g) will turn off. The apparatus should remain lighted for at least 30 minutes and no hot water should be used. Residual heat from the thermal exchanger will heat the water to a temperature of 70ºC.

Fuses

The fuses are in the electronic control unit underneath the connector cover. Replace defective uses with exactly the same fuses only.

Unit fuse: 10 A - delayed action - (T 10 A)

Burner fuse: 20 A - delayed action - 6.3 x 32 mm



XI. OPERATION OF APPLIANCES

Starting operation

The device is not suitable for use as a tankless water heater.

In principle, heating is always possible,

with no restrictions, whether or not there is water.

Verify that the chimney is free. You must remove any coverings.

Open the valve of the gas cylinder and the quick-closing valve on the gas supply duct.

Summer mode (Boiler only)

Combi 6 :

Gas-powered only. The water temperature can be set to 40°C or 60°C.

Combi 6EH :

Use the gas or 230V electricity supply to produce hot water.

The water temperature can be set to 40°C or 60°C.

For gas operation, the water volume is heated using the lowest burner setting. The burner halts once the water temperature is reached.

For electrical operation, it is possible to choose manually between 900W (3.9A) or 1800W (7.8A) depending on the fuse protection on the camp site.

Mixed operation is not possible. In this setting. The equipment automatically chooses electricity. No activation of the gas burner.

Winter mode

Heating with controlled water temperature.

Combi 6EH :

Choose gas, electricity or mixed operation with the energy switch.

Combi 6 and 6EH :

The appliance automatically chooses the required power level, according to the difference in temperature between the ambient temperature selected on the control knob and the actual temperature.

When the ambient temperature selected on the control knob is reached, the burner returns to the lowest power level and will heat the water to 60°C.

The hot air fan may continue to run to cool the device (timer stopped).

- Heating without controlled water temperature. Controlled or with the installation of water drained

Combi 6EH :

Choose gas, electricity or mixed operation with the energy switch.

Combi 6 and 6EH :

XI. OPERATION OF APPLIANCES

The appliance automatically chooses the required level of power, according to the temperature difference between the ambient temperature adjusted on the control knob and the actual temperature. The burner stops once the ambient temperature adjusted on the control knob is reached.

The hot air fan continues to work at low speed as long as the blower temperature (on the unit) is above 40° C.

When the boiler is full, water is also heated automatically. The temperature of the water depends on the power of the heating delivered and the length of heating necessary to reach a desired ambient temperature.

Shut-down

Combi 6 and 6EH:

Press the rotary button / push button for more than 3 seconds. A switch-off timer to reduce the unit's temperature is active.

If freezing weather is expected, you must empty he boiler!

In case of prolonged shutdown, close both the quick-closing valve on the gas supply duct and the gas cylinder valve.

XI. OPERATION OF APPLIANCES

ALDE COMPACT 3020 HE

A specific user manual is provided with the documentation of the motorhome. Functions marked with a (*) are accessories, which are not installed on all vehicles.

Launch the settings menu by pressing the MENU button. The background light comes .on and those functions that can be set are displayed. Settings that you make are automatically saved after 10 seconds. The control panel will go to standby automatically after 30 seconds if the screen has not be touched.

1. Panel control in standby mode.



2. The control panel in settings menu.



3. Set the desired temperature



3. Set the desired temperature:

The temperature can be set between +5ºC and +30ºC, inclusive, in increments of 0,5ºC.

The temperature displayed is the temperature which is currently set. Increase the temperature by pressing the “+” button. Reduce the temperature by pressing the “-” button. The settings are now complete and the boiler will work at the set temperature.

XI. OPERATION OF APPLIANCES

ALDE COMPACT 3020 HE

4. Domestic hot water

4.1 No hot water



4.2 Normal operation



4.3 More hot water



The boiler is fitted with a built-in hot water boiler which can hold approximately 8.5 litres. The boiler can equally well be used without there being any freshwater in the boiler. There are three different settings for hot water: no hot water, normal operation and more hot water.

4.1 No hot water. If domestic hot water is not needed, press the ”-” button (symbol becomes empty). **4.2 Normal operation.** If there is freshwater in the heater and hot water is required, press the “+” button (the symbol will then show half-shaded). **4.3 More hot water.** If you need more hot water, the water temperature can be temporarily increased to around 70°C. Press the “+” button so that the symbol shows fully shaded (black). The boiler returns to normal operation after 30 minutes. NB. If the pump operation function is set to Cont., see section 2:11 point 17, then the continuous pump operation function is turned off for 30 minutes, before then returning to continuous pump operation. NB. If an additional hot water tank (*Alde Flow part no. 3020 161) is installed and the panel is in more hot water mode, the hot water function can then be in operation for longer than 30 minutes. **Info!** When hot water only is required, during the summer for instance, or when there is no requirement for hot water, no settings need to be made; the boiler looks after this function automatically.

XI. OPERATION OF APPLIANCES

5. Heating with electricity



Proceed as follows to activate heating with electricity. The more power (wattage) you select, the quicker heating will take. The boiler uses no more power than is needed, even if it is set for 3kW.

5.1 Use the + or - button to switch on the electric heating and toggle between the various power modes (Off, 1 kW, 2 kW or 3 kW) The set value will be displayed on the screen. The activated mode is indicated by the + button changing colour to green. If a *load monitor is installed and set, the boiler will not use more electricity than it is capable of even if 3 kW is selected. **5.2** The settings are now complete and the boiler is working at the set temperature. **5.3** To switch off electrical operation, use the - button to toggle to Off.

6. Heating with gas



Proceed as follows to activate heating with gas. A priority can be set when selecting both electricity and gas.

6.1 Start gas operation by pressing the LPG flame symbol. The LPG symbol is activated and changes colour to green. **6.2** The settings are now complete and the boiler will work at the set temperature. **6.3** To switch off gas operation, press the LPG flame symbol. It will now change to blue.

XI. OPERATION OF APPLIANCES

ALDE COMPACT 3020 HE





7. Fully automatic climate control (AC) *

If a Truma AC is connected up to the Alde, then the ACC button is visible and it is possible to control ACC from the panel. This function makes it possible to have fully automated climate control for both heating, cooling and hot water. The button is grey if not installed or if 230 V is disconnected. With an outside temperature sensor fitted, ACC function is improved: operation of the AC is modified in line with the outdoor temperature.

7.1 Set the desired temperature. **7.2** Press the blue ACC button, the button turns green (see fig. 2) and the ACC function is switched on, but is not necessarily in operation. If gas and/or electricity is switched on, AC and the boiler work to deliver the temperature set, regardless of whether heat or cooling is needed in the vehicle. To turn off the ACC function, press the ACC button and it becomes blue. **7.3** To turn AC lighting off and on, press the button rapidly. When the button is kept pressed in, the light changes from dark to light and then back (light to dark) and so on in 8 brightness levels. When the button is released it stays at the current brightness. This button is only visible when an AC* with in-built light is connected. **NB.** Temperature sensors that are used when fully automatic climate control is in operation must be positioned so that they are influenced equally by the heat from the Alde heating system and the air from the AC. In certain cases it can be an advantage to use Alde's temperature sensor (part no. 3010 638).

8. Activated Functions (A)

Activated functions can be accessed by pressing the A symbol (see figure 1). This screen shows the various functions that are activated. The respective function that is activated can be accessed from here and new settings can be made

AIR HEATER RUNNING ON DIESEL

Some different makes of heater are used.

No more gas-oil for heating is supplied once the reserve level of the carburant tank has been reached (alarm on the control panel). Therefore, do not wait for this alarm to go off before refilling if you intend to use this type of heating.

Since starting these heating devices uses a high amount of 12 V current, we highly recommend starting them during travel. This operation enables having a warm unit when you stop with a low impact on your battery and gas consumption.

It is mandatory to stop the gas-oil heating element and wait until it becomes fully extinguished (burning of residues and ventilation of exhausts) before turning off the electricity for the control panel.

WEBASTO AIR HEATER Air Top 55 and Air Top 40

It is easy to operate:

- Switch on using the rotary knob shown below, usually located on the front seat.

A green light appears in the centre of the button when the appliance is working.

Turn the knob to the maximum position to start off and when it has regulated turn to the required position (about half-way for a temperature of 20 °C).

Never leave the heater set to maximum, as the safety cut-out may be triggered (overheating).

- Return to position 0 to switch it off.

A temperature sensor is fitted on the driver side wall.

At least two outlets in the ventilation system are not fitted with smoke dampers. Do not reinstall the check valves or obstruct these heater exhaust outlets.



This equipment is designed by Webasto to operate up to 2000m and at external temperatures up to -40 °C

XI. OPERATION OF APPLIANCES

Maintenance and safety instructions:

Servicing relative to the warranty concerning these devices must be done only by repair shops that have been approved by the manufacturer.

Warranty claims are accepted only if it is possible to verify that the plaintiff has respected the upkeep and safety instructions.

Because of risk of explosion, heating must be turned off at service stations and during filling of the vehicle gas tank.

Because of risk of intoxication and asphyxia, heating must not be used in an enclosed area (a garage, for example).

For optimal performance, the heater should be checked every two years, particularly if it is used during long periods and/or in extreme environments.

The diesel/gas-oil fuel indicated by the vehicle manufacturer must be used for the Dual Top RHA-100 heating system. Class EL, L and PME (biodiesel) domestic fuels cannot be used.

There is no known drawback to the use of additives.

If fuel is taken from the vehicle tank, follow the vehicle manufacturer's instructions concerning additives.

If you change to a special low-temperature fuel, run the eating device for around 15 minutes so that the system becomes filled with the new fuel.

Do not clean the heater with a high-pressure cleaning system. Take care of the vehicle and fully empty the water heater and all waterways if there is a risk of freezing.

The warranty does not cover damages caused by freezing!

IMPORTANT: In order to avoid mechanical parts from seizing, it is advisable to run the heating unit for around 10 minutes every 4 weeks.

XI. OPERATION OF APPLIANCES

GAS CIRCUIT

Your motorhome has standard equipment for using either PROPANE or BUTANE gas.

Located in a sealed compartment and accessible from the outside through a hatch:

- A place for a standard cylinder (13 kg household / 30.6 litres)
- A place for an extra cylinder (13 kg household / 30.6 litres)

ONLY ONE CYLINDER AT A TIME IS CONNECTED TO THE CIRCUIT FOR STANDARD VEHICLES

Connection elements:

Standard:

- A flexible gas connector.
- A low-pressure regulator for adjusting pressure for normal use at 30 mbar.

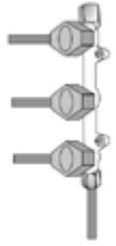
Options:

- Depending on version and option, there is an automatic inverter to ensure initial pressure release and automatically extract the second cylinder if it has been opened when the first one is empty.
- A pressure regulator with a built-in collision sensor which allows operation of the gas installation during travel (see below for operation)

Located next to the devices (i.e.: in the cupboard under the sink and fridge or under the bed)::

- Valves ensure faucet operation and separately cut off outflow (fridge/cooktop/heating and optional oven).

A pictogram indicates their destination.



VALVE OPENING

The valves must be turned in the same direction as the distribution tube for each device. An arrow on the valve lets you check its position.

VALVE CLOSING

The valves must be turned perpendicularly to the distribution tubes for each device.

Implementation of the pressure regulator with a built-in collision sensor:

In case of abrupt braking or a collision, the captor cuts off gas flow. To reinitialize the collision sensor, press the YELLOW button down for a few seconds. Make sure the pressure regulator is in a vertical position.



Test reinitialization by turning on a gas device, such as the cook top.

If the device does not operate, repeat the steps

If the device fails to operate after several tries, contact your dealer / salesperson.

XI. OPERATION OF APPLIANCES

GAS CIRCUIT

Supply to the appliances

- Check that the valves to the various appliances are closed,
- Open the gas cylinder.
- Then open the valves supplying each appliance.
- Ignite the various appliances.
- Ignition may take some time because air in the pipes has to be purged.

Each appliance is equipped with a safety device that switches the gas supply off if the flame is accidentally extinguished.

- Closing circuits: proceed in the same way as when opening them, but in the reverse order.

Recommendations :

All appliances operating on gas must not be used unless the vehicle is stopped. (Parked vehicle).

Make sure that the cylinder(s) is or are properly closed before starting to drive.

Safety ventilation grills should not be obstructed – evenly partly – for any reason.

Naked flame heaters should not be used to heat the living area.

Make sure that the external grills are not obstructed by any protective devices that have been put in position, before switching the fridge and the water heater.

The grills are not supplied as standard with the motor caravan, but are available as an after market option from your distributor (optional).

WARNING :

Never fill the gas tank when gas devices are in operation.

IMPORTANT :

The installation of gas appliances should be done by authorised personnel which will absolutely make a proof test and leak test from the gas circuit

Gas cylinders must be placed where indicated by the manufacturer.

You must not use means of connection that have not been authorised by the manufacturer.

You must not change, have modified or allow changes to the gas circuits unless authorised by the manufacturer; any change must be made by a certified installer. In particular, this concerns replacing the pressure regulator supplied by the manufacturer with another type/pressure or a different flow.

You must not use gas devices with a pressure different from the pressure recommended by the manufacturer.

We recommend regularly checks on the flexible hoses (each time the gas tank is changed and at least once a year); if they have deteriorated, they must be replaced.

We recommend that you avoid leaving the gas connection tubes disconnected or without a stopper to keep them from becoming filled with dirt or insects.

If you smell gas, you must **IMMEDIATELY** shut off the supply from the gas tank. Extinguish all open flames, including cigarettes and pipes. Do not switch on the electricity. Open all doors and windows to let the gas escape.

Propane gas is heavier than air; consequently, gas leaks will remain at floor level. The noxious odour of gas allows locating the source of the leak. Make sure the leak is not coming from a device that has been turned off.

Never look for a leak holding an open flame. You must use a spray or a soapy solution to locate leaks

IMPORTANT :

- When you are on the road, close the gas circuit stopcocks and the gas cylinder valves, except for special equipment.
- Have the gas installation in your motorhome checked every two years by a specialist.
- Replace pressure regulators and gas pigtails no later than ten years after the manufacturing date.

WATER CIRCUIT

Your motorhome is equipped with:



- A clean water tank,
- A waste water tank

Filling:

Standard: The clean water tank is filled through an opening with a screw on stopper located on the unit exterior and indicated with a pictogram.

Double: One of our models is equipped with a traditional filling system inside the living unit in the kitchen block area and another specific system outside the unit. Filling is done under domestic pressure (2.5 – 3 bars) with a special adaptor that should be placed at the end of the water input hose.



To open and close the cap with the key, hold the cap in place to keep it from moving when you turn the key in the lock.



If the control panel is in fill mode.

An LED will light up to indicate that the tank is almost full and that filling should be stopped.

Internal power supply:

The water supply uses a 12 V electric pump. Pressurize the pump as follows.

- Check that all taps and mixers are closed (cold water and hot water).
- Switch on the 12 V pump, using the switch on the electric control panel.
- Purge the cold water and hot water circuits using each tap or mixer.
- The installation is then ready to operate.

A purge fault (presence of air) may prevent the water heater from operating.

Clean water

When traveling, do not wait to be almost dry to stock. To refill the clean water tank, you can do it at the same time as when you stop for petrol for example. Some service areas have a tap but, in all

cases, you should be discreet and diplomatic. Moreover, increasingly common feature specific points with specialized terminals (EURO-RELAY example).

The water contained in the tank is not a drinkable water.

Waste water

- You cannot empty the waste water tank wherever you want.
- The wastewater tank is evacuated with the help of a knife gate valve that allows quick draining of the tank.



- Locate the valve on the exterior of the motorhome.
- Manipulation handle (pull towards you for opening)
- Knife gate valve

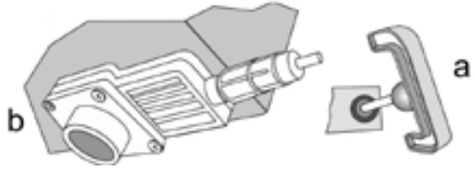
Insulation

Certain of our models feature specific insulation of the wastewater tank, which are found under the vehicle chassis.

Water pump

For the Shurflo pump models, the tank must be completely drained during the winter. Draining is done by opening the drain tap or by opening all the taps and operating the pump (15 minutes on, 15 minutes off) until the tank is empty.

Next, disconnect the pump's inlet and outlet pipes, preparing a container to catch any residual water. Switch the pump on to evacuate any water remaining in the pump. To avoid problems due to freezing, do not reconnect the pipes during the winter, and leave all the taps open.



WARNING

If you are not heating your vehicle when winter approaches, you must empty all clean water and waste water circuits and the water heater, to prevent any damage which will not be covered by the guarantee.

XI. OPERATION OF APPLIANCES

CIRCUIT 230V

230 V power supply connector:

The mains power supply is connected to an EEC 230 V connector (2 pins + earth) on the right or left side of your motorhome. Lift the protective cover when you want to access it and insert the standard plug (Differential protection).



230 V internal power outlets:

There are one or more 230 V power outlets in your living compartment.

Protection 230 V:

A Circuit breaker protects your motorhome during 230 V voltage.

This circuit breaker is located in the wardrobe, under the bench or low elements in the living compartment depending on the model.

Move the control upwards (I position) to switch on the power.

XI. OPERATION OF APPLIANCES

SWITCHING ON AND OFF RADIOS

To turn the radios on and off, an external switch has been installed. Its function is to connect and disconnect the radio without having to have a contact signal. The radio will draw power from the auxiliary battery and not from the vehicle. If your vehicle does not have an auxiliary battery, the switch is ON and the engine is running, the power will be drawn from the alternator.

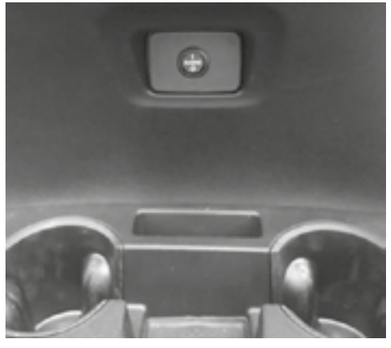
FORD chassis radio:

On vehicles with FORD chassis, it is located next to the dashboard, on the driver's side, next to a 12V socket.



FIAT chassis radio:

On vehicles with a FIAT chassis, it is located in the central part of the cabin, next to the space for the bottles and slides.



XI. OPERATION OF APPLIANCES

PANORAMIC SKYLIGHTS

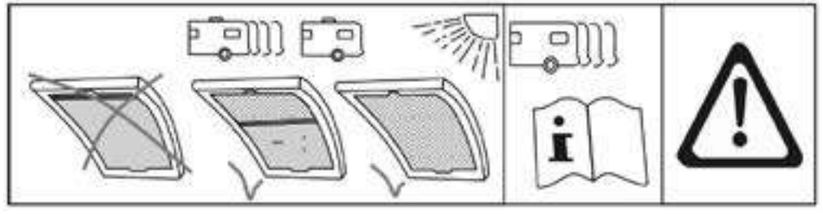
Suggested precautions:

- Close the roof light fully before driving the vehicle (make sure they are locked).
- Do not leave the roof light open when absent from the vehicle.
- Do not open the roof lights in high winds or heavy rain.
- Remove snow, ice or any dirt from the roof lights before opening them.
- When the sun is shining, the shade for the skylight(s) must be closed maximum at two-thirds.
- In case of damage, see a specialized repair shop

The methacrylate glass of the panoramic windows, such as that in the living cell bays, must be cleaned only with soapy water or with special products for methacrylate glass. Fine scratches and some dull stains may be removed with polish and a soft cloth.

Only use soapy water to clean the blinds. Failure to comply with these recommendations will automatically invalidate the guarantee. Using products other than soapy water will have disastrous consequences for the acrylic glass (deterioration, cracks, etc.).

A sticker on the skylight reminds of the proper use of the skylight and its folding blind.



XI. OPERATION OF APPLIANCES

BEDS

Roof bed:

The roof bed, depending on the model of your motorhome, can be manual or electric. These beds have a safety net in order to prevent falls.

Manual:

The manual roof bed is secured with a safety belt. To open it, unlock this belt previously.

Open the folding roof bed by lowering it to its proper position, if this type of bed exists in your model.

When you start driving again, remember to fold it back to have more driving space.

Electric:

Depending on the model, your vehicle may have an electric roof bed. This type of bed has a control switch to be able to move the bed up or down.



To manoeuvre the bed in high and low positions, you should press continuously on the switch.

If the bed is placed in an intermediate position, it is possible to sleep in it, accessing to it by a step ladder, and also in the lower part, using the eating area

IMPORTANT: In the case that maneuvering the bed involves raising or lowering the cupboards, the maximum weight capacity is 5 kg each one

NB: The maximum weight allowed on a movable bed is listed on a sticker stuck to the side of the bed.

As an indication, usually:

- Electric roof bed : max. 230 kg
- Manual roof bed : 150 kg

We supply a crank in order to operate the bed in case of system failure. Depending on the model, you will find the hole to insert the crank in (please see images below)



XI. OPERATION OF APPLIANCES

BEDS

In the dinette area:

- Put the table between two seats or in front of the seat, depending on the model.
- Putt the sliding extensions into position (if there are any) at each end of the bench.
- Lastly, put the different cushions in place: seat and back cushions and other bedding parts.
- On certain models other bedding parts are available as an option (check with our dealers).

Bunks:

When the upper bunk or beds are used by children, in particular children under six, pay attention to the risk of falling and take all necessary precautions to ensure their complete safety.

Certain models are equipped with safety nets that should be put in place under your responsibility.

A sticker placed on the side of the roof bed, reminds you of this risk.



Rear bed:

The bed can be raised using a crank; there are two possibilities.

1. 1. ..The mechanism and crank are located under the bed, with access from the garage door.
2. 2. ..The mechanism and crank are located under the bed, with access from the front side of the bed.

Raise the mattress base and mattress for an easier process.





An advice:

Do not hesitate to ask your distributor to demonstrate all these operations when you collect your motorhome.

HE IS A SPECIALIST!

Never force an element when trying to put it into place. We recommend you that you choose a type of bedding according to the bed size (including sheets and duvet covers).

ELECTRIC TABLE SUPPORT

Some of our models have an electrically driven table support.

For safety reasons, this support can only be operational when a switch with the drawing of an electric table is pressed.

CHEMICAL WC MODEL C250

Watch out for the air pressure when opening the WC cassette trap, especially when travelling in the mountains. Open it then with the WC bowl lid closed. You will find below a short description on using this equipment.

Specific documentation is supplied with the camper.

The toilet has two parts: a permanently-fixed part and a waste-holding tank accessible from the outside. The removable waste-holding tank is located underneath the bowl and can be removed via a hatch on the outside of the motorhome.

Start up:

1. Open the access hatch on the outside of your motorhome.
2. Remove the waste-holding tank by pulling the safety catch (which holds the tank in place) upwards.
3. Pull the waste-holding tank outwards until the end stop. Tilt it slightly and remove it completely.
4. Place the waste-holding tank upright and turn the rotating emptying spout upwards. The emptying spout is used to empty the tank easily and hygienically.
5. Remove the cap (with the measuring cup inside) from the emptying spout and pour the correct dosage of Thetford toilet fluid (see product label) into the waste-holding tank. This avoids unpleasant smells and keeps the inside of the tank clean.

Next add approximately two litres of water - enough to cover the bottom of the tank completely

N.B.: Never add toilet fluid directly via the blade or bowl as this could damage the lip seal on the waste-holding tank.

Always pour the fluids via the emptying spout.

6. Slide the waste-holding tank back into its original position via the access hatch. Make sure that it is secured with the safety catch. Close and lock the access hatch.

Using the toilet (standard)

Turn the bowl to the desired position with the cover closed and using both hands.

To activate the control panel, press the flush-button once. The control panel display will stay activated for approximately 5 minutes. Run some water into the bowl by pressing the flush button again briefly.

You can use the toilet with the blade open or closed.

To open the blade, slide the blade handle under the toilet bowl sideways.

After use, open the blade (if it is still closed) and flush the toilet by pressing the flush button for several seconds (if necessary, re-activate the control panel). Close the blade after use.

Important notice! Please do not travel with a flush-water tank, if fitted, that is too full. Similarly, do not travel with water in the toilet bowl. Failure to comply with this notice may result in water damage to your camper.

Emptying

The waste-holding tank holds eighteen liters: it requires emptying when the red indicator light on the toilet control display lights up. The red light lights up when the waste-holding tank can only hold about two more liters, which is no more than two to three further uses.

Make sure that the blade is closed. Open the access hatch on the outside of your motorhome. Pull the safety catch on the waste-holding tank upwards and remove the waste-holding tank.

Place the waste-holding tank in an upright position (pull-out handle at the top, wheels at the bottom). Slide the handle sideways towards the front of the tank until it is released from its locked position.

Pull the handle up and wheel the waste-holding tank to an authorized waste disposal point.

Push the handle back into its locked position. Turn the emptying spout upwards and remove the cap. Hold the waste- holding tank in such a way that during emptying you can operate the vent plunger with your thumb. To empty the tank without splashing, depress the vent plunger while emptying the tank.

After emptying, rinse the tank and blade thoroughly with clean water.

Warning! Do not seriously shake the tank or use high pressure water cleaners. This could damage the inside of the tank.

Note: the vent plunger should only be depressed once the emptying spout is pointing downwards. Prepare the toilet for re-use if required. Slide the waste-holding tank into the toilet and close the access hatch.

Cleaning and maintenance

The toilet should be cleaned and maintained regularly, depending on the amount of use.

Note: never use bleach, vinegar or other detergents that contain these substances. These could damage the seals and other toilet components permanently.

Toilet bowl:

- Squirt a few drops of Thetford bathroom cleaner into the toilet.
- Flush the bowl with water and wipe the rest with a damp cloth.
- Clean the seat and the lid. The seat and the cover can be removed easily.
- To keep your toilet fresh and prevent deposits from forming in the bowl, add a suitable amount of Aqua Rinse into your toilet's flush water tank (if appropriate).

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

Cold weather operation

You can use your Thetford Cassette Toiler as normal in cold

WC XI. OPERATION OF APPLIANCES

CHEMICAL WC MODEL C250

weather as long as it is in a heated location. Otherwise it may freeze. We advise you therefore to drain the toilet following the instructions under «Storage». It is inadvisable to use anti- freeze as used in car radiators for it is not environmentally- friendly.

Storage

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

- Activate the control panel by pressing the flush-button once. Open the blade and press the flush button until water stops flowing into the bowl. Close the blade. Open the access hatch on the outside of the camper and empty the waste-holding tank in an authorised waste disposal point. Follow the cleaning and maintenance instructions. To allow the waste-holding tank to dry rapidly, do not place the cap back on the emptying spout of the tank

XII. MOVING THE SWIVELLING SEATS IN THE DRIVER'S CAB

Some of our models feature swivelling cab seats which can be used to form an inviting front sitting area.

Having said that, rotating the driver's seat could in some circumstances require releasing the handbrake to make it easier to rotate them facing the living room.

For safety reasons and before carrying out any operation, you must make sure that you can proceed in all safety.

1. Proceed with the engine off.
2. Only proceed if the vehicle is parked on level ground.
3. Wedge the vehicle wheels with suitable wedges and engage 1st gear.
4. Only now can you release the parking brake, rotate the seat, put the parking brake back on immediately and take the vehicle out of gear

XIII. SAFETY (VENTILATION – FIRE EXTINGUISHER)

Ventilation:

Your motorhome unit is equipped with safety ventilation in compliance with current legislation. These gratings, which are usually found under the fridge and furniture elements and in the gas box, as well as in the access step to the unit door, must never be blocked.

For your safety, it is essential to clean these grills at least once a year (blowing and brushing from outside).

Fire Extinguisher

Your motorhome living area is equipped with an approved fire extinguisher.

It is advisable to carry out the necessary checks to keep this device in good working order.

Control is under the responsibility of the motorhome owner.

Safety exit

Access to safety exits (windows, unit door) must always be clear of obstacles.

The safety windows must open toward the exterior or slide horizontally and provide a minimum opening of 450 mm in all directions. (EN 1646.1).

XIV. WINTER USE

PRECAUTIONS AND RECOMMENDATIONS:

For winter driving, and particularly for driving on snow, you should use the same rules for a motorhome as for a private car, in other words drive very smoothly without sudden acceleration or braking.

In any case, your motorhome will tend to hold the road better than a car, simply because it is heavier, and therefore grips the road better. It will lose its grip later than a car, but when it does skid, it will be much more difficult to control, therefore BE CAREFUL.

You must put chains before driving on thick snow, but before doing so for the first time we recommend that you try to install them at home in peace. It can only be easier than when you really need them, often when it is snowing.

The most difficult problem to solve in the living compartment during winter use is condensation.

The keyword to prevent the condensation phenomenon is AERATION. Particularly in the winter, do not close the bottom or top aeration systems in your motorhome.

Another important point for the comfort during winter use is the waste water tank which must not freeze. Add either antifreeze, salt or alcohol to lower the freezing point.

NOTE:

An optional heating element can be installed by your dealer



XV. CLEANING

External cleaning

To clean the body, never use a system with rollers since you run the risk of deteriorating or tearing off the ventilation structures of your mobile home.

High-pressure cleaning systems should never be used.

Internal cleaning:

Do not use sponges with abrasive bands to clean the furniture because the furniture covering is of the ‘paper’ type.

WARNING: Using wallpaper is, of course, strictly forbidden.

For the floor, avoid sand which is abrasive and can damage the surface of the floor covering.

Consequently, do not allow it to enter the living compartment at all costs.

Do not use large quantities of water when cleaning the floor, since this could reduce the life of your cell (presence of wood). The best cleaning appliance is a vacuum cleaner.

We use bay windows and panoramic skylights in methacrylate. They should be cleaned **only with soapy water and a sponge (never use any other type of product; see Chapter V).**

Cushions, curtains, etc. generally require dry cleaning.

XVI. STORAGE IN WINTER

This is the period during which you no longer use your motorhome.

Like any other vehicle, it tends to age much more quickly when it is not being used. Therefore, take appropriate precautions:

1. Drain all water circuits (clean water, waste water, WC toilet cassette), and your distributor / vendor will help you the first time since you need to be thoroughly familiar with your vehicle.

Refer to the paragraph on the pump operation (page 48) to bleed the water pump.

1. The gas cylinder must be closed and, ideally, removed; in this case, block the gas line. Do not forget to close all ventilation orifices so that insects cannot enter (blanking pieces available as an option).
2. Take the batteries out and charge them, and then store them in a dry, frost free location, unless you can leave your motorhome plugged in to a 220 V mains power supply while you are not using it, to keep the batteries charged and frost free.
3. We suggest you install appropriate screens or plugs over the air gratings.
4. If the motorhome will not be used for an extended period of time, remember to ventilate it regularly.

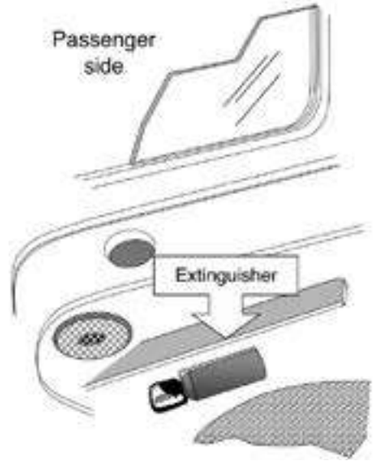
XVII. A-CLASS

BATTERY COMPARTMENT

The Amphitryon battery is located under the passenger seat.

If the motorhome has the ALDE heating installed, the auxiliary battery is located in the bench of the folding passenger seats, and the second auxiliary battery in the pilot's seat.

EXTINGUISHER (OPTION)



WATER TANK:

- Your motorhome is equipped with a drinking water tank located under the rear bench of the dining area or under the fixed bed. This tank will not freeze when your motorhome is heated in the winter; it can be drained using a manual valve. This deposit is equipped with an electronic probe which measures the number of litres it contains; the filling level is shown on the control panel.
- At the tank outlet, a negative-pressure pump powered by 12 V electricity turns on when the faucet is opened. It operates only if the control panel switch has been turned on. The pump primes itself and the flow is 10.6 l / min.

Start-up and maintenance:

The water tank is filled through the filling opening located on the left or right side of the vehicle using a flexible seamless hose. If water starts to run out of the tank, this indicates that it is full. To avoid overfilling, check the filling level on the control panel.



You can check the filling level by checking you only need to check the filling level in the control panel.

Water pump

When the pump is turned on (see control panel in Chapter 8), it starts to operate automatically as soon as the faucet is opened.

Inappropriate functioning for a few seconds when all faucets are closed indicates; that there is air in the installation, that a faucet is improperly closed or that there is a leak. Check the circuit: sometimes the problem is due simply to a loose sleeve clamp.

When the tank is empty, we recommend cutting off the electrical power to the pump to keep it from operating when dry, since this might damage it.

WARNING :

The source used and the means of filling do NOT guarantee that the water will be potable.

XVII. A-CLASS

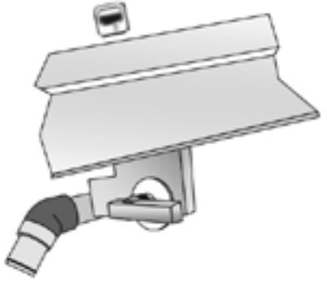
IMPORTANT: It is strongly recommended to always empty water in the circuit, tank and water heater when there is a risk of freezing and your camper is not being used.

DRAINING OF FRESH WATER TANK

1. To drain hot and cold water, proceed as follows:
2. Turn the pump off on the control panel.
3. Empty the tank by opening the cap(s). A valve is located inside the vehicle close to the tank. 3 - Open the water heater faucet (see the chapter on WATER HEATER/HEATING)
4. When the deposit and the water heater are empty, open the faucets and pump starter for a few seconds.
5. When the circuit is empty, close the fresh water tank valve and the heater drain valve

DRAINING OF WASTE WATER TANK

- All waste water (washbasin, sink and shower) is collected in a rigid tank with a capacity of around 100 litres located under the vehicle floor.
- A sensor signals when the tank is full, the warning light comes on and there is a beeping noise on the control panel.
- Tanks are emptied using a manual valve for wastewater and by removing a stopper for the clean water containers located on the side of and under the vehicle.

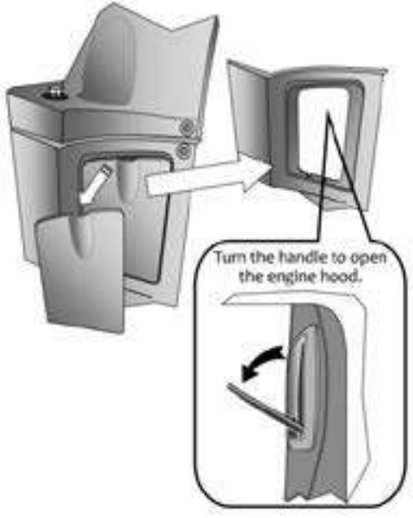


WARNING:

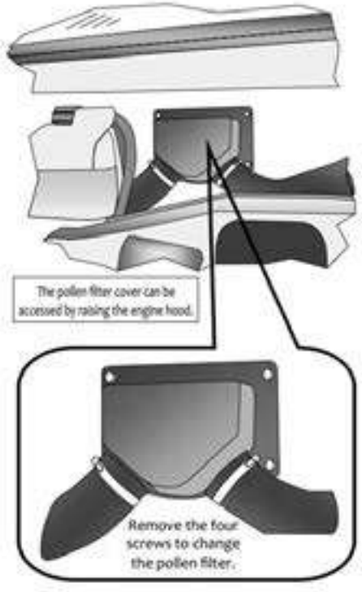
If you use your motorhome in very cold weather, the MANUFACTURER cannot completely guarantee that the waste water circuit will not freeze. Remember that insulation without a heat supply will only delay the thermal exchange

OPENING THE ENGINE BONNET

There is a lid to the left of the driver. Slip your finger into the slot and pull the lid towards you to access the handle which opens the engine hood.



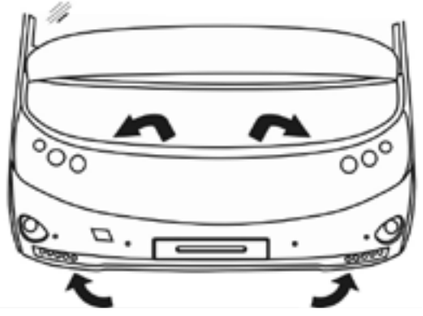
POLLEN FILTER



XVII. A-CLASS

THE REPLACEMENT OF THE BULBS ON THE VEHICLE

- Top lights; access via the engine on the left and on the right.
- Lower lights; access by the under body.



Road Lights H1 55W
Headlights H1 55W
Blinker Lights with Orange Prongs 21W
LED Daytime Lights
Daytime / Fog Lights H7 55W

THE PASSENGER WINDOW



To open:

- Move the handle forward.
- Push on the handle to adjust the opening.



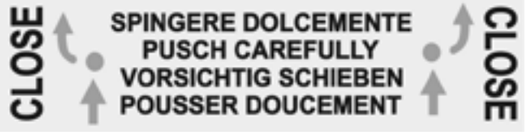
To close:

- Pull on the handle to close.
- Move the handle backwards to lock



IMPORTANT: Check that the window is properly locked by pushing the window forward.

WARNING: Please follow the manufacturer's instructions.



XVII. A-CLASS


Heater



Gas security pressure regulator


Drinking water fillup cap



230V outside power plug


Refrigerator


Circuit purge


Drinking water drain valve



230V outlet


Oven


Heater drain


Outside shower outlet



12V battery circuit


Cooktop


Gas shut-off valve for travel


Valve for emptying the waste water (black water) reservoir

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