



## Cub L16 Robust Caravan Owner's Manual

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## L16 Robust Caravan



### L16 OWNER'S MANUAL

Congratulations on your purchase of the Cub L16! This manual serves as a brief introduction to help you make the most of your L16 experience. Please refer to manufacturer manuals where possible for detailed instructions, maintenance, and safe use of appliances and fittings.

- ▶ PLEASE READ AND COMPREHEND these instructions before using your L16 for the first time.
- ▶ TAKE THE TIME TO GET TO KNOW YOUR L16 and become familiar with all standard fittings and options on the caravan.
- ▶ IF IN DOUBT about anything relating to your L16, please feel free to call your local CUB dealer or our Head office for advice.



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Check out handy tips on YouTube <https://www.youtube.com/user/cubcampers>



## **CARAVAN TRAVEL CHECK LIST**

Before travelling it is important to make sure your caravan is secured and in good condition for travel.

- Check your tow vehicle and trailer are roadworthy. Check your brakes and lights are working.
- Check wheel nuts, bearings, suspension are in good condition.
- Check your tyre pressure and wear. Make sure tyres are of the same construction on all wheels and have a tread depth of 1.6mm or more.
- Make sure your maximum weight does not exceed what is recommended for your caravan and car (refer to weights and loads)
- Make sure ball weight is 7-10% of total ATM (maximum unhitched weight of fully loaded trailer)

### **INSIDE:**

- Test the smoke alarm by pressing the Test button until it sounds. Be sure to do it at arm's length away.
- Windows are closed and latches are in the air lock position (latch pin in front of the catch).
- If required, check scupper vent is open to prevent dust ingress.
- Fridge and microwave are closed and secure.
- Pantry, kitchen drawers and under bed drawer are locked.
- Table legs are locked into position.
- Ensuite roof vent is closed, ensuite cabinet is locked, shower head is secure.
- Remove any TV if fitted – stow for travel.
- Ensure No passengers are inside the caravan.

### **OUTSIDE:**

- Entry door is closed and locked. Check frame to make sure its secured.
- Check safety chains attached and in good condition, coupling and tow pin are clean and in good condition before attaching. Be aware of pinch points – Keep hands and fingers clear while attaching chains.
- Front gas bottle and jerry can storage area is secure. Make sure all bottles are closed and gas is off.
- Inspect the fire extinguisher, make sure the gauge is in the green area and there is no corrosion or damage. Ensure the Fire extinguisher is serviced or inspected every six months in accordance with Australian Standard 1851, The fire extinguisher testing intervals are to be recorded on a label or metal tag attached to the unit.
- Check awning brackets are firmly attached, and bolts are not loose.
- Test the 240V circuit breakers with test button. Make sure you have packed a 15A extension lead if you plan to use 240V mains power.
- Use the test button to check the Breakaway System is charged and working correctly.  
Disconnect the trailer plug from the tow vehicle, check fuses, and pull the break-away pin from the break-away

switch attached at the A-frame (near where the trailer connects to the tow vehicle). The electric brakes and brake lights of the caravan should activate.

- Make sure RedVision system is turned off.
- Make sure HWS fuel supply is shut off.
- All storage lockers outside are closed and locked.
- Outside toilet door is locked and the flush water tank is less than half full and the waste holding tank is empty or not more than  $\frac{3}{4}$  full to avoid leakage.
- Fresh water tanks are full, grey water is empty, and water tank box is secured. Make sure you have packed the “drinking water” hoses.
- Stabiliser legs are wound up and secured.

#### **NOTE:**

- Learners, P1 license holders and provisional motorcycle riders are not allowed to tow.
- You must not tow more than 1 trailer at a time.
- You must not obscure vision to reflectors, brake light, indicator lamp or number plate.
- You must secure and cover your load, making sure it does not overhang.
- During the trip, make sure coupling, all doors, hatches, covers and any load or equipment, are still properly secured.
- By law in Australia if you are towing anything wider than your vehicle, towing mirrors are required.
- It is illegal to ride in a caravan when it is being towed.

#### **PACKING THE L16**

The CUB L16 features a design style where most of the storage space is located forward of the axle. This aspect needs to be carefully considered when packing the L16 for travel to ensure that the maximum weight applied to the towbar of the tow vehicle is not exceeded.

The most stable, sway-free towing condition is achieved when the total ball load is within 710% of the caravan's ATM. The ATM, Ball weight and TARE are stamped on your vans VIN plate to assist with this calculation.

Do not overload the caravan forward of the axle with weights that will result in the total ball weight exceeding 10% of the ATM. Do not exceed maximum allowable tow-ball mass of the tow vehicle.

Before travelling, make sure all doors, vents, and hatches are closed and windows are locked in the air lock position with the latch pin in front of the catch. (The middle position is for ventilation to help reduce condensation it will not give a dust proof seal in this position.)

#### **Weights & Loads**

Before packing your vehicle and trailer, it is important to understand the following terms of your TOW-VEHICLE by the vehicle (car) manufacturer.

1. **GROSS VEHICLE MASS (GVM):** The maximum legal weight of the tow-vehicle when it is fully loaded. (This includes everything: the driver, passengers, equipment fitted to the vehicle such as roof racks and bull-bars, luggage, fuel, weight on the tow ball etc.)
2. **GROSS COMBINATION MASS (GCM):** The maximum legal COMBINED weight of the loaded tow-vehicle AND the loaded trailer.
3. **TOWING CAPACITY:** The maximum weight of a fully loaded trailer that the tow-vehicle can legally tow.

**NOTE:** If the towbar fitted to the vehicle is a factory-fitted or dealer-fitted item, it will inevitably match this rating. However, if the towbar is a non-genuine after-market fitment, check the plaque fitted to the towbar to verify the Towing Capacity of the towbar.

4. **TOW BALL MASS (TBM):** The maximum downward load that can be applied to the towball (or equivalent).

**NOTE:** It is also important to verify that the TBM rating of the towbar can comfortably accommodate a ball load of at least 10% of the trailer's ATM.

Similarly, fully understand the following terms and loading limitations imposed upon the TRAILER by the trailer manufacturer (i.e., in this case Cub Campers):

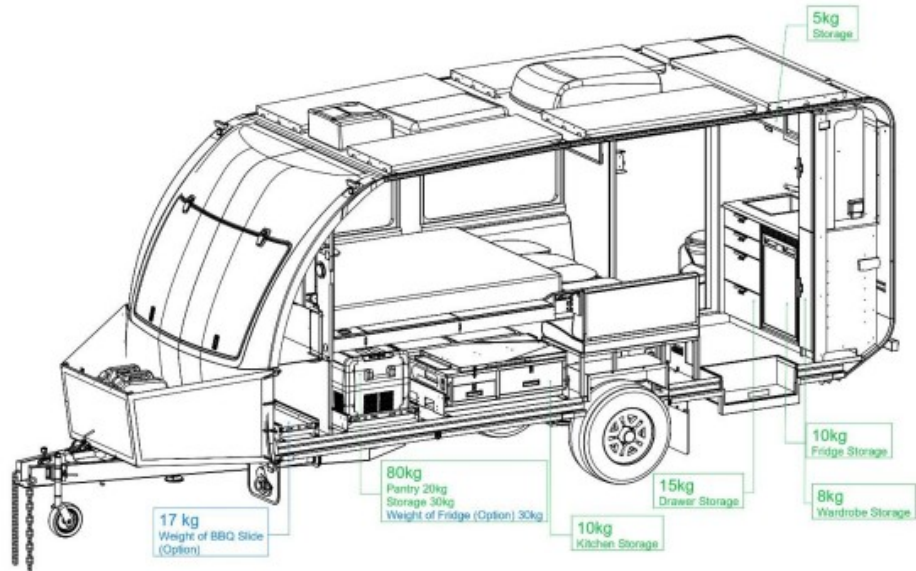
5. **TARE MASS:** The weight of a trailer as it is delivered (i.e., with no water or gas in their respective tanks.)
6. **ATM (AGGREGATE TRAILER MASS):** The maximum permissible weight of a free-standing, fully loaded trailer (i.e., unhitched).
7. **GTM (GROSS TRAILER MASS):** The maximum permissible weight of a fully loaded trailer as applied to the ground by the main wheels only (i.e., hitched).

**NOTE:** All these loading limits must be adhered to, and in particular the GCM! If the GVM and TOWING CAPACITY add up to a higher figure than the GCM, then the loads upon the TowVehicle, Trailer, or both must be reduced to adhere to the GCM limit. Failure to comply with these limitations may affect safety, risk police penalties and void prospective insurance claims. Ultimately, it is the responsibility of the user to ensure that the caravan is used for its intended purpose and that it is never over-loaded.

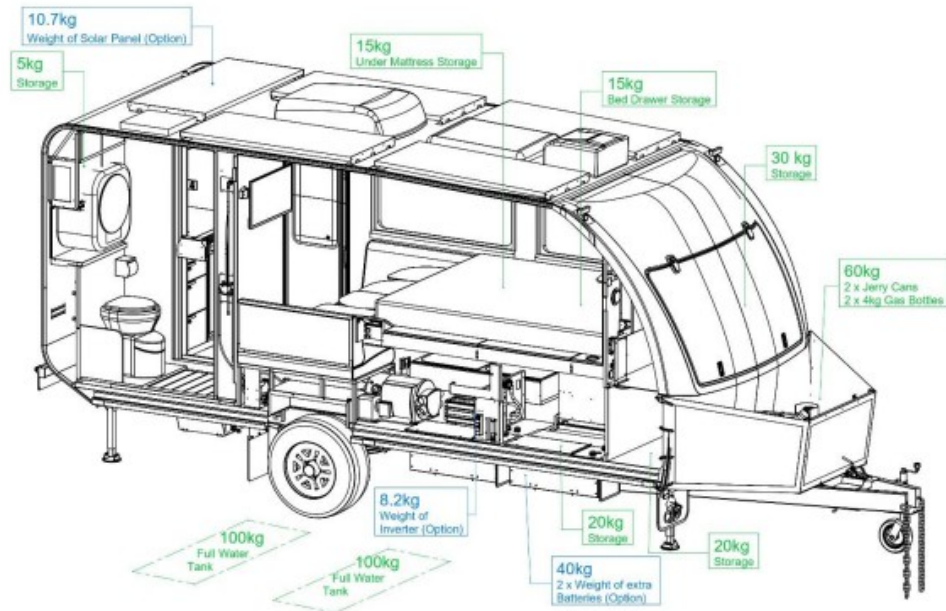
#### **L16 – Packing Weight Distribution Guide**

It is important to note that options added to your caravan at the time of purchase or aftermarket will affect these weights – therefore this illustration is a guide only and is shown with several optional upgrades.

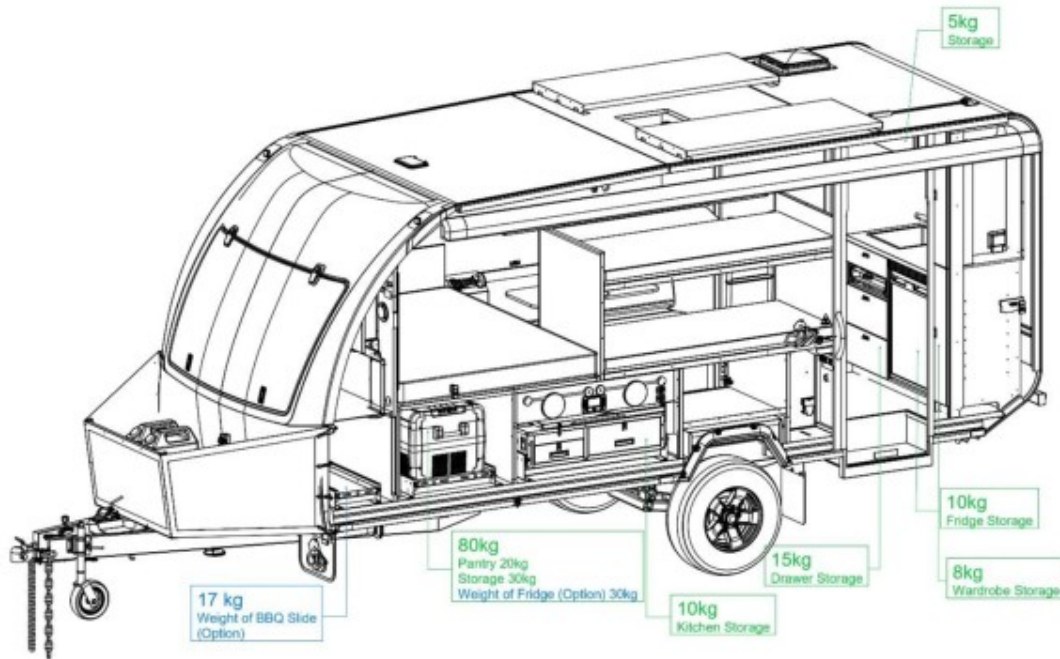
## L16 LUGGAGE WEIGHTS GUIDE



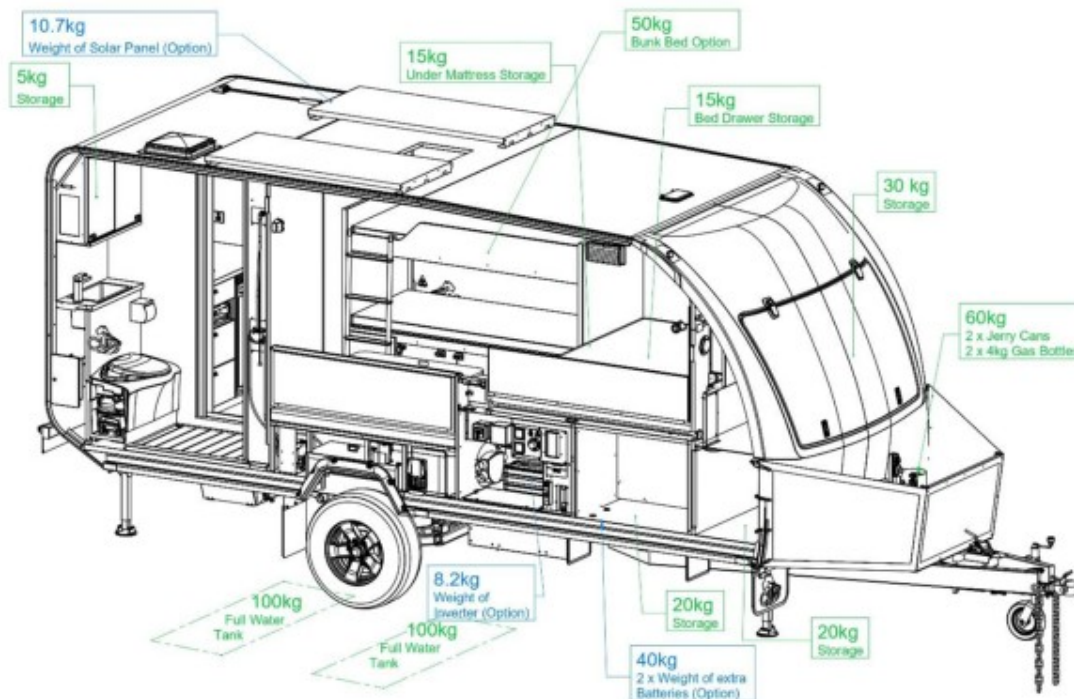
## L16 LUGGAGE WEIGHTS GUIDE



## L16 BUNK VERSION LUGGAGE WEIGHTS GUIDE



## L16 BUNK VERSION LUGGAGE WEIGHTS GUIDE



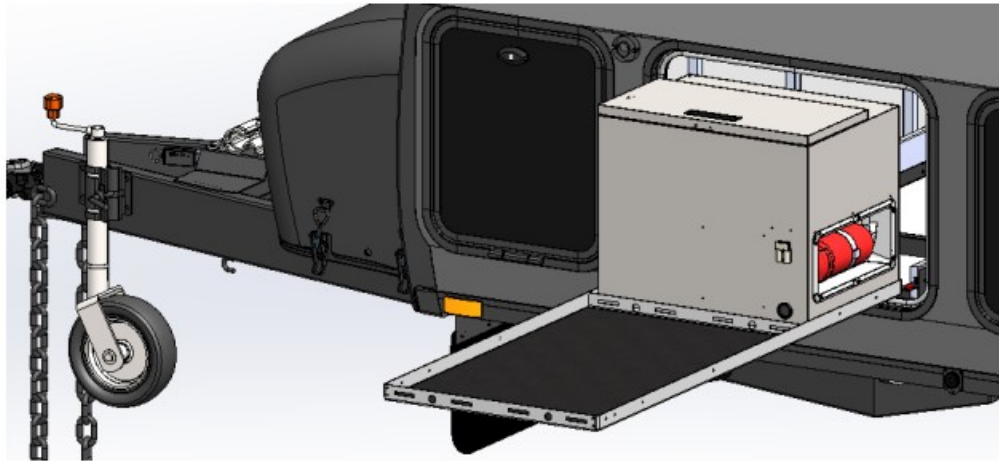
## SAFETY

### Fire Extinguisher

#### [Click for Fire Extinguisher User Manual](#)

The L16 is equipped with a 1kg ABE Dry Powder Fire Extinguisher FF1010 with a 1A20BE fire rating. The fire extinguisher has a discharge range of 3-4mt and is rechargeable. It has a pressure gauge to indicate internal pressure. Its discharge duration is 13 seconds. For safety information and instructions please refer to Fire Extinguisher User Manual.

It is stored in the locker with the pantry next to the external kitchen as shown **below**:



**DANGER:** This extinguisher is designed for use against small fires. It is not designed to fight large fires that are burning out of control. If the fire is too hot or smoky for you to get within 2 metres of it, do not try to fight it yourself. Warn everyone, evacuate the premises, and have someone call your local Fire Brigade (dial 000) from outside the building. Do not puncture or burn any fire extinguisher. The contents are under pressure and the extinguisher may explode. Never locate this extinguisher close to an engine, stove, or other source of heat. It is pressurised and could rupture or explode if exposed to temperatures over 66°C.

## INSTRUCTIONS FOR USE



**CAUTION:** This extinguisher contains a dry powder extinguisher agent. The agent/powder is not toxic but can irritate skin. When using this unit, avoid breathing the powder. Always ventilate the area after use.

**WARNING:** Do not check the pressure or test the fire extinguisher by operating it. Once used (even slightly) it will gradually lose pressure and will not be fully charged for use in an emergency. When the pointer drops into the recharge area, the extinguisher may still be pressurised. You must discharge the unit completely before disposing of it.

Inspect the extinguisher before and after travel or at least once a month.

1. Remove the extinguisher from the mounting bracket and inspect the gauge. If the pointer is in the GREEN area, the extinguisher is properly pressurised and ready to use.

If the pointer has moved to the RECHARGE area, then the extinguisher has lost pressure and must be recharged or replaced. If the unit is new or still under warranty, return it to Master Distributors Pty Ltd. If the warranty has expired, take the extinguisher outside, discharge its contents completely, discard the unit, and

replace it with a new one immediately.

2. Check for signs of damage or misuse. Make sure you can still read all the text on the label.
3. Carefully examine the surface of the extinguisher for corrosion. You can help prevent corrosion by cleaning the extinguisher if it gets wet or dirty. If you notice corrosion during the warranty period, return the unit.
4. Make sure the tamper indicator ("safety seal") is still intact. Make sure the nozzle is clean and unobstructed.
5. When you finish inspecting the extinguisher, put it back securely into the mounting bracket.

Ensure the fire extinguisher is serviced or inspected every six months in accordance with Australian Standard 1851. The fire extinguisher testing intervals are to be recorded on a label or metal tag attached to the unit.

#### **BEFORE YOU FIGHT ANY FIRE:**

- Make sure everyone is leaving or has left the building.
- Notify your local fire authority by dialling 000.
- Make sure the fire is confined to a small area and is not spreading.
- Make sure you have a clear, unobstructed escape route.
- Make sure you know how to safely use your fire extinguisher.
- If you are fighting the fire and the fire begins to spread or burn out of control, GET OUT IMMEDIATELY! Do not fight the fire yourself.

#### **Smoke Alarm**

[Click for QUELL Smoke Alarm User Manual](#)

The L16 is fitted with a Quell Smoke Alarm with Hush function. Refer to Smoke Alarm user manual for information about operation and maintenance.

**WARNING:** TEST YOUR SMOKE ALARM OPERATION AFTER CARAVAN OR MOBILE HOME VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE A WEEK DURING USE

#### **Testing**

Test the unit to ensure proper operation, by pressing the Test/Hush button for at least 5 seconds (or until the unit sounds). This will sound the alarm if the electronic circuitry, horn, and battery are working.

**CAUTION:** Due to the loudness (85 decibels) of the alarm, always stand an arms-length away from the unit when testing.

If no alarm sounds, the unit has a defective battery or other failure. DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a fire. Erratic or faint sound coming from your alarm may indicate a defective alarm.

#### **Low Battery**

This alarm has a low battery monitor which will cause the alarm to "chirp" approximately every 40-50 seconds for a minimum of 30 days when the battery gets low. Use only the following 9-volt batteries for replacement:

#### **Alkaline Type**

- Energizer 522
- Duracell MN1604 or MX1604
- Gold Peak 1604A
- Panasonic 6AM6, 6AM-6, 6AM-6PI, 6AM6X or 6LR61(GA)

#### **Lithium Type**

- Ultralife U9VL-J

#### **Smoke Sensing Chamber Operation**

This alarm will "chirp" if it detects a problem with the smoke sensing chamber. This chirp will occur approximately 20 seconds after the flash of the red LED indicator light.

Clean the alarm. If the alarm is still chirping, replace the alarm.

#### **LED indicators:**

This alarm is equipped with a red LED indicator, with three modes of operation.

Red LED – Flashing every 40–50 seconds: Indicates that the smoke alarm is operating properly.

Red LED – Flashing: When the Test/Hush button is pressed, or when the smoke alarm senses particles of combustion and goes into alarm (constant pulsating sound), the red LED will flash once per second. The flashing LED and pulsating alarm will continue until the air is cleared.

Red LED – Alarm silencer (Hush™ mode) indication: The red LED will flash every 11 seconds, indicating the smoke alarm is in the alarm silencer (Hush™) mode.

#### **Alarm Silencer (Hush™)**

The alarm silencer (Test/Hush™ button) is extremely useful in a kitchen area or other areas prone to nuisance alarms.

The alarm silencer (Hush™) has the capability of temporarily desensitising the alarm circuit for about 11 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm.

The smoke alarm is desensitised by pushing and releasing the alarm silencer (Test/Hush™ button) on the smoke alarm cover. If the smoke is not too dense, the alarm will silence immediately. The red LED will illuminate every 11 seconds to indicate that the alarm is in a temporarily desensitized condition. The smoke alarm will automatically reset after approximately 11 minutes. If after this period particles of combustion are still present, the alarm will sound again.

The alarm silencer (Hush™) can be used repeatedly until the air has been cleared of the condition causing the alarm. Pushing the Test/Hush button on the alarm will end the alarm silencer (Hush™) period.

**NOTE:** Dense smoke will override the alarm silencer (Hush™) and sound a continuous alarm.

#### **Electrical Warnings**

**WARNING** – A CONNECTABLE ELECTRICAL INSTALLATION BATTERY SHALL ONLY BE REPLACED BY ONE OF THE SAME TYPE AND SPECIFICATION AS THAT ORIGINALLY FITTED. UPGRADES TO THE BATTERY OR SYSTEM SHALL ONLY BE PERFORMED BY A COMPETENT PERSON.

230VAC POWER POINT SUPPLYING BATTERY CHARGER:

- IS NOT CONTROLLED BY THE POWER SOURCE CHANGEOVER SWITCH.
- IS FED DIRECTLY FROM THE EXTERNAL POWER INLET (VIA POWER INLET SAFETY SWITCH).
- CANNOT BE SUPPLIED FROM AN INVERTER (IF FITTED).
- IS ONLY LIVE WHEN EXTERNAL POWER IS CONNECTED TO THE CARAVAN & “EXTERNAL SUPPLY MAIN SWITCH” IS SWITCHED “ON”.

**NOTE:** Any unauthorised modification of any kind to Low-Voltage and/or Extra-Low Voltage wiring systems, batteries, components etc. of this caravan will void product warranty and may contravene federal and/or state laws.

It is recommended that the electrical systems are periodically re-tested. (In most states of Australia, this may be carried out by a competent person in accordance with AS/NZS 3019)

## **COUPLING**

[Click for Off-Road Ball Coupling Attachment Youtube Video](#)

[Click for Off-Road Ball Coupling User Manual](#)

The L16 is fitted with a 50mm ALKO Off-Road Coupling. It is ADR Rated to 3500 kg. For more information and maintenance instructions, refer to the ALKO Coupling User Manual.



Make sure to only use a 50mm Australian Standard tow ball with this coupling as no other size tow ball is safe to use with the coupling.

Check there is enough clearance on the tow hitch – see diagram below. Some tow bar designs are not compatible with the off-road coupling.



#### **To attach coupling to tow ball:**

1. Rotate latch handle upward.
2. At the same time pull latch assembly up to lift tongue.
3. With the latch assembly pulled back, lower the coupling onto tow ball.
4. Release latch assembly.
5. Check that the latch has release and is engaged in the coupling head.
6. Ensure that the ball is fully latched by attempting to lift the coupling vertically off the ball.
7. Connect all cable connectors and safety chains.

#### **To detach coupling from tow ball:**

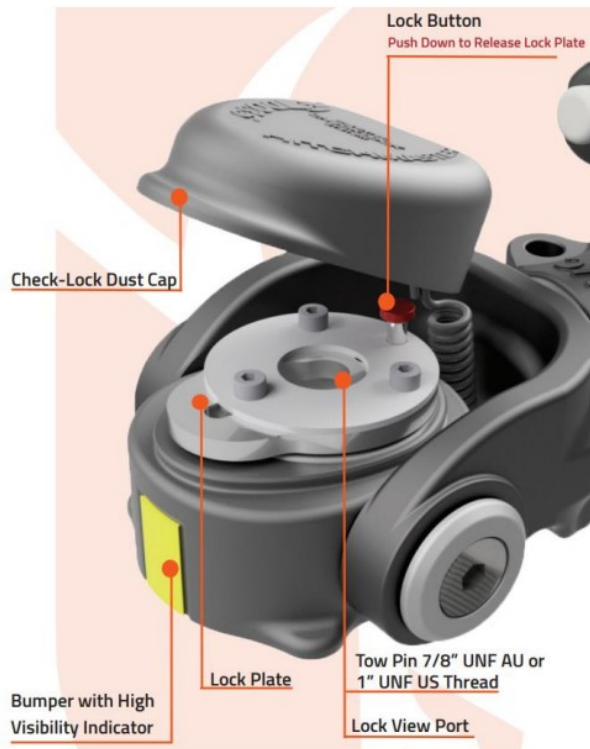
1. Disconnect all cable connectors and safety chains.
2. Use the jockey wheel to take the weight off the ball until head of the coupling can rotate.
3. Rotate latch handle upwards. (Same as when attaching)
4. At the same time pull latch assembly upward to release tow ball. (Same as when attaching)
5. Raise the coupling from the tow ball.
6. Release latch assembly.

#### **If optional only:**

[Click for CRUISEMASTER Coupling User Manual](#)

[Click for CRUISEMASTER D035 Coupling Hitching Youtube Video](#)

If optional, the L16 may be fitted with a CruiseMaster D035 Off-Road Coupling. It is ADR Rated to 3500 kg. For more information and maintenance instructions, refer to the CruiseMaster D035 Coupling User Manual.



**NOTE:** Keep hands and fingers clear when attaching and ensure trailer safety chains are attached whilst coupling and uncoupling.

## BREAKAWAY SYSTEM

[Click for CAMEC Breakaway System User Manual](#)

[Click for HOPKINS Breakaway System User Manual](#)

The L16 includes either a Camec breakaway unit or Hopkins breakaway unit which is a safety device designed to apply the trailer brakes and brake lights in the unlikely event the trailer is separated from the tow vehicle. Before each trip, test the unit by pressing the green test button. Refer to the product instructions for further details.



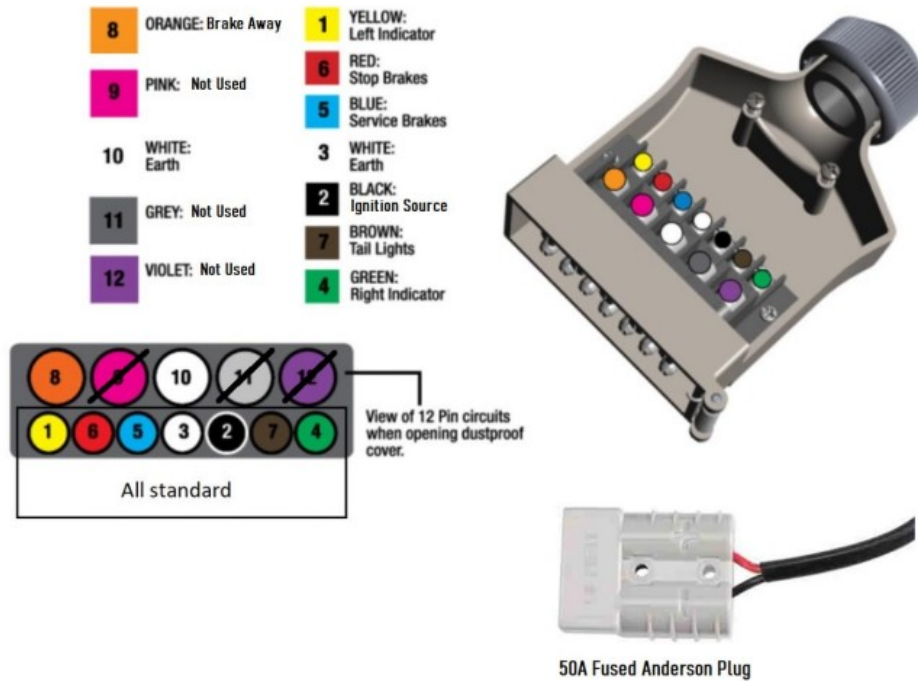
Do not use the break-away system as a parking brake. The battery will be flat after a brief time and release the brakes. Incorrect use will void all warranty.

The battery should be replaced every 2 years with the same type of battery.

## 12-PIN TRAILER PLUG

The L16 requires a 12-pin plug to connect to the tow vehicle. You will need to ensure the tow vehicle has the

appropriate 12 pin socket connection as below. Power to Pin 2 is required for the reverse camera to work.



## SCUPPER VENT



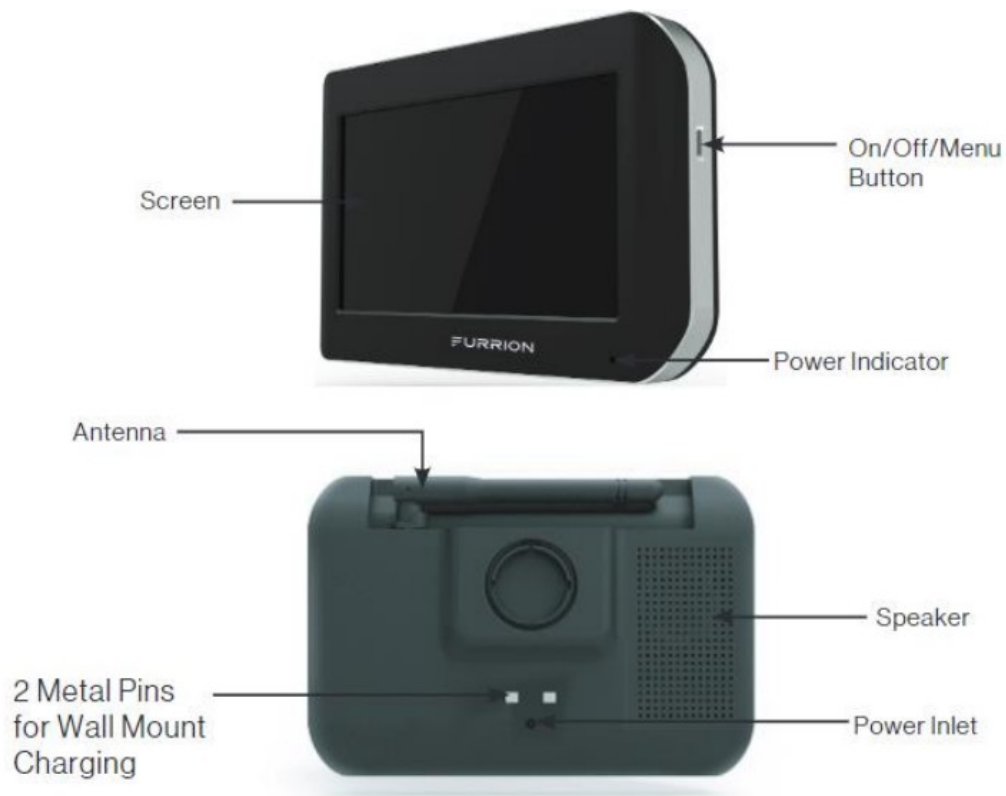
The L16 roof is fitted with a scupper vent to reduce dust ingress into the caravan by raising the internal pressure to restrict air flow as you travel. All other hatches must be closed, and windows must be in the air lock position (pin in front of latch) for the vent to be effective.

## REAR VISION CAMERA (IF OPTIONED)

[Click for FURRION Rear Vision Camera User Manual](#)

If optioned, the L16 will be fitted with a Furrrion Vision S Rear-Vision Camera & 5" Display Kit. Power to pin 2 on the 12-pin plug is required for the camera to work. For safety information and manufacturer user instructions please refer to Rear Vision Camera User Manual.

- Observation systems are wireless with high-resolution touch screen monitors that can show up to four different camera images
- IP65 waterproof cameras
- Rear assist reversing lines
- 2.4GHz wireless communication digitally locks to the camera system for minimal interference
- Cameras offers 120-degree viewing angle, with infrared night vision
- The monitor can be mounted with the included windshield or universal surface mount
- 5" touch screen anti-glare monitors



**NOTE:** This monitor is to be used as an aid to ensure there are no children or obstructions, do not back up your vehicle while watching the monitor screen only. Please be aware of blind spots when using this camera. The image is not designed to show distance and actual distance is less than what appears in the monitor.

Clean the LCD screen with a microfibre cloth. Do not use coarse or abrasive materials. Only use a dry cloth to clean the monitor, keep away from excessive moisture, extreme heat or cold. Use a wet cloth to clean the camera lens. A dry cloth may scratch the camera lens.

## CARAVAN – SETTING UP

1. Unhitch the L16 from the tow-vehicle and use the Jockey Wheel to set the caravan parallel with the ground.

**NOTE:** This can be simply done by marking the height of the rear of the caravan floor against your body and then leveling the front of the caravan using the jockey wheel, to the same height on your body.

2. Pull the red handles towards you to release all 4 wind-down legs. Ensure the legs are in the vertical position when the red handles are locked back into place. Use the crank-handle supplied (located in the front locker) to wind down each leg until they are in firm contact with the **ground**.



**NOTE:** Suits 19mm socket if using battery drill. These legs are not designed to be used as a jack or as a means of lifting the trailer off the ground. They are designed to stabilize the trailer when stationary.

## EXTERNAL KITCHEN

[Click for DOMETIC Gas Cooker User Manual](#)

**NOTE:** To avoid scratching the window, ensure the side windows are fully closed or fully opened before opening up the kitchen shelf. Close windows when cooking to prevent cooking smells from entering the caravan.

1. Unlock the kitchen locker door. Lift the locking tabs on each runner and slide out the kitchen all the way until it clicks on both sides.
2. Pull out the braided stainless-steel gas hose located in the left-hand side and connect to the gas bayonet outlet. (This outlet is to the left of the kitchen under the caravan floor).
3. Open the gas valve located underneath the caravan body beneath the bayonet. (The valves are open when the handles are in-line with the tubing). Turn on the gas bottle at the front of the caravan when ready to use, and remember to turn off after use.
4. Release the bungee loop from the front of the kitchen that's holding down the table.
5. Slowly flip the table over allowing support legs to swing down vertically. Carefully guide both support leg tabs into the slot on the right side of the kitchen body (one slot for each leg).
6. Open the glass hatches, raise the water faucet into position as required.
7. Turn on the water-pump switch located on the inside of the entry door to the left.  
**Note:** Switch pump 'OFF' at night when not in use to avoid noise of pump periodically repressurising.
8. Your kitchen is now ready to use. When finished, make sure to turn off the gas at the bottle, and to disconnect the bayonet before sliding the kitchen back into the caravan.

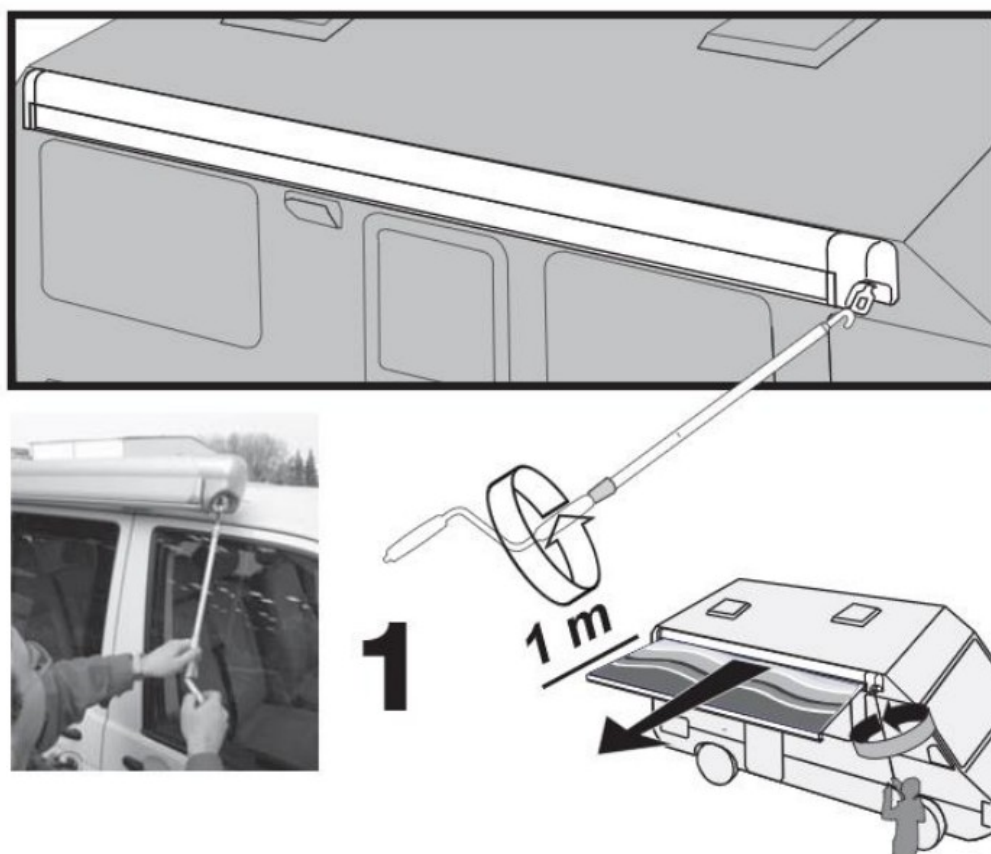
## AWNING

[Click for FIAMMA Awni ng User Manual](#)

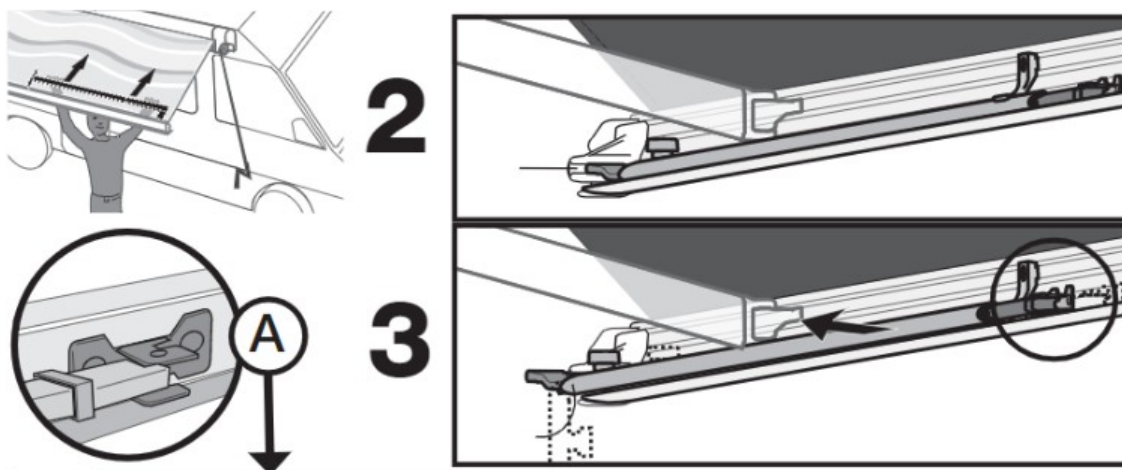
The L16 is fitted with a Fiamma F45 S Awning. For more information on the operation and maintenance of this awning please read carefully and refer to the respective Fiamma Owner's Manuals provided. The handle and tension rafter are stored in the front lower locker area.

Ensure the awning is packed away or secured in heavy weather to avoid damage.

- Periodically check the brackets are firmly attached (especially after the first trip), make sure the bolts are not loose and that the holding brackets have not shifted.
- To avoid stains, make sure that your awning is completely dry and clean before closing it. In the event you must close the awning while wet ensure that it is re-opened for drying within 12 hours.
- Most dirt is superficial and can be removed with clean water and a cloth or a brush. If the fabric is very dirty, add some light cleaning detergent. Never use aggressive chemical substances and never clean the fabric with a high-pressure machine.
- Make sure that the awning perfectly rolls in; when it is, the red indicators in the front profile ends are no longer visible. Before travelling, make sure the awning is closed correctly. Damaged fabric will not allow the awning to perfectly roll in. Never use the awning with a damaged canopy.
- FIAMMA recommends not using the awning at a temperature below 0°C.



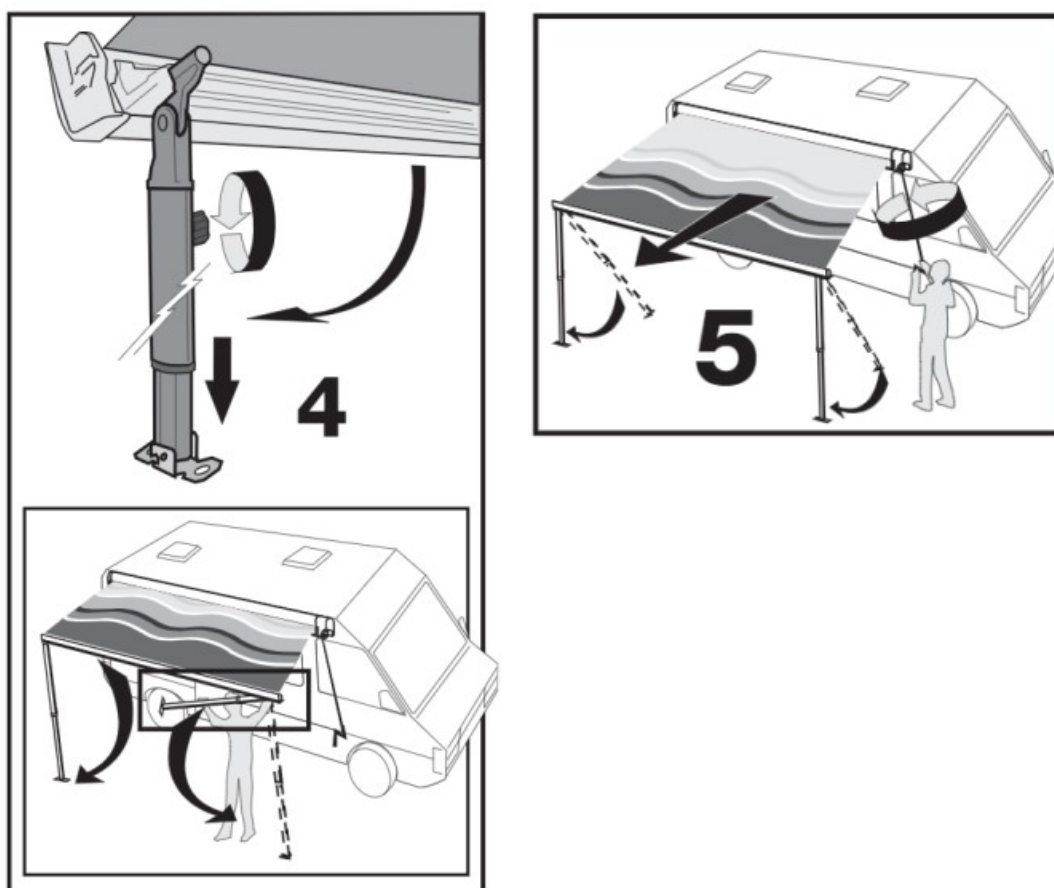
1. Use the awning handle to unwind the awning. Use the legs 1 metre out to avoid strain on the awning and caravan wall.



2. Grasp the leg near its hinge-joint and pull it toward you.

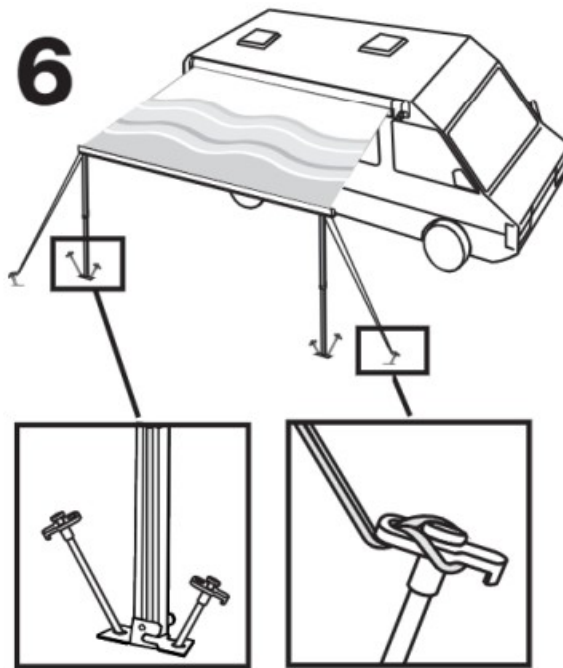
3. Unhook the leg.

**NOTE:** The foot for leg A has been designed to prevent its incorrect placing inside the housing of the lead bar during the closing phase of the awning. With an incorrect placing of the foot the lead bar will not close completely; we advise you to always put it into the housing properly with the base turned to the lead bar.

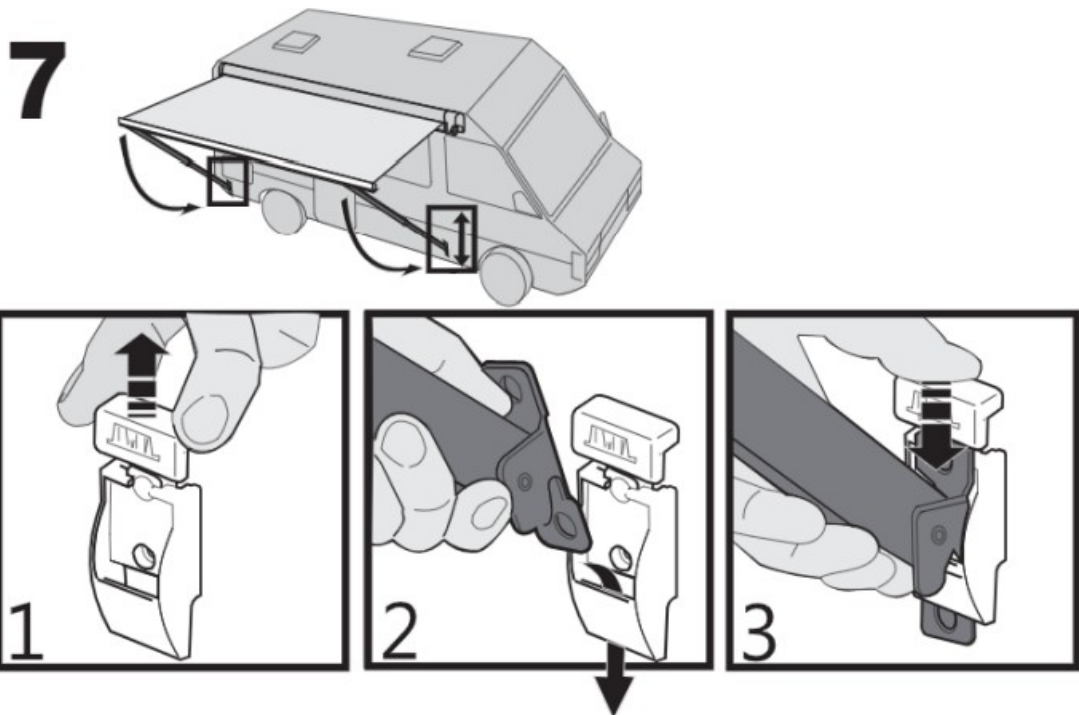


4. Lower the leg as shown in the figure.

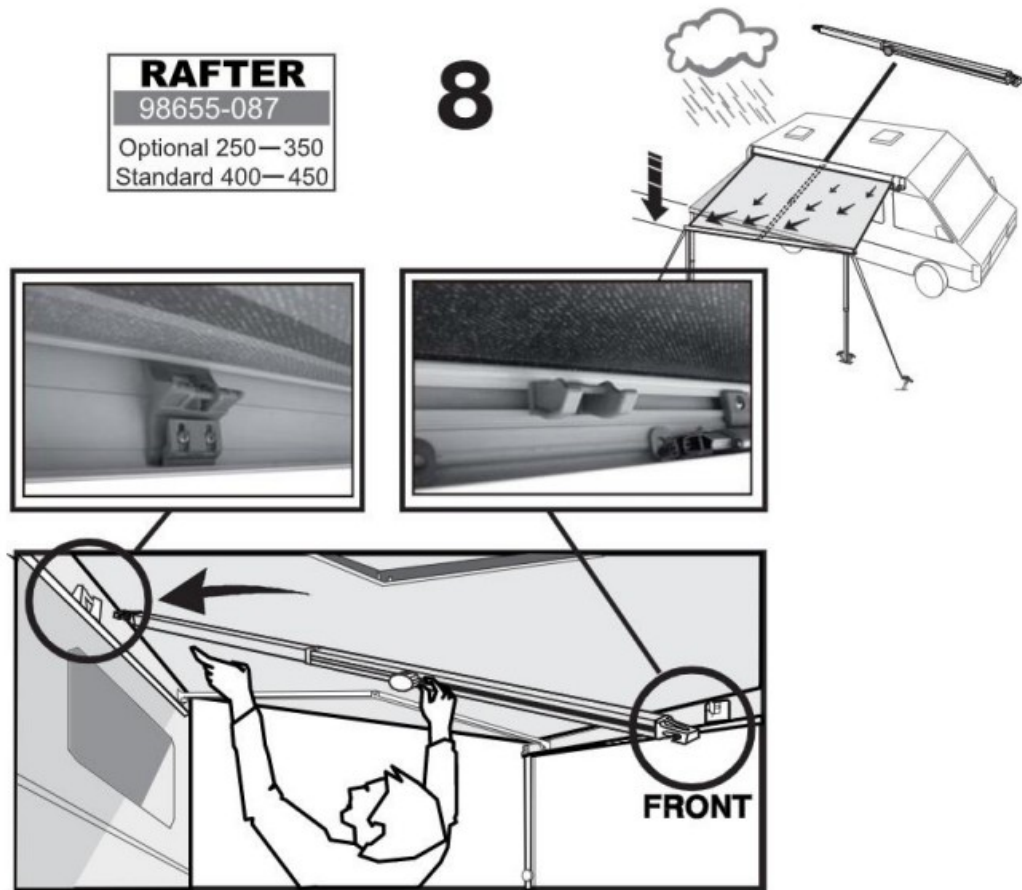
5. After unrolling the awning completely, adjust the legs at the chosen height.



6. To avoid the awning being lifted by an unexpected gust of wind, it is necessary to secure the legs to the ground with the provided hooks (see Appendix for picture and location of peg kit). For safety's sake, we strongly advise you also use some storm cords in the upper part of each support leg or anchor the awning with the Fiamma Tie-Down Kit strap.

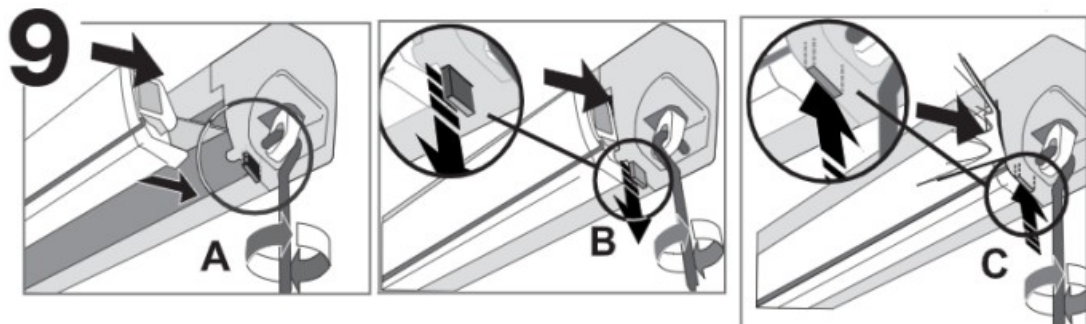


7. If you want to fasten the support legs to the vehicle, put the terminals into the wall brackets.



8. Install the tension rafter using the anchors shown in the figure. We remind you that the awning is a sun protection, so please roll up your awning in case of rain, wind, or snow. Otherwise, please take the following precautions: lower one side of your awning, so that water can flow away and place the tension rafter as shown in the figure.

To put away the awning, use the awning handle to wind up the awning.



9. A. The awning is open. B. The awning is about to close. The red flag is visible. C. When the awning is completely closed, the red flag is no longer visible. The awning is now properly closed.

## REDARC REDVISION

[Click for REDARC RedVision Quick Start Guide](#)  
[Click for REDARC RedVision User Manual](#)

The L16 comes standard with a Redarc RedVision Management System. For safety information and manufacturer instructions refer to the REDARC – RedVision User Manual provided. There is also a RedVision App that replicates MOST of the display and switching features of the Display available in the Google Play Store or the Apple App Store.

Once your L16 is all set up, go to the RedVision control panel, and push the Power Button to power up your caravan.



## NAVIGATION

- The Left/Right buttons are used to navigate the pages on the centre of the screen
- The Up/Down buttons are used to navigate through options found on other pages
- The Left/Right and Up/Down functions are indicated on the screen.

## SOFT KEYS

The Soft Keys functions will be indicated by an icon and these functions will change depending on the screen. The Soft Keys are used to toggle devices on/off. Softkeys may also be conditionally locked, for example to prevent a shower pump being accidentally operated while the vehicle ignition is on.



Pushing the Power Button **ONCE** will open a Power Button instruction dialogue and allow switching between Storage and Touring modes.



Pushing the Power Button **TWICE** will invoke the 'Master Switch' function, when a Distribution Box is installed. This function switches a defined set of devices and can be customised, by the installer, to user specifications.



**HOLDING** the Power Button will put the screen into Standby mode. Pushing any button will wake the screen up again. When the system is set to 'Storage Mode' only the Power Button will wake the display up.

## REDARC REDVISION TVMS (if optioned)

If optioned the Redarc display comes with TVMS (Total Vehicle Management System) and includes water level monitoring on the display (the standard model does not have this feature). For safety information and manufacturer instructions refer to the Redarc – RedVision User Manual provided. There is also a RedVision App that replicates MOST of the display and switching features of the Display available in the Google Play Store or the Apple App Store.

## BATTERY MANAGEMENT

### REDARC BMS30

[Click for REDARC Battery Management System User Manual](#)

[Click for REDARC BCDC Battery Charger User Manual](#)

The L16 is fitted with a REDARC BMS30 battery charger as standard. For safety information and manufacturer instructions for these Battery Chargers please refer to the respective REDARC BMS Owner's Manuals provided. For battery charging when connected to mains power and when connected to the tow-vehicle

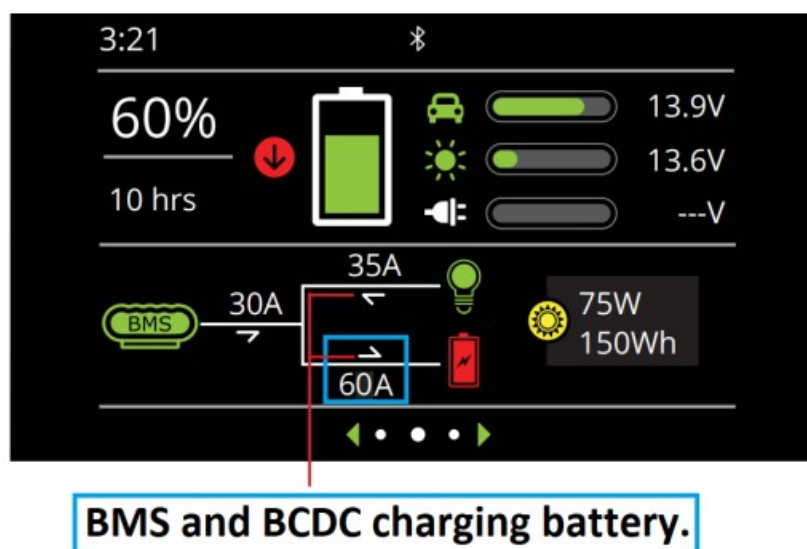
- Your REDARC Manager30 gives an accurate picture of your battery percentage and time until full/empty. Make use of the display screen and/or phone app.
- You can always start the vehicles engine and utilize the DC-DC charging when you are getting low. You cannot

always use a generator, especially in national parks, but you can run your vehicle. It may only need a small amount to get you through until the next day when you may be back on the road again. You will need to rev your engine to between 1,200 RPM and 2,200 RPM to effectively charge your battery. Make sure to warm your engine first for a few minutes on idle before you rev your engine to avoid engine damage.

### BCDC1240D (IF OPTIONED)

If optioned your L16 will be fitted with a BDC1240D and comes with an additional solar panel.

- Because of the additional “BCDC1240D” 40A charger, the screen will sometimes show that the load is charging the batteries. This is fine and normal when adding a second charger to the BMS30, as the L16 has in its setup. This is the extra charge coming from the second charger. In the below image, “60A in” is coming in through the load, which would normally read “5A out”



When charging a battery, make sure the settings at the Battery Setup menu on the Display are correct for the type of battery under charge. Charging a battery with the wrong profile may cause the Battery Charger to indicate a fault or give misleading results and cause injury to persons, damage to the Battery Charger and/or property.

### SOLAR PANELS

[Click for REDARC Solar Panel User Manual](#)

The L16 is fitted with 2 x 180W REDARC Solar Panels. For safety information and manufacturer instructions of the Solar Panels please refer to relevant REDARC User Manual.

In perfect conditions the solar panels should charge approximately 100ah of battery per day. However, factors that influence this are:

- How clean the panels are – dust, bird droppings, etc. can make a significant difference
- Cloud or smoke haze
- Shade under a tree
- Time and place. The angle of the sun and length of day

Sustainable power supply can be achieved by constant monitoring of the power usage and solar replenishment each day.

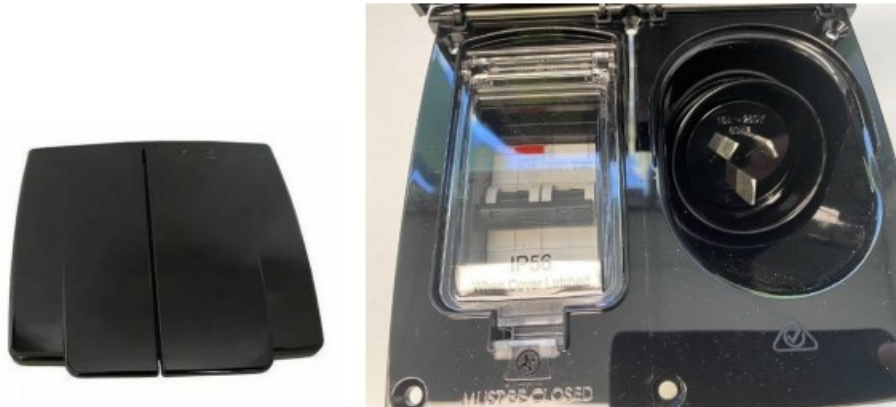
**NOTE:** There is an Anderson plug to connect an additional portable solar panel located on the driver side ahead of the axle on the battery box or above the wheel arch on later models. Extra portable solar panels are available for purchase through Cub Campers if requested.

### CONNECTION TO 240 VOLT ELECTRICITY

A 15A extension lead is required to connect the L16 to a 240V power supply e.g., at your home or at a caravan

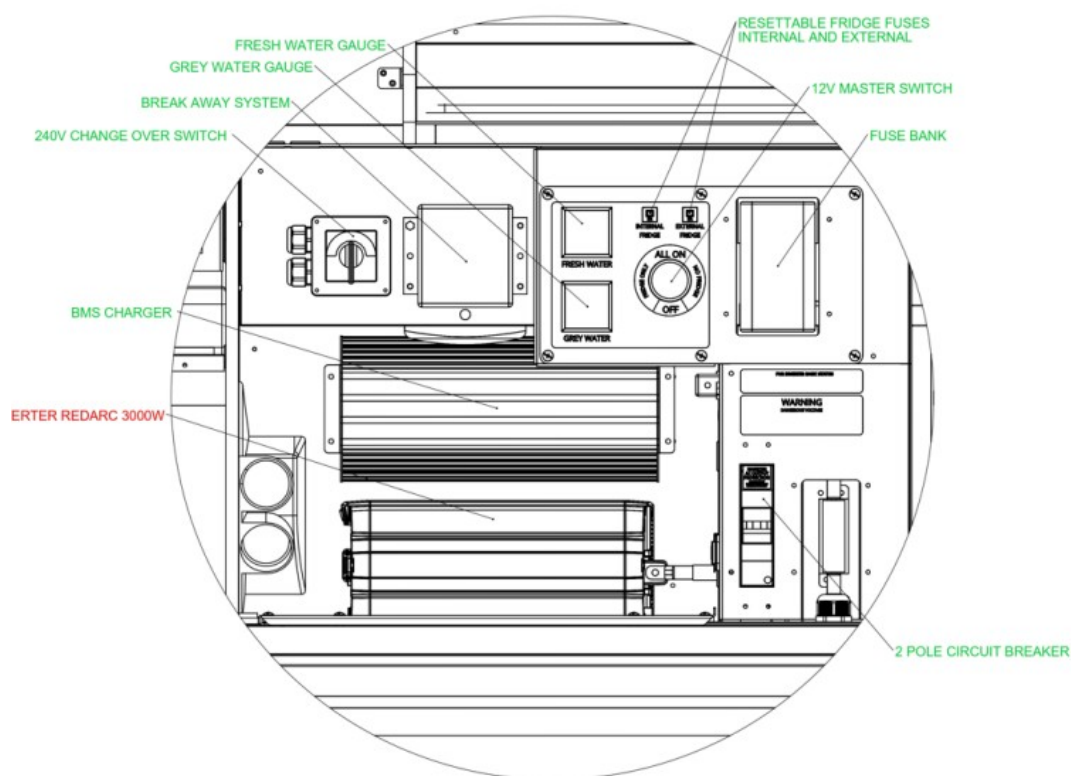
park. Plug the 15A lead into the 240V Power Inlet located on the outside driver's side wall of the caravan. Locate the change over switch in the electrical hatch and turn to "mains" from "off".

The 240V breaker switch is located on the left of the 240V Power Inlet as shown in the image on the right below. Be sure to test the breaker switch by pressing the test button before travelling or once a month.



Seek out & pay attention to instructions (per AS/NZS 3001.2 Appendix B) which should be provided by the operator of any site supply which you may wish to connect your Caravan.

## ELECTRICAL HATCH



All images provided are a guide only – your individual van may have a different configuration or equipment.

## INVERTER (IF OPTIONED)

[Click for REDARC Inverter User Manual](#)

The L16 has an option to include a REDARC 3000W Sine Wave inverter. For information on the correct operation of this please refer to the REDARC Inverter User Manual provided.



- To use the inverter, the changeover switch must be flipped to the inverter position
- All 240V power points inside the living area will then be powered by the inverter
- The 240V breaker switch for the inverter is separate to the mains inlet breaker. This is in the driver side electrical locker area (refer to above image).
- Do not obstruct the inverter unit's ventilation openings. Doing so may result in the inverter overheating and ultimately damage the inverter.
- It will provide effective use of appliances if used conservatively. Be sure not to use too many high-powered appliances at the same time or the protection system will turn the inverter off.

**WARNING:**

RISK OF ELECTRICAL SHOCK. DO NOT EXPOSE THE INVERTER TO RAIN, SNOW, SPRAY, BILGE OR DUST. DOING SO MAY RESULT IN DAMAGE TO THE INVERTER OR OTHER APPLIANCES INSTALLED IN THE SYSTEM OR RESULT IN ELECTRIC SHOCK OR FIRE.

POWER POINTS MARKED "DUAL-SUPPLY" CAN BE SUPPLIED BY EITHER THE EXTERNAL 240VAC POWER SUPPLY OR THE ONBOARD INVERTER. FOLLOW INVERTER MANUFACTURERS INSTRUCTIONS TO SELECT THE DESIRED

POWER SOURCE. (EXTERNAL POWER SOURCE IS TO BE PREFERRED WHEN AVAILABLE TO CONSERVE HOUSE BATTERY POWER.)

Power points other than the battery charger power point rely on the inverter to either provide 240VAC power using the onboard battery as the energy source or to allow power to pass through the inverter from the external power inlet. (The inverter manufacturer's manual contains more information on this.) For inverters which have their input & output connected by plug & socket, it is possible to bypass the inverter by unplugging the input & output cables & mating them directly to each other. Doing so will allow power to pass through to all downstream power points no matter the state of the inverter. This might be desired in the unlikely event that there are issues with the inverter system & to do so is permissible. HOWEVER, if the inverter is bypassed as described above, always effect the bypass exactly as described. This is very important to ensure the external power safety switch is never bypassed. The external power INLET must always be the source of external 240VAC power supply to ensure a safety switch always protects all power points. Never introduce an external power source directly to the plug or socket at the inverter."

## **12V & 240V OUTLETS**

Throughout the L16 there are various 12V and 240V outlets. Their locations are listed below.

### **12V Outlets**



- 2 x reading lamps with USB ports at the bed head



- Above the outside slide out kitchen
- In the front boot on the right
- In the electrical locker
- On the left and right side of the bed beside the lounge
- Above the benchtop of the inside below the microwave.
- Behind the TV

## 240V Outlets



- Outside on the wall left of the entry door
- On the side of the bed, next to the lounge on the left side upon entry
- Above the benchtop of the inside kitchen on the right corner, below the microwave.

There are also 240V Outlets hidden in the furniture for the caravan appliances which are listed below:

- In the kitchen behind the pantry for the fridge
- Below the bed for the REDARC battery management system
- In the cabinet above the internal sink for the Air Conditioner (if optioned) and Microwave

## WATER TANKS

The L16 is fitted with a 100L water tank, and one 100L grey water tank.

- All water inlets are in a steel box behind the driver side wheel, featuring domestic hose fitting inlets for each tank and a mains water inlet for connecting to town water with a hose. When connected, the town water will pressurize the water system and bypass the water tank.
- This water box also includes isolation tap pictured below in the open positions. The tank can be filled while they are isolated. Make sure at least one valve is open before using the water pump.

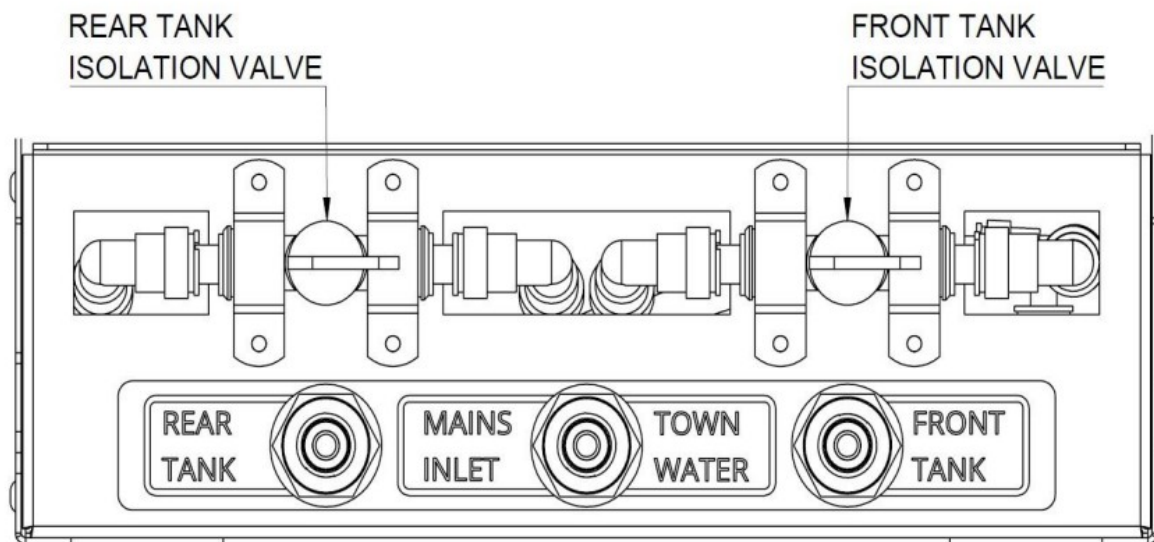
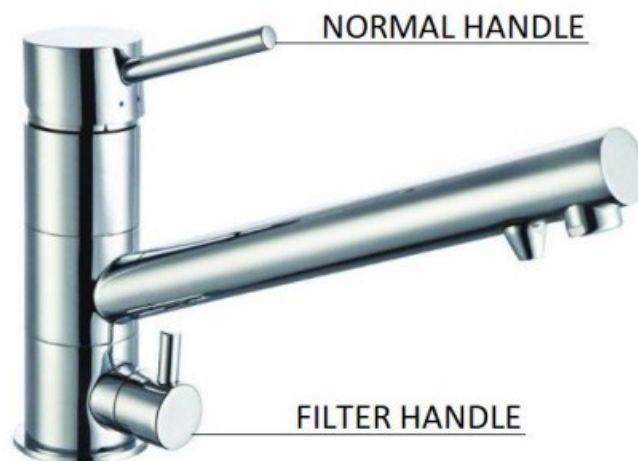


Image is if 2nd tank is optioned.

- The grey water tank has a ball valve located behind the driver side wheel.
- The water tank gauges are shown on the REDARC display unit if a TVMS is optioned or on the water level indicator.
- The internal kitchenette tap features an inbuilt water filter. The filter canister for this is accessible by removing the two top drawers. To remove the drawers, pull out all the way and then firmly lift and the drawer should click out of the track.



## HOT WATER SYSTEM

### [Click for TRUMA UltraRapid User Manual](#)

The L16 is fitted with a Truma Ultra Rapid Gas/Electric Hot Water System. For information on the correct operation of this Hot Water System (HWS) please refer to the respective Truma Owner's Manuals provided. Materials in the device which come into contact with water are suitable for use with drinking water.

The heater requires Gas fuel, which is drawn from the gas bottles fitted to the front of your van. Please ensure that you have sufficient gas to operate your heater before use and close the internal windows located directly over the external vent to ensure fumes do not come back into the cabin space. The HWS also has 240V Electrical operation option for when connected to 240V power source (home or caravan park) or using an inverter (if optional). When being powered by the inverter, limit use based on battery and solar levels.

**Please carefully read the below warnings and safety instructions:**

- If the vehicle is parked in closed rooms:
- Shut off the fuel supply to the heater by closing the gas cylinder.
- Switch to off at the control panel
- Never operate the water heater without water in it.
- Never operate when travelling.
- Do not operate near flammable vapours.
- Never use system when refuelling, in multistorey or enclosed car parks, in garages or on ferries. The heater's exhaust can be toxic in enclosed spaces (e.g., garages, workshops). The unit can only be operated outdoors to ensure dissipation of exhaust gases.
- Do not spray water directly into the wall cowl when cleaning.
- In the event of a leak in the gas system, extinguish all naked flames, do not smoke, switch off all appliances, shut off gas cylinder, open doors and windows and ask an expert to inspect the system.
- Keep areas around the appliance, the air inlets, and the vents free of obstruction.
- Keep the cowl for the exhaust duct and combustion air intake free of contamination.
- Area around the wall cowl may be hot, avoid leaning objects on or touching this area.
- The exhaust system must be inspected by a qualified technician at regular intervals not exceeding two years.
- To avoid frost damage, the hot water system must be drained via the drain valve, even if it was not operated. Warranty will be void for frost damage.
- Water may drip from the discharge pipe of the P&T safety valve and this pipe must be left open to the atmosphere.
- Always remove the cowl cover prior to operating the water heater!

### **MAINTENANCE:**

- The Truma UltraRapid must be descaled on a regular basis (at least twice a year). We recommend the use of suitable normal commercial products for the cleaning, disinfection, and care of the Truma UltraRapid. Products containing chlorine are unsuitable.
- To avoid the colonization of micro-organisms, heat up the Truma UltraRapid to 70 °C at regular intervals.
- The drain valve and the P&T safety valve are to be operated regularly or every 6 months to remove lime deposits and to ensure that they are not blocked. Before using the product for the first time, it is essential to flush the entire water supply through with clean warm water. Always mount the cowl cap when the water heater is not being operated.

### **Filling the Truma UltraRapid with water**

1. Check that the drain valve and the P&T safety valve in the cold water intake are closed. Lever needs to be in position (e) for drain valve and test level of the pressure relief valve in the close position (4a).
2. Open the hot water tap in the bathroom or kitchen
3. Switch on water pump. The 'POWER' switch is on the inside of the entry door to the left (LED lamp will alight)
4. Leave the tap open to let air escape while the water heater is filling. The heater is filled when water flows out of the tap.

#### Pressure and Temperature Relief Valve (P&T safety valve)

The P&T safety valve is to be operated regularly to remove lime deposits and to ensure that it is not blocked.

- Beware of scalding injury from hot water when operating the P&T safety valve. Remember to allow the appliance to cool down first.
- Do not place a plug or reducing coupling in the discharge pipe of the P&T safety valve.
- Do not operate the water heater without a functioning P&T safety valve – this could cause an explosion. It must not be removed for any reason other than replacement.

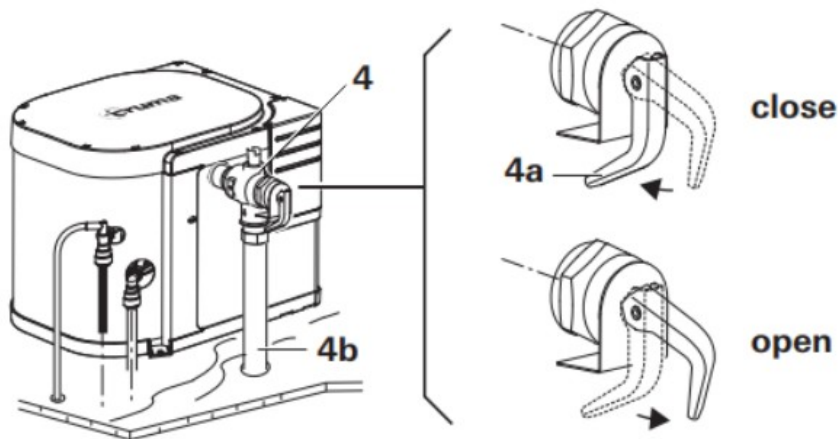


Fig. 2a

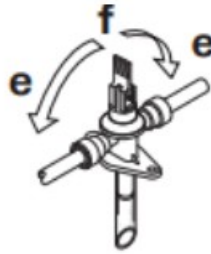
4 P&t safety valve

4a Test lever

4b Discharge pipe

#### **To drain the hot water system**

- Switch off the power for the water pump.
- Allow appliance to cool down.
- Open the hot water taps in kitchen and bathroom.
- Open the drain valve: Lever in vertical position (f).
- The water heater will drain directly to the outside via the drain valve. • Make sure water has been completely drained.



**e = close**  
**f = drain**

## HOT WATER GAS OPERATION

### 1. SWITCH WATER PUMP 'ON'

Locate the 'POWER' switch on the inside of the entry door to the left and switch 'ON' (LED lamp will alight).

Note: Switch 'OFF' at night to avoid being woken by the pump periodically re-pressurizing the system.

### 2. REMOVE COWL COVER (Fig. 3a)

If the wall cowl is positioned close to an opening window (or hatch) – in particular directly under it – the window (or hatch) must remain closed when the water heater is in use (see warning plate).



Fig. 3a

### 3. TURN ON GAS

Open gas cylinder at the front of the van and open stop cock valve in the gas supply line, located beside the HWS.

### 4. SWITCH ON

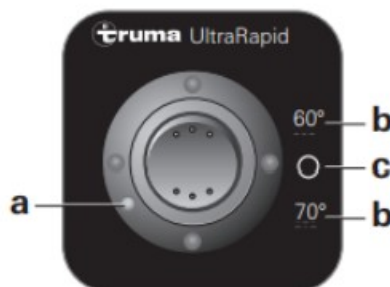
Switch on the water heater at the switch on the control panel (b), see below.

Control Panel:

a = Red indicator lamp "Fault"

b = Water heater "On" 60 °C or 70 °C

c = Water heater "Off"



If there is air in the gas supply line, it may take up to a minute before the gas is available for combustion. If the appliance switches to "Fault" during this time, switch off the appliance – wait 10 minutes – and switch on again.

### 5. SWITCH TRUMA SYSTEM 'OFF'

Switch off the water heater to position (c) on the control panel. If the water heater is not to be used for a longer

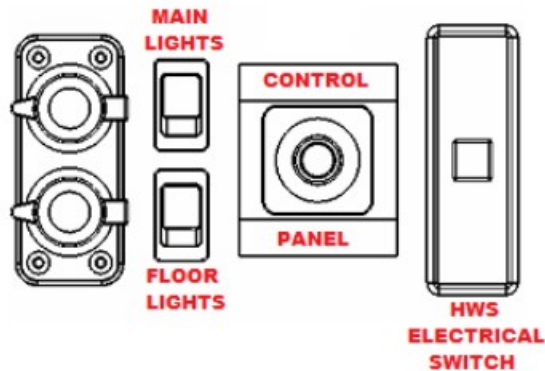
period, mount the cowl cover, close stop cock valve in the gas supply line and close the gas cylinder.

## HOT WATER ELECTRICAL OPERATION

First make sure your 240V is on (see Connection to 240 Volt Electricity Section). If being powered by the inverter, limit use based on battery and solar levels.

To operate the electric heating element, switch on the HWS electrical switch to the right of the Control Panel.

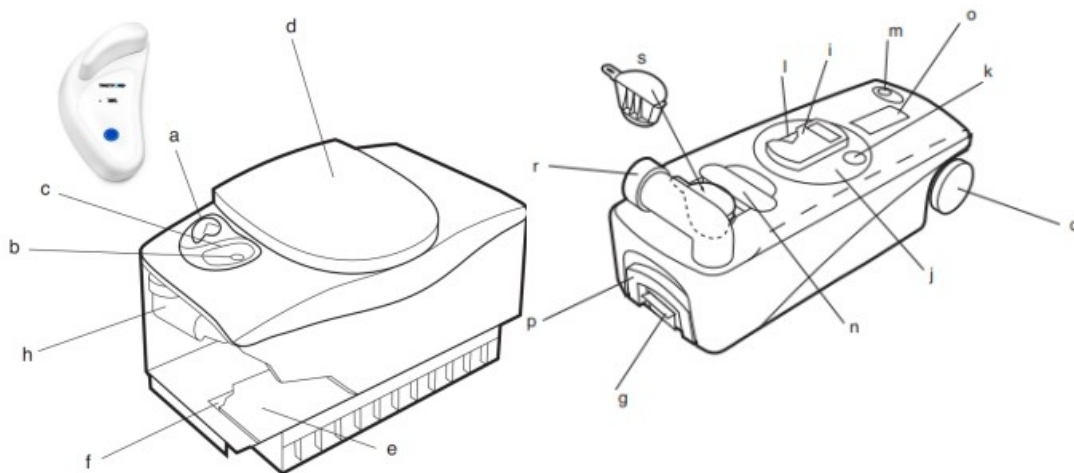
The water temperature cannot be selected, automatic temperature limited to approx. 70 °C. For a faster heating up period the appliance can be simultaneously operated with gas and electrical power.



## TOILET

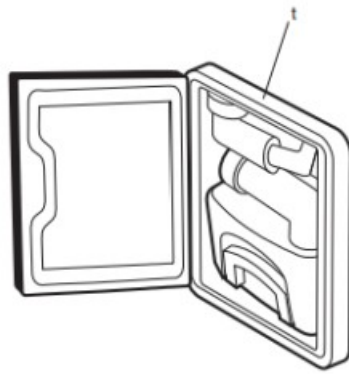
[Click for THETFORD Toilet User Manual](#)

The L16 ensuite includes a Thetford Cassette Toilet. Your model will be fitted with either a manual filled tank or a plumbed in tank. A manual filled model will have clear gauge visible on the RHS of the external compartment. If this gauge is not evident your model will be plumbed in.



For more information around the maintenance and operation of the toilet please refer to the Thetford Toilet user manual provided. The toilet is made up of two parts: a permanently fixed part and a waste tank that is accessible from the outside. The removable waste tank is located under the toilet bowl and can be removed via a door on the outside of the caravan.

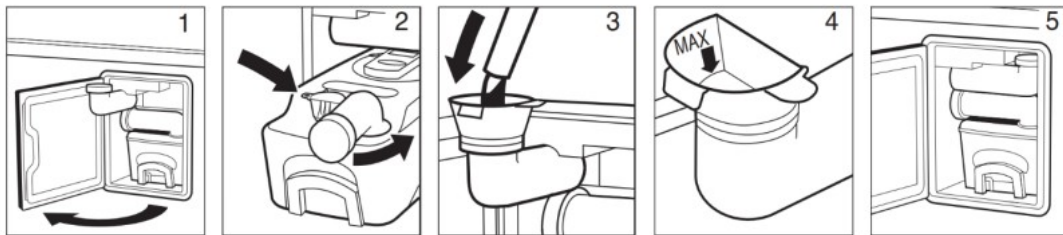
- a. Handle to open and shut the valve blade.
- b. Flush knob: when this is pressed, an electric pump fills the bowl with water.
- c. Level indicator display: the red LED on the display lights up when the waste tank is full. When the flush knob is pressed briefly, the display shows the level in the waste tank and the level in the water tank (C-402X).
- d. Removable seat and cover.
- e. Cover plates.
- f. Storage compartment for toilet fluids (only the tall model).
- g. Safety catch: holds the waste tank in place.
- h. For manual fill model – Water filling funnel for easy filling of the flush water tank.
- i. Cover: guarantees optimal hygiene. Opens when the waste tank is in the toilet and closes when the waste tank is removed.



- j. Removable mechanism.
- k. Valve blade opener.
- l. Valve blade / valve seal.
- m. Vent plunger: for emptying without splashing.
- n. Upper handle.
- o. Automatic pressure release vent that ventilates the waste tank when it is in the cassette toilet. Avoids excessive pressure in the waste tank.
- p. Pull-out handle for easy transport of the waste tank.
- q. Wheels.
- r. Rotating emptying spout allows waste tank to be easily and hygienically emptied.
- s. For manual fill model – Water filling extension.
- t. Access hatch to waste tank and water filling funnel: lockable from the outside.

### SETTING UP AND USING YOUR TOILET

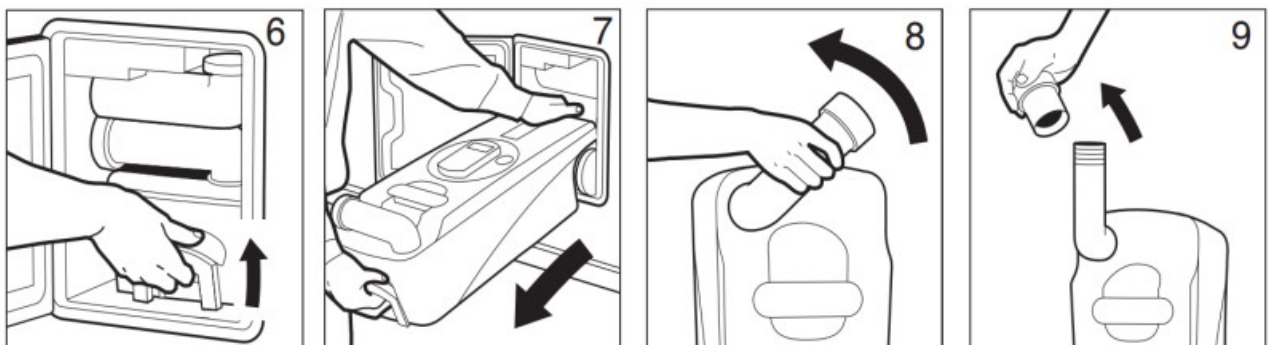
Some L16 Caravans will be fitted with a manual fill tank (see below for instructions) If your L16 is a manual fill it will have a clear water level gauge next to the tank. Models fitted with an auto fill tank are plumbed into the water tank and do Not need manual filling.



1. Press top button and open the access door on the outside of the caravan using key provided if required.
2. Rotate the waste tank emptying spout 90° and remove the water filling extension
3. Rotate the water fill funnel outwards, remove the cap, and place the extension on the water fill funnel. Add the recommended amount of fresh-water additive (See sample Thetford AQUA RINSE in the bottom drawer of inside kitchen) to the water tank for a better and cleaner flush that also keeps the water in the flush tank fresh.
4. Fill the rest of the water tank with clean water.
5. Remove the extension and return to its original position on the waste tank.

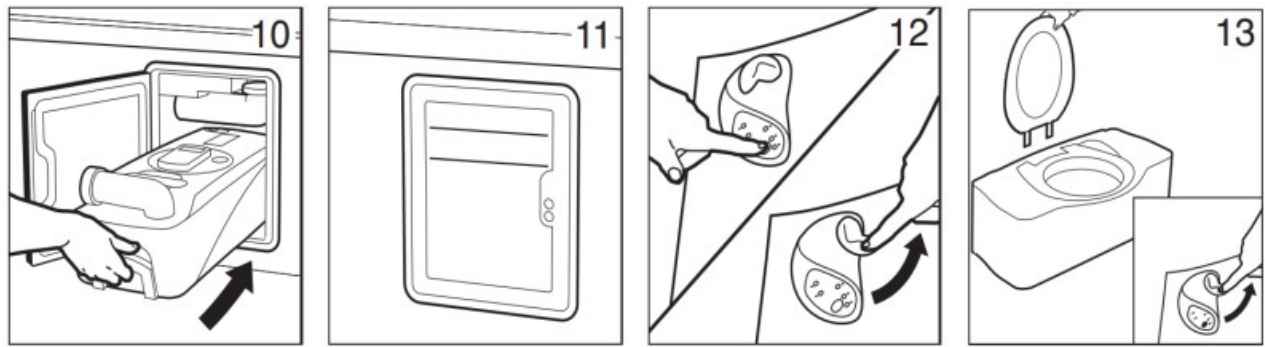
**WARNING:** Keep water level below the top of the water filling funnel.

**NOTE:** 150ml of water will remain in the water fill funnel when the water tank is empty.



6. Remove the waste tank by pulling the safety catch upwards.
7. Pull the waste tank outward to the stop. Tip it slightly and take the tank fully out.
8. Place the tank upright and turn the emptying spout upwards.
9. Remove the cap, pour the stated quantity of toilet fluid into the waste tank (use cap with measuring cup and sample bottle of AQUA KEM BLUE toilet fluid in bottom drawer of inside kitchen). This avoids unpleasant smells in the waste tank and keeps the inside of the waste tank clean. Next add approximately 2 litres of water – enough to ensure that the bottom of the waste tank is covered. Screw the cap back onto the emptying spout. Turn the emptying spout back to its original position.

**WARNING:** Never add toilet fluid via the valve blade or via the toilet bowl.



10. Slide the waste tank back into its original position via the access door. It should easily slide back into place. Do not use excessive force as this may cause considerable damage.
11. Make sure that the waste tank is secured with the safety catch. Shut the access door and lock it.
12. Run water into the bowl by pressing the flush knob briefly or open the valve blade by turning the handle anti-clockwise. Your Thetford toilet is now ready for use.
13. After use, open the valve blade (if still closed) by turning the handle anti-clockwise.

Flush the toilet by pressing the flush knob for several seconds. **TIP:** The flush of your toilet will be more effective if you pulsate the flush by pressing the flush button several times in a row. Close the valve blade after use.

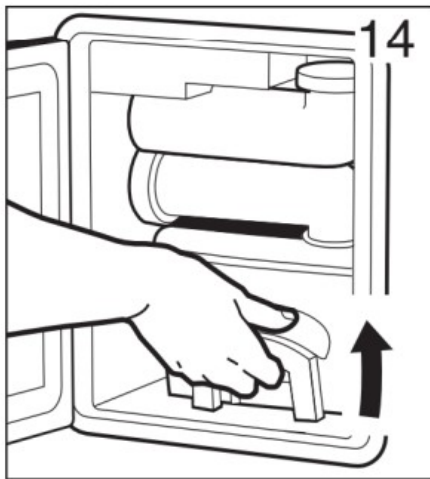
**NOTE:** Do not leave water in the bowl if the toilet is not being used. This does not help to reduce unpleasant smells and only leads to flooding.

**NOTE:** To prevent clogging, Thetford recommends using Aqua Soft, Thetford's quickly dissolving toilet paper.

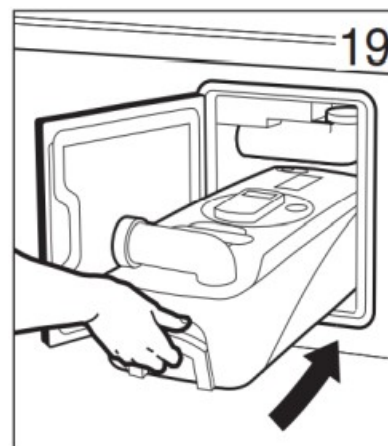
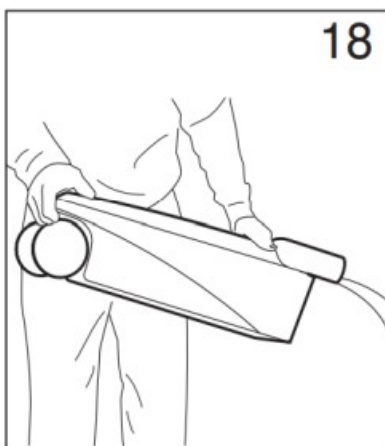
**WARNING:** We recommend emptying the flush tank before travelling. To avoid leakage through the venting system do not travel with flush tank more than  $\frac{3}{4}$  full.

The waste tank has a capacity of 19 litres and must be emptied at the latest when the red light in the level display lights up. The indicator lamp will light up when the waste tank can still take about 2 litres, which is about 3 uses. It is advisable to empty the waste tank earlier. Do not allow the waste tank to become too full.

## **EMPTYING TOILET WASTE TANK**



14. Make sure that the valve blade is closed. Open the access door located outside the vehicle. Pull the safety catch upwards and remove the waste tank.
15. Remove the water filling extension first to avoid it getting lost during the emptying of the waste tank and place it back in the hatch.
16. Stand the waste tank upright (Pull out handle at the top, wheels at the bottom). Press the handle down and move it away from the waste tank until it snaps out of its locked position.



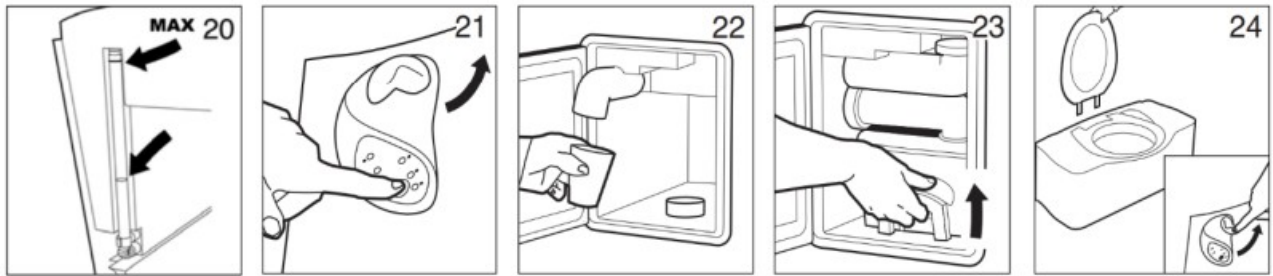
17. Pull the handle up and wheel the waste tank to an authorised waste dump.
18. Push the handle back. Turn the emptying spout upwards and remove the cap from the spout. Hold the waste tank by the upper handle with one hand, while placing your other hand by the rear handle so that during emptying you can operate the vent plunger with your thumb. To empty the tank without splashing, depress the vent plunger while emptying the tank. After emptying, flush the tank thoroughly with water. Also clean the valve blade with water.

**NOTE:** The vent plunger should only be pressed once the emptying spout is pointing downwards.

19. If required, make the toilet ready for use once again (steps 8 and 9). Return the water filling extension to its original position on the waste tank. Slide the waste tank into the toilet and close the access door.

### STORAGE

It is important to follow the instructions below if you do not expect to use the Thetford toilet for an extended period.



20. Completely empty the water tank through the drain tube, which also serves as a level indicator. Take the drain tube out of the clamp and carefully pull it downwards from the upper plug. Direct the drain tube out through the access door opening to allow water to flow out. Afterwards, be sure the drain tube is placed back into the clamp first and then pushed back in the upper plug.
21. Open the valve blade by turning the handle on the toilet anti-clockwise. Press the blue knob until water stops flowing into the bowl. Close the valve blade.
22. Open the access door on the outside of your caravan and turn the water filling funnel outwards. Remove the cap and empty the water filling funnel by turning it a quarter turn anti-clockwise.
23. Remove the waste tank and empty this at an authorised waste dump. Follow the instructions for cleaning and maintenance.
24. Replace the waste tank and open the valve blade.

## CLEANING

The toilet should be cleaned and maintained regularly depending on the amount of use. To clean the toilet, Thetford advise using water and Thetford Bathroom Cleaner & Thetford Toilet Bowl Cleaner. NOTE: Never use bleach, vinegar or other powerful household cleaners that contain these substances. These may cause permanent damage to the seats and other toilet components.

### Toilet Bowl

Squirt Thetford Toilet Bowl Cleaner into the toilet bowl and use Thetford Bathroom Cleaner for the outside of the toilet. Read the product instructions before use. Flush the toilet bowl with water and wipe down the rest of the toilet with a damp cloth.

Clean seat and cover. The seat and cover can easily be removed: Lift the seat and cover assembly and pull the round pins (inside the assembly) outwards from the pin holes. After cleaning, replace the seat and cover by positioning the round pins in front of the pin holes and push the lid and seat downwards.

To keep your flush water fresh and to prevent deposits from forming in your toilet bowl, add a correct dosage of Aqua Rinse in your flush-water tank, if present, in your toilet.

### Waste Tank

Next to using Thetford's Cassette Tank Cleaner, the powerful cleaning agent for the periodical cleaning of the waste-holding tank of your toilet, Thetford suggest the following:

- Remove the mechanism from the waste tank by turning it anti-clockwise, as shown on the waste tank. Rinse the complete mechanism under a tap.
- Remove the cover plate from the automatic pressure release vent by prising it up using a screwdriver. Use one hand to push the automatic pressure release vent open, while holding the float of the automatic pressure release vent on the inside of the tank with the other hand. Push the float upwards, turn the float a half turn and remove it from below. Remove the rubber seal that is under the float. Rinse the float and rubber seal under a tap. Replace the rubber seal and the float for the automatic pressure release vent in the same way.

## MAINTENANCE

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

treat the seals with Thetford High Grade Seal Lubricant after cleaning.

**NOTE:** Never use Vaseline or any vegetable oil except olive oil. These may cause leakage. The valve blade seal is a part of the toilet that is subject to wear. Depending on the extent and manner of service, after a period it will be less effective and will need to be replaced.

### WINTER OPERATION

You can use your Thetford cassette toilet as usual in cold weather, as long as the toilet is situated in a heated location. If this is not the case, there is a risk of freezing. In that case Thetford advise that the toilet is drained by following the instructions under "STORAGE". For environmental reasons, the use of antifreeze such as that used in a car radiator is not advised.

### TOILET CARE PRODUCTS

For more information or to purchase Thetford toilet care products for use with your Thetford cassette toilet, visit <https://www.thetford.com.au/shop/>



### AIR CONDITIONING (IF OPTIONED)

[Click for Truma Aventa Air Conditioner User Manual](#)

If optioned the L16 has a roof mounted Truma air conditioner, it requires 240V mains power or the optional 240V inverter to function. The power point for the air conditioner if optioned is in the overhead cupboard next to the microwave. For information on the correct operation of this AC unit please refer to the owner's manual provided.

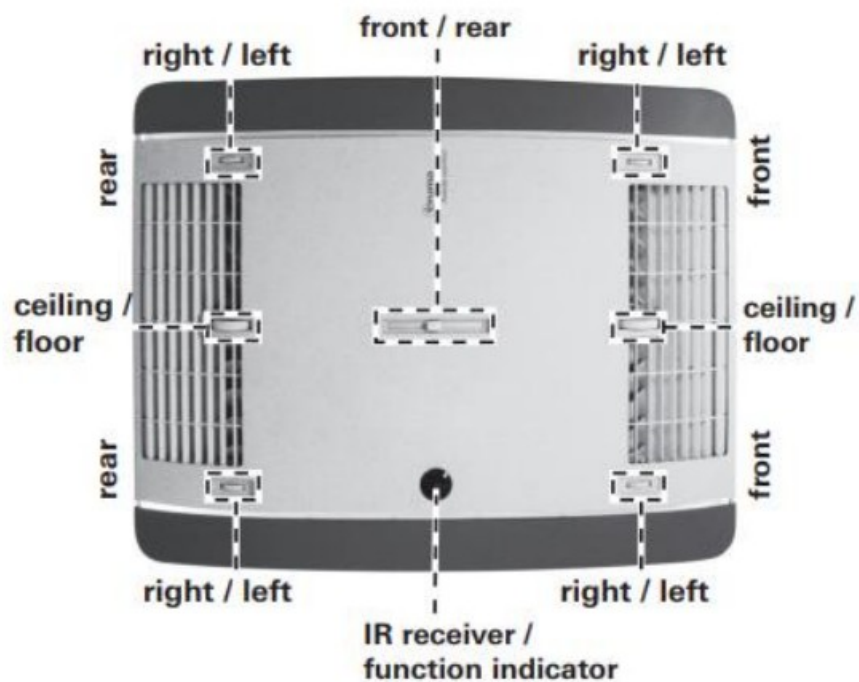
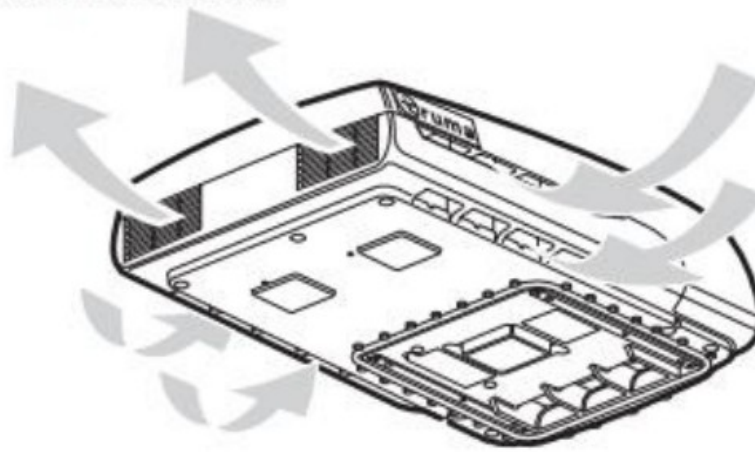
- When being powered by the inverter, limit use based on battery and solar levels.
- Park the vehicle in the shade if possible.
- Darkening with blinds reduces the amount of heat radiation.
- Clean your roof at regular intervals (a dirty roof heats up more than a clean roof). Keep the air inlets / outlets and the condensation traps on the roof free of obstructions such as leaves at all times.
- When the vehicle is being cleaned it, ensure that no water gets into the device when spraying with a high-pressure cleaner, for example (do not spray directly into the openings of the device).
- Empty or used batteries can leak and damage the remote control. Remove the batteries if the remote control is not being used for a long period of time.
- Carry out filter changes depending on the amount of use, but at least every 12 months.

In automatic mode, cooling / heating mode and the fan level are selected automatically depending on the room temperature.

In circulated air mode, the interior air is recirculated and cleaned by the filters. No LEDs illuminate in the IR receiver.

Whether or not the air conditioning system is operating, the lighting can be switched on or off by pressing the "Ambient lighting" button. The lighting is dimmed by pressing and holding down the "Ambient lighting" button. The previous setting is activated when it is switched on again.

Air inlets / outlets




IR receiver / function display



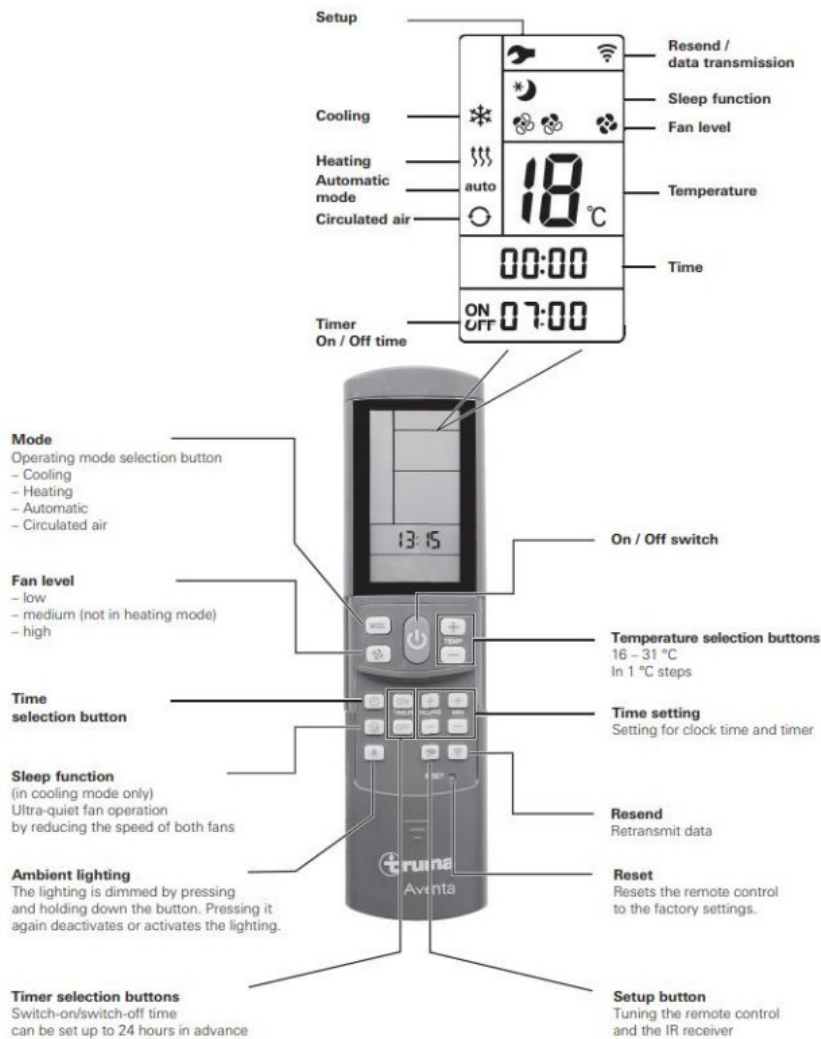
- LED 1 blue – illuminated – (cooling mode)
- LED 1 blue – flashing – (cooling mode compressor start-up)
- LED 2 yellow – illuminated – (heating mode)
- LED 2 yellow – flashing – (heating mode compressor start-up)
- LED 3 red – flashing – (data transfer in progress)
- LED 3 red – illuminated – (fault)

There is an additional pushbutton on the IR receiver (m), where the unit can also be switched on and off without the remote control (e.g. with a ballpoint pen). If the unit is switched on using this pushbutton, the system is automatically reset to the factory settings (automatic mode, 22 °C).

Before switching on for the first time, the remote control must be tuned to the IR receiver.

- Insert batteries (pay attention to polarity)
- Setup symbol on remote flashes (if symbol does not flash, perform Reset)
- Point remote control at IR receiver.
- Press Setup button  and hold down.
- When the red LED on the IR receiver starts to flash, release the Setup button.

The remote control is now tuned to the IR receiver, the Setup symbol goes off and the air conditioning system starts in circulated air mode, at low fan level and with no timer set.



## ROOF VENTILATION

The L16 is fitted with a Finch Australia 12 Volt Shower Hatch with LED



- The hatch features permanent / fixed ventilation
- The 2-way fan means it can be used to either extract steam from the bathroom or bring in the fresh air from outside.
- The flywire screen is easily removable for cleaning.

**NOTE:** Make sure vent is closed when driving or if there is strong wind or rain to prevent damage.

#### **ENTRY DOOR**

The L16 Camec entry door with flyscreen is fitted with a lower vent for cross flow ventilation.

**NOTE:** Do NOT obstruct the vent, it is required to allow air flow in the cabin where a gas installation is fitted.

#### **WINDOWS**

Click for EUROVISION Window User Manual



The windows have 2 locking positions.

1. Vent lock position – Use the vent lock position (pin slot in between lug) while the van is occupied to help minimise condensation.
2. Air lock position – Use the air lock position (pin slot on outside of lug as shown in diagram) while van is travelling to prevent dust ingress.

#### **To open the windows:**

1. On all side handles, push the white button on the handles and rotate the handle towards the centre to unlock and away from the centre to lock.
2. Push the window outwards. The window will click at different opening positions.
3. Take care when opening the windows so as not to fall out of the caravan.

#### **To close the windows:**

1. Push the window outwards a little to release from the lock position, then pull inwards to close.
2. Rotate the handles at the bottom until it clicks once to lock the window.

**NOTE:** Make sure all windows are fully closed and handles in full air lock position when travelling. Close windows when cooking outside and using the heater to prevent unwanted smells and fumes entering the caravan.

To operate the blinds and the fly screen use the central handle to pull or push the blind downwards or upwards to any position. The blind and flyscreen can also be locked together by joining at the middle catch and then positioned as desired. To unlock, press up to release the catch in the handle, this will separate the blind and flyscreen.



The windows also serve as an emergency exit; unlock fly screen and blind and open the window to exit caravan. Note above illustration shows blind at the top however, your van will be installed with the blind drawn from the bottom up to give privacy.

### **SHOWER SCREEN DOOR**

The L16 is fitted with a ROLdoûr retractable shower screen door for space saving and ease of use. Cleaning is simple and made easier with a removable cartridge screen, [Click for Video on Removing Cartridge](#)

The ROLdoûr screen is made from 100% polyester with a blush textured finish on the front and a waterproof PVC coating on the back.



### **Textured side**

We recommend treating your fabric screen with a fabric protection before use and top up as when required (or every 6 months), this will help to protect the textured fabric side against scuffs and stains created by passing traffic in the living area which can then be easily wiped clean.

You can use fabric protection products such as Scotchgard Fabric Water Shield for the textured side.



### **Waterproof side**

It is also possible to add extra protection to this side with a waterproof repellent spray to help support a quicker water runoff, with the position of your shower head, you may feel you might need to add an extra shield to protect your screen if the shower head is in the direct line of sight of the water spray as opposed to general off spray. You can use a waterproof repellent spray such as Heavy Duty Water Shield from Scotchgard.

### **To clean**

- You can remove the cartridge from the frame and clean on a flat clean surface or you can clean the screen in place. Do not use force as this can stretch the screen and the waterproof resin. Place a clean flat object or board behind whilst cleaning the area from the opposite side.
- Avoid using bleach or any other harsh or abrasive chemicals, as this will discolour or remove the protective waterproof layer. Stick to water that is warm rather than hot for all these same reasons.

### **For the textured polyester side**

- Remove any surface dust with a dry cloth.
- Wipe the fabric in one direction from top to bottom with the screen fully extended.
- Leave the screen fully extended to air dry naturally.
- Once fully dry & clean, treat with fabric protection spray to protect against scuffs or marks created by passing traffic in the living area.

### **For the waterproof side**

- Use a light soapy cleaning product. Gently scrub with a wet soapy soft cloth or sponge and rinse away soap with clean water.
- Once fully dry & clean, treat with waterproof shield spray to protect if required.

## **FUSION STEREO**

### **[Click for FUSION Stereo User Manual](#)**

The L16 is equipped with a MS-RA210 Fusion Head Unit located inside the door on the side of the lounge above the switches. It comes with four speakers, two are located above the bed and two located outside above the slide out kitchen. It features the ability to customize audio profiles for two separate audio zones and is compatible with a smart device or Garmin watch. Audio source options include Bluetooth, DAB+ radio, AM/FM radio, AUX and USB connections. For more detailed user information please read carefully and refer to the respective Fusion Owner's Manuals provided.

### **FUSION-LINK WIRELESS REMOTE CONTROL APP**

You can use the Fusion-Link remote control app on your compatible Apple or Android device to adjust the stereo volume, change the source, control playback, select and manage radio presets, and adjust some stereo settings. For information about the Fusion-Link remote control app for compatible Apple or Android devices, go to the Apple App Store or the Google Play™ store.



## Dial

- Turn to adjust the volume.
- When adjusting the volume, press to switch between zones.
- Turn to move through the menus or adjust a setting.
- When in a menu, press to select the highlighted option.
- Press and hold to activate certain functions such as opening the radio presets.



- Press to turn on the stereo.
- Press to mute the audio.
- Press and hold to turn off the stereo.
- Press and hold for longer than 10 seconds to reset the stereo.




- Press to open the menu.
- Press to return to the previous screen from the menu.
- Press and hold to exit the menu.



Press to change the source.

**TIP:** You can turn the dial to browse and press the dial to select the source.

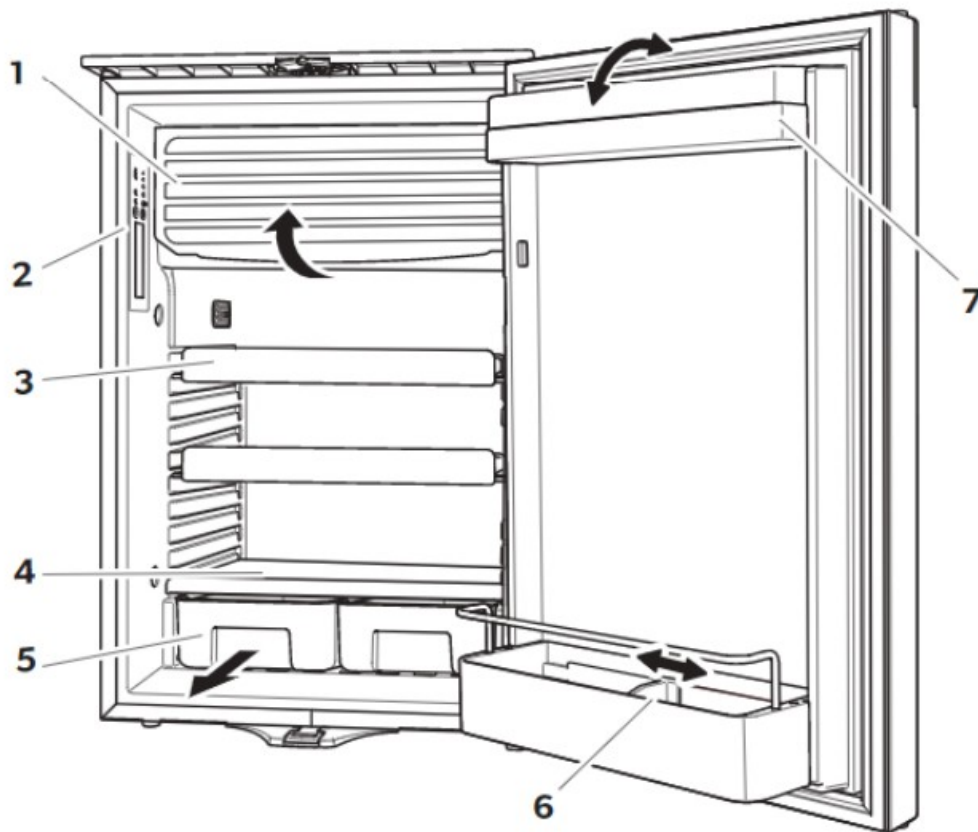
- Press to skip to the beginning of the track or to the previous track, when using an applicable source.
- Press and hold to rewind the track, when using an applicable source.
- AM/FM source:
  - Press to tune to the previous station or preset.
  - Press and hold for faster tuning (manual mode only).
- AUX: Press to decrease the gain.
- SiriusXM source:
  - In Live Mode, press to tune to the previous station or preset.
  - In Live Mode, press and hold for faster tuning, in Manual mode only.
  - In Replay Mode, press to skip to the previous track.
  - In Replay Mode, press and hold to rewind the current track.
- DAB source:
  - Press to return to the previous DAB station in the ensemble. When you reach the beginning of the current ensemble, the stereo automatically changes to the last available station in the previous ensemble.
  - Press and hold to return to the previous DAB ensemble.

-  Press to pause or resume media playback.
- AM/FM source:
  - o Press to cycle through the tuning modes (Auto, Manual, and Preset).
  - o Press and hold to save the selected station as a preset.
- SiriusXM source:
  - o Press and hold to switch between Replay Mode and Live Mode.
  - o In Live Mode, press to cycle through the tuning modes (Manual, Category, and Preset).
  - o In Replay Mode, press to pause and play.
- DAB source:
  - o Press to scan for DAB stations.
  - o Press and hold to save the current station as a preset.
- Press to skip to the next track or station, when using an applicable source.
- Press and hold to fast-forward, when using an applicable source.
- AM/FM:
  - o Press to tune to the next station or preset.
  - o Press and hold for faster tuning (manual mode only).
- AUX: Press to increase the gain.
- SiriusXM source:
  - o In Live Mode, press to tune to the next station or preset.
  - o In Live Mode, press and hold for faster tuning, in Manual mode only.
  - o In Replay Mode, press to skip to the next track, if applicable.
  - o In Replay Mode, press and hold to fast-forward the current track, if applicable.
- DAB source:
  - o Press to advance to the next DAB station in the ensemble. When you reach the end of the current ensemble, the stereo automatically changes to the first available station in the next ensemble.
  - o Press and hold to advance to the next DAB ensemble.

## FRIDGE

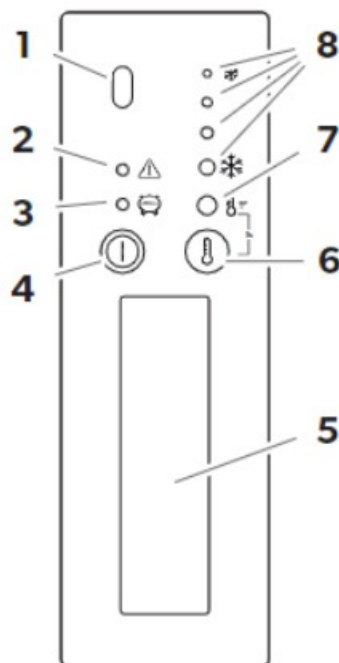
[Click for DOMETIC Compressor Fridge User Manual](#)

The inside kitchen includes a DOMETIC CoolMatic CRX 110 Compressor Fridge with 109L Capacity. For more detailed user and safety information please read carefully and refer to the DOMETIC Compressor Fridge User Manual provided.



No.	Explanation
1	Freezer compartment
2	Control panel
3	Wire shelf (folding, so that bottles can be put in the refrigerator)
4	Shelf
5	Fruit compartment
6	Bottle restraint (to hold bottles in the door)
7	Compartment with lid (hinged)

### Control Panel



No.	Explanation
1	IR sensor for switching the interior light
2	LED Service display
3	LED Blue: Compressor is running LED Orange: Compressor is off
4	On/off button
5	Inner lighting
6	Temperature selection button
7	LED: Winter mode on (CRX110ACDC, CRX140ACDC)
8	LEDs: Temperature levels

## MICROWAVE

### [Click for NCE 23L Microwave Oven User Manual](#)

The L16 includes the NCE 23L Microwave oven. Please refer to Microwave User Manual for user operation and safety information. The microwave can only be used when connected to 240V mains power or with the inverter option.

The flatbed design eliminates the need for a turntable, resulting 45% more useable cooking area than a standard turntable 23 litre microwave oven. Larger usable space makes cooking and reheating larger portions quick and easy with even results. The unique diamond wave design on the microwave cavity back wall enhances the reflection of microwaves for faster, more even results.



### TABLE LEGS

[Click for LAGUN Table Leg User Manual](#)

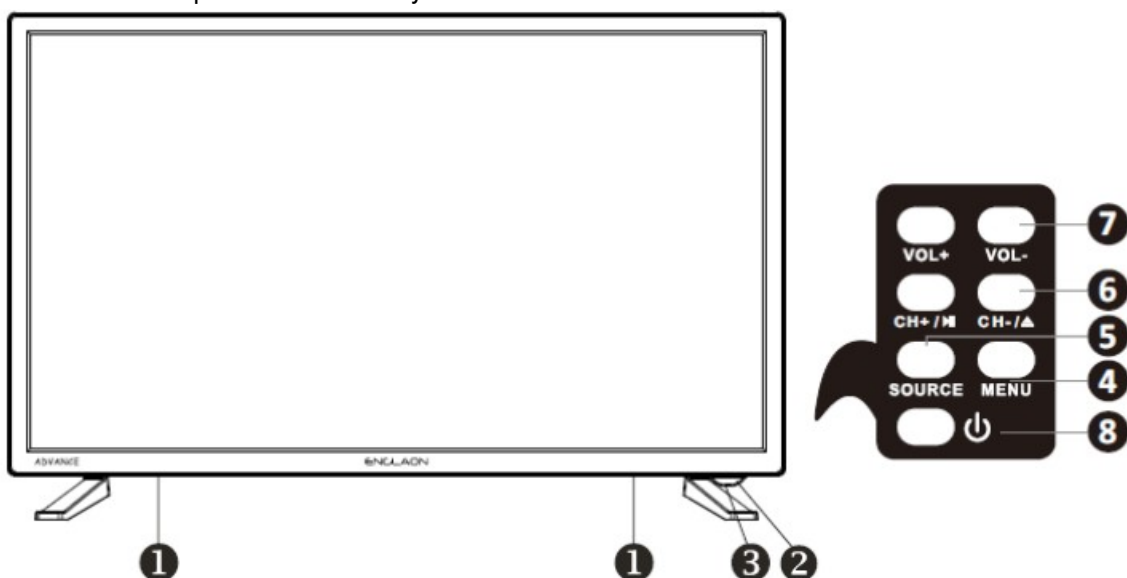
Inside the L16 there are two tables on Lagun table legs which can support approximately 22kg of weight each. For more information see the provided User Manual.

- The bottom handle releases the vertical height adjustment. Be careful when releasing as gravity will pull it down.
- The top handles can release to allow the table to swivel 360 degrees.

### TV (IF OPTIONED)

[Click for ENGLAON LED TV User Manual](#)

The L16 includes an option to include an Englaon 27" LED TV DVD combo. Please refer to Englaon TV User Manual for correct operation and safety information.



1. SPEAKER

2. POWER INDICATOR

Green: In power on mode.

Red: In standby mode.

3. REMOTE CONTROL SENSOR

#### 4. MENU

Press to see an on-screen menu of your TV's features.

#### 5. SOURCE

Change and select the desired mode.

#### 6. CH+/-

Press to change channels.

In the on-screen menu, use the CH +/- buttons as up/down arrow buttons.

PLAY

Play/stop DVD (in DVD mode).

EJECT Eject DVD.

#### 7. VOLUME

Press to increase or decrease the volume.

In the on-screen menu, use the VOL +/- buttons as left/right arrow buttons.

#### 8. POWER

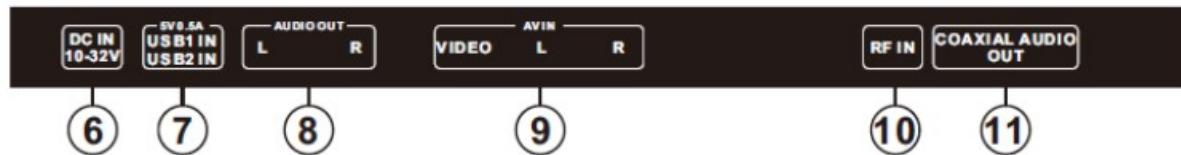
Press this button to turn the TV on or off.

### Overview of back panel

#### Side port



#### Port



#### 1. Android USB

External device interface.

#### 2. EARPHONE

Connecting for headphone.

#### 3. YPbPr Connecting for the Y/Pb/Pr Input in Component mode.

#### 4. IN HDMI2 Connecting for HDMI signal.

#### 5. IN HDMI1 Connecting for HDMI signal.

#### 6. DC IN 10-32V DC input

#### 7. USB1/USB2 IN 5V 0.5A 8.

#### 8. L/R Connect to the audio output jacks on your amplifier/home theater.

#### 9. VIDEO Connecting for VIDEO signal input in Composite mode.

#### 10. RF Connected to external antenna to receive the ATV/DTV program in ATV/DTV mode.

#### 11. COAXIAL Coaxial Digital audio output.

### WI-FI SET UP (IF OPTIONED)

### [Click for NCE Wi-Fi Modem User Manual](#)

The H16 comes with an option to include a NCE 4GX Mobile Router/Wi-Fi Modem. It features wireless internet access for multiple devices and is designed for outdoor mobile use. For more instructions, please refer to the NCE Router User Manual.



#### **To set up the router:**

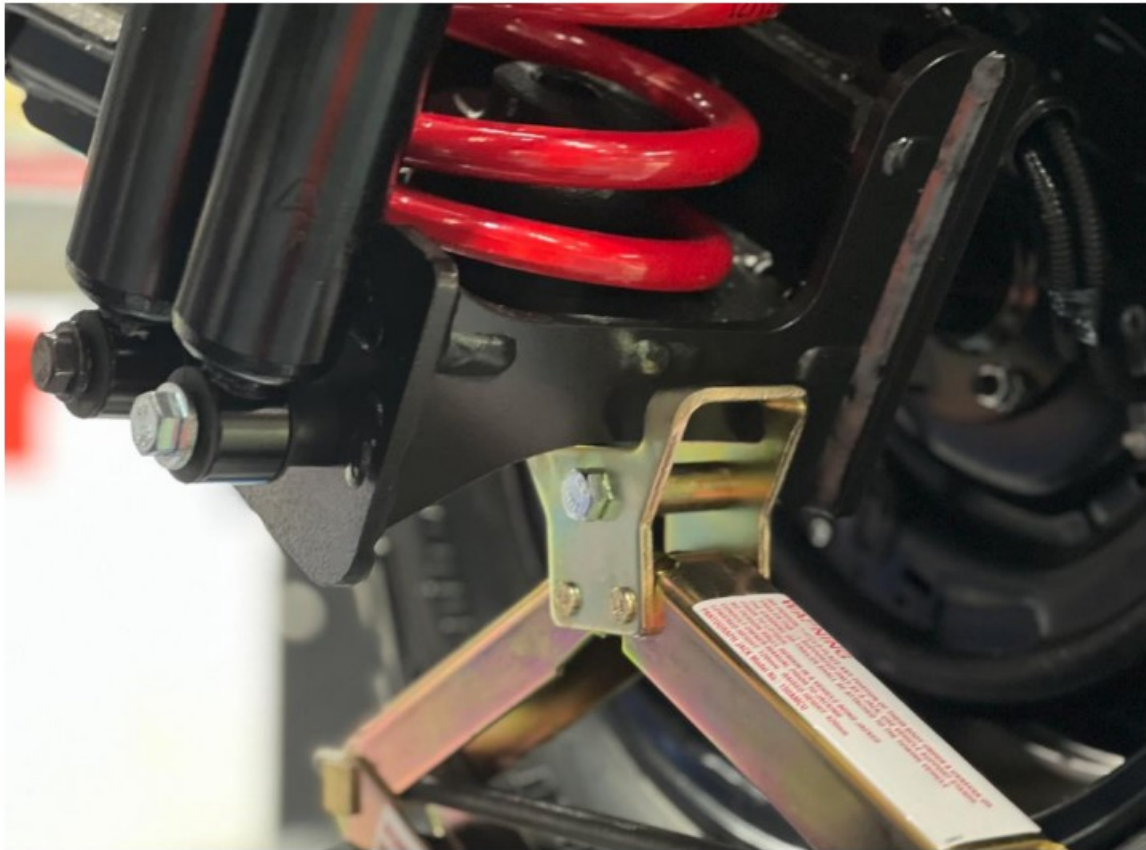
1. Make sure the power plug is NOT plugged into the Wi-Fi Router.
2. Insert your full-sized SIM Card into the SIM Slot on the left side of your Wi-Fi Router.
3. Now plug in the power plug into the side of the Wi-Fi Router.
4. On your smart device, open the Wi-Fi settings and locate the device "WIFI-59F634". (This is a unique number for every unit which will be different) and click on it. You now should be connected to the router.
5. On your smart device open any web browser and in the web address bar type in 192.168.1.1 and click Go. On the "Welcome Page", click in the white bar, type in "admin" and click LOGIN.
6. In the top left-hand corner, click on the menu bars, and click Wi-Fi Set Up. To change your Wi-Fi name, click on the "WIFI-59F634", backspace on these digits, then type in your own personal Wi-Fi name e.g., MYWIFI. Now click on the WPA PSK: (no encryption) arrow and click on (encryption) Note: make sure you backspace on any previous digits and type in your own personal password e.g.: ABCD1234, and then click on save. In the top right-hand corner click on the body symbol and click on Logout, and then you may close the web browser.
7. Now go back into your smart device settings, locate your personal WIFI name "MYWIFI" and click on it. Now type in your new password "ABCD1234" and click connect.

#### **JACKING THE CARAVAN**

**WARNING:** WHEN USING A JACK ensure that:

- the area is safe,
  - there is no-one under the trailer,
  - the opposite wheel is securely chocked.
- If possible, keep the trailer attached to the Tow Vehicle.
- The jack is located under the passenger side lounge seat base

- Position the jack beneath the suspension arm as pictured below



## **FIBREGLASS CARE**

[Click for Gelcoat Care and Maintenance Owner's Guide](#)

For the front nosecone, sidewalls, roof, and rear fiberglass panels:

1. Wash the surface with a mild detergent. For optimum results, use a cleaner recommended for fibreglass composite and follow directions.
2. Do not use automatic dishwashing detergent, abrasives, bleaches, acid-based chemicals, or ammonia.
3. Wax at least bi-annually to restore gloss and protect your surface finish. Use only wax recommended for fibreglass composite and follow instructions carefully. Never wax your gelcoat surface in direct sunlight.
4. For more information, refer to the document "Owners Guide to Gelcoat Care and Maintenance"

## **WHEEL CARE**

1. Wash your wheels regularly with warm soapy water to remove any buildup of dirt and brake dust.
2. Use a different sponge or soft brush on your wheels to the one you use on your caravan bodywork.
3. Never use abrasives such as stiff brushes or scouring pads.
4. Never use hot steam cleaning, as this can also damage the finish on your wheels.

## **SERVICING**

**WARNING:** CHECK THE TIGHTNESS OF YOUR L16'S WHEEL NUTS, tyre pressures, wheelbearing temperatures, and brake adjustment after having travelled 100km, 1,000km and approximately every 5,000km thereafter.

1. Regular servicing of your caravan should be undertaken at least every 12-months and at 10,000km, whichever

comes first.

2. It is also highly recommended that you have your caravan serviced after any extended journey, and prior to any further extended travelling.
3. Regular servicing should include checking tyres for wear and correct pressure, wheel- bearings (inspect, re-pack or replace), suspension and shock absorbers, brakes, lights, safety chains, tow hitch, and all other fixings.
4. Servicing should only be undertaken by suitably qualified technicians.
5. If any guidance is required, please contact your local Cub dealer.
6. Remember to check your tyre pressure regularly to save petrol, enhance handling, prevent accidents, and maintain the life of your tyre. Tyre pressure should be adjusted to suit conditions. Tyres should be cold when checking air pressure.
  - 360kPa at 50% load
  - 550 kPa at 100% load

### **KEYS, REMOTES & ACCESSORIES**

**NOTE:** Key number may change depending on L16 year of manufacture (Keys are located inside kitchen drawer)

**External Shower Door**



**Locker Doors**



**Toilet Door**



**Entry Door**



**Front Boot**



Fiamma Awning – Peg Kit (located inside kitchen drawer)



Thetford Accessories (located inside kitchen drawer)



1500kg Ultra Lo Jack & Bag (located under lounge seat base)



Fiamma Awning Winder, Fiamma Tension Rafter, and AL-KO Winder Handle (Top to Bottom)  
(located in the front storage locker)

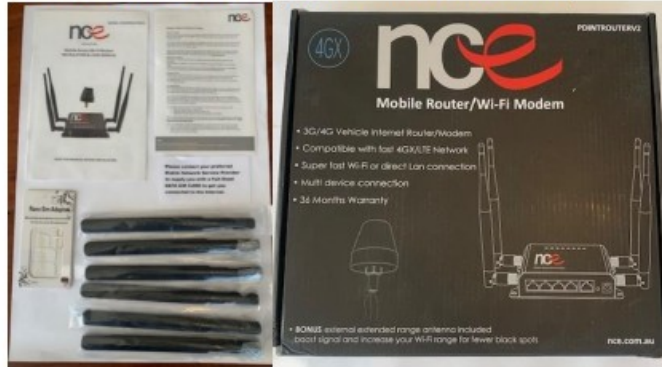


## OPTIONAL ITEMS

Cruisemaster DO35 Hitch Tow Adaptor & Spanner (located inside kitchen drawer)



NCE Mobile Router/Wi-Fi Modem (located inside kitchen drawer)



Englaon Smart TV Remote Control (located inside kitchen drawer)



Furrion Vision S Rear-Vision Camera 5" Display Kit (located inside kitchen drawer)



## Caravan Use and Care

Please note that your caravan is a recreational vehicle. If the vehicles use is outside of its intended purpose i.e., not as a recreational vehicle, some warranty items may be void and the expected lifespan of some components may be reduced.

Correct care and regular maintenance of your recreational vehicle is essential.

Battery	To ensure maximum life of your battery: 1.Ensure battery charge is maintained 2.DO NOT let batteries run completely flat 3.DO NOT overcharge batteries. Trickle charge when not in use for extended periods (6 months or more)
Brake Care and Service	Brakes must be serviced after the first 1000 to 2000 kms of use and every 5000 to 10,000 kms thereafter.
Rust Prevention	Rust can set in very quickly – 1.Ensure vehicle is stored dry and where possible covered to protect vehicle from dirt and weather which can cause rust. 2.Regular greasing of hand brake cables and nipples
Solar Panel	Panels will need to be kept clean to ensure maximum efficiency.
Toilet	Ensure toilet tanks are cleaned out and dried if caravan is to be put into storage.
Tyre	Ensure correct tyre pressure for use; running tyres flat on a tar road will cause inner tyre wear and tyre wall damage. Tyres (including the spare) should be inspected after every 2,000 kms and at least once every 12 months regardless of use as some storage conditions can reduce the expected life of the tyre. Ensure tyre lugs are tightened to 145 Nm. If lugs become loose the tyre may detach from the van.

Van load and weight distribution	Ensure you do not exceed the maximum load recommended as this may damage your car, van chassis, suspension, brakes, tyres and can be a safety risk while driving. Overloading your van will void your warranty on these items.
Water Tanks	1.Water tanks should be flushed clean before use. 2.Regular flushing to prevent mould is recommended – Do not allow water to sit stagnant for extended periods of time (3-6 months). 3.DO NOT leave water or waste in tanks during storage.
Warranty Note	Please ensure that any warranty items are reported to Cub Immediately to ensure that the matter can be investigated and actioned. Failing to raise issues promptly may compound faults and may result in your warranty claim falling outside of the warranty period.

The electrical systems of your Cub Campers product have been designed, inspected, tested & commissioned in accordance with AS/NZS 3001.2:2022 & AS/NZS 3000:2017, including any later amendments thereto dated on or before the publication date of this Owner's Manual. Any modification of any kind to Low-Voltage and/or Extra-Low voltage wiring systems, batteries, components etc. of this trailer must be accomplished by a competent & appropriately qualified entity & effected parts of the installation recertified by a qualified entity.


Any unauthorised modification of any kind to Low-Voltage and/or Extra-Low voltage wiring systems, batteries, components etc. of this trailer WILL VOID PRODUCT WARRANTY & may contravene federal and/or state laws. This manual reflects the manufacture, installation and labelling requirements of the revised electrical standard AS/NZS3001.2 (2022) which came into effect on 18/11/2023. Installations and labelling requirements of earlier models will be compliant with AS/NZS3001.2 (2020)

Thank you for purchasing a Cub Caravan. Please drive safely and happy travelling.



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## Documents / Resources

	<p><a href="#">Cub L16 Robust Caravan</a> [pdf] Owner's Manual L16 Robust Caravan, L16, Robust Caravan, Caravan</p>
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## References

- [Caravan and Camping Supplies Online | Thetford Australia](#)
- [User Manual](#)

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