



## **FOREWORD**

This document is applicable to the **2024 EXPEDITION** model equipped with the REDARC™
Multi ROGUE™ power distribution and MANAGER
ALPHA™ 100 charging systems.

Significant improvements have been made to enhance the owner experience including:

- Battery charging
- Power saving
- · Lighting control and dimming
- Water control
- Pop-Top control
- System control

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PORTABLE SOLAR PANEL PORT

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## CRUISEMASTER TOW HITCH







#### COUPLING

- The caravan should only be coupled on level ground.
- Make sure towing pin and universal is free of sand, dirt and foreign objects, and is lightly lubricated.
- Raise height of trailer coupling above vehicle towing pin by adjusting the RV jack.
- Push and hold lock button down, push the locking plate back to fully open position until the lock button springs back.
- Align coupling over towing pin by moving either vehicle or trailer, and lower.
- Ensure that the hitch is seated properly on the pin.
- Push the lock button to release the plate into the locked position.
- Assemble the dust cover by snapping in the back edge of the seal first and then pushing on the front.
- Dust cover will emit an audible snap when assembled correctly.

#### DECOUPLING

- Caravan should only be uncoupled on level around.
- If uneven surface, leave the chains on until finished unhitching the caravan.
- Engage handbrake and chock wheels if required.
- Remove dust cover, tow plug, camera lead, brake-safe lanyard and safety chains.
- Push and hold lock button down, push the lock plate to fully open position until the lock button springs back.
- Lower jack leg to raise the height of trailer above vehicle towing pin.

#### HANDBRAKE ADJUSTMENT

The cable should be adjusted in a manner that, when the handbrake is disengaged, there is some slack to ensure the brakes will not drag during towing. The adjusted should allow the lever to reach the highest vertical position and completely engage the brakes.

A further check should be made with the suspension at both ends of its travel to ensure the brakes do not operate in bump and rebound conditions.

Refer to the **Cruisemaster DO35 V3** website for additional information.

# TRAILER PLUG CONFIGURATION

#### **7 PIN TOW PLUG**

ZONE RV caravans are equipped with the industry standard 7-pin flat connector.

The image below details all connections required between the tow vehicle and the caravan.



**NOTE:** It is the responsibility of the Tow Vehicle driver to ensure the wiring is correct and that all lights operate prior to towing the caravan with periodic checks to ensure no faults exist such as a disconnected plug or blown lamps.



#### ANDERSON PLUG

**LOCATION:** Front of drawbar

An Anderson plug is located on the drawbar and may be connected to the tow vehicle to provide supplemental charging of the caravan batteries via the MANAGER ALPHA. It is advisable to support the lead with the trailer plug lead to minimise the chance of it from becoming disconnected from the car and preventing it from dragging on the ground.

I NOTE: Wiring of the vehicle Anderson connector is the responsibility of the Tow Vehicle owner. Power should be made available via an ignition switched relay to reduce the possibility of draining the tow vehicle battery when the ignition key is off. The DC input charging current of the MANAGER ALPHA™ is preset to 50Amps from the ZONE RV factory to match the caravan wiring size and length and suits most vehicles. It is not recommended to exceed this setting. It may need to be decreased depending on the vehicle alternator capacity, Anderson supply fuse, vehicle wiring gauge and the total length from the car to the MANAGER ALPHA™ charger.

Refer to the **REDARC BATTERY CHARGER** section of this manual for setting details.

• NOTE: Some functions of the caravan are disabled while power is supplied from the Anderson connector. This allows for maximum charge current to the caravan batteries while the ignition is ON. Refer to the section SYSTEM OPERATIONAL CHART for details.

## **GAS SYSTEM**

Your ZONE RV is fitted with provision for storage of one 4.5kg gas cylinder that is intended for use with appliances that have their own regulator.

There is no provision for direct connection to the caravan via bayonet or similar fittings.

**CAUTION:** LPG is a volatile fuel system and by its composition extremely explosive. Ensure great care is taken when doing anything with your gas system.

## **SMOKE SENSOR**

In compliance with fire regulations, a battery power smoke detector is fitted to the ceiling near the caravan entry door. The battery has a typical life of up to 10 years.

Please refer to the manufacturer's webpage for complete details.

https://www.cavius.com.au/



## CARBON MONOXIDE SENSOR

A standalone battery powered carbon monoxide sensor is installed within the caravan. The battery has a typical lifespan of 10 years from new.

Please refer to the manufacturer's webpage for complete details.

https://redsmokealarms.com.au/





# **ELECTRICAL SYSTEMS**

#### **ELECTRICAL CERTIFICATE**

All ZONE RV caravans are supplied with a non-prescribed Electrical Safety Certificate.

Installation and testing of the 240V cabling and components are completed by a qualified Electrician. Any unauthorised changes will void the certification and 240V warranty.

AC system may only be carried out by a licensed Electrician.

#### 240V AC POWER SYSTEM

240V power is available by connecting an approved 15Amp caravan power extension lead to the external side wall socket. The wall socket has an incorporated RCD protection switch.

Alternatively, the caravan is equipped with a 240V inverter to provide power from the storage batteries to the power sockets, Air Conditioner and Cooktop.



A good quality pure sinewave generator may be connected to the external 240V side wall socket to provide power to all 240V outlets and equipment within the caravan. Alternatively, the MANAGER ALPHA<sup>TM</sup> may be plugged into the generator, via an external RCD, to charge the batteries whilst simultaneously using the inverter for 240V power inside the caravan.

#### IMPORTANT INFORMATION ABOUT GENERATORS

Depending on the generator power capacity, you may need to restrict the number of appliances including the caravan Air Conditioner and Cooktop.

The MANAGER ALPHA battery charging system is connected to a 240V GPO located adjacent the battery charger which is supplied directly from the 240V wall input socket. Turn off the GPO to isolate the charging system from the generator if required.

#### 12V DC POWER SYSTEM

The caravan is equipped with multiple storage batteries that provide power to the Lights, Fans, Fridge, Air Compressor (for suspension), USB sockets and Inverter.

The 240V inverter can draw power from the storage batteries for operation of the Air Conditioner, Cooktop and 240V appliances when mains 240V power is not connected.

The 240V electrical system will automatically switch to the external 240V mains supply when power is available conserving battery charge.

Due to inverter power limitations, it is advised that the A/C unit, Cooktop and other 240V appliances are not operated concurrently when the caravan is not connected to 240V mains power supply.

**CAUTION:** All electrical work on the 12V DC system may only be carried out by a licensed Auto Electrician.

#### STORAGE BATTERIES

In compliance with AS3001.2, the storage batteries are installed within a sealed durable compartment located under the caravan.

The DC voltage system is protected via a high current Mega fuse located within the battery storage compartment to safeguard against high current overload or major short circuit conditions.

Additional lower amperage fuses located on the electrical panel are provided for selected systems.

The ROGUE™ modules contain internal "fuse less" electronic protection devices for other circuits such as lighting. Refer to the REDARC™ equipment manual for full details. A movable lifting platform cable of 150Kg lift capacity is required for removal and installation of the battery storage compartment.

**CAUTION:** The battery box must only be opened by a licenced auto electrician or electrician familiar with 12V power systems.

caution: To minimise risk of electric shock or arcing to the grounded caravan chassis, always disconnect the NEGATIVE lead first from the battery storage compartment then disconnect the POSITIVE lead. Always reconnect the POSITIVE lead first then reconnect the NEGATIVE lead.

#### DC SYSTEM ISOLATION

The caravan is equipped with two low voltage isolation switches for emergency use or to perform maintenance of the 12V electrical system.

- DC Isolator switch for the storage Batteries located under the right hand side lounge seat.
- Solar Panel Isolator Circuit breaker located at the top of the electrical system power board for the caravan fixed panels and auxiliary solar port.





Open position Close to engage Solar Panels

Press to Isolate Solar Panels

#### Isolation procedure:

- Always turn the water heater system off first via the control thermostat device located adjacent the vanity.
- Press the Solar system circuit breaker RED button, yellow lever pops out.
- Turn the DC isolation switch OFF.

The steps below must be followed if the battery compartment needs to be removed.

- Disconnect the Negative cable at the battery compartment terminal first.
- Dsconnect the Positive cable at the battery compartment.
- Disconnect the signal cable at the battery compartment.

Connection of the battery compartment is the reverse of the previous steps with reconnection of Positive lead first.

- Turn the DC isolation switch ON.
- Close the Solar system circuit breaker (press in yellow lever).
- Turn the water heater on via the control thermostat.

**1) NOTE:** It is not recommended to use the DC isolator for caravan storage.

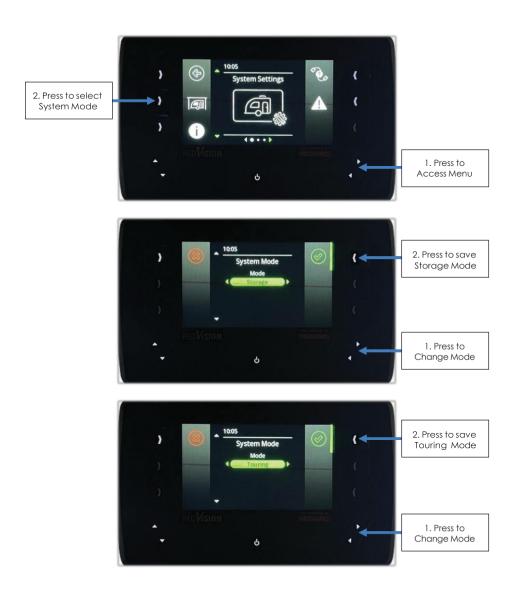
Refer to the **SYSTEM MODE** section for long term caravan storage.

#### SYSTEM MODE

Select **Touring** mode for normal use of the caravan.

Select **Storage** mode when not using the caravan for extended periods and ensure that mains power is connected to the external inlet or that the caravan solar panels are positioned to accept sunlight to keep the storage batteries at optimum charge.

The Manager Alpha will continue to charge the batteries while in **Storage** mode. The system will automatically switch to **Touring** mode when the tow vehicle Anderson plug is connected and live.



#### **ROOFTOP SOLAR PANELS**

An array of Solar panels fixed to the roof of your ZONE RV caravan provide power to charge the storage batteries via the MANAGER ALPHA charger.

All panels are connected in a parallel configuration. Each panel is protected by individual fuses which is located with the drivers' side electrical compartment.

Refer to the **Fuse Specifications** section for fuse ratings. Periodic inspection and cleaning of the panel surfaces will ensure optimum charging efficiency.

**CAUTION:** Do not stand or place objects on the solar panels.

CAUTION: To minimise the risk of injuries when working at heights, ensure that the appropriate safety equipment is used when cleaning the solar panels. There are no anchor points on the caravan roof that are suitable for fall arrest and restraint purposes.

#### **PORTABLE SOLAR PANEL PORT**

An external RED Anderson socket located at the underside rear of the caravan provides connection for a portable solar panel or blanket.

The socket is suitable for a solar blanket of up to 300Watts. The socket is directly connected to the Solar Circuit Breaker in parallel with the rooftop solar panels which located on the electrical panel.

Suitable fusing of the external Solar panel is the responsibility of the caravan owner. Only attach solar panels without an internal regulator. For best results, the solar panel maximum output voltage should closely match the caravan fixed panels which is within the range of 20 to 24V DC.



# REDARC DIGITAL MANAGEMENT SYSTEM

Located inside the caravan adjacent to the entrance door is the REDVISION<sup>TM</sup> control panel. It is the central point for controlling the lighting, fans, water delivery, fridge and 240V inverter.

The control panel has the capability of providing multiple overlay screens for access to each of the output controls and has been intuitively grouped for convenient access.

Refer to the REDVISION™ QuickStart Guide which can be found within the REDARC™ manuals or via the web link. **RedVision Quickstart Guide** 

An icon adjacent to each switch on the REDVISION TM control panel illuminates GREEN to indicate that the output is ON and operating correctly.



If the system detects an overload condition for any given output, the icon will change to RED indicating a fault is present. Full details of the fault detection system can be found within the REDARC TM ROGUETM manual.

Items that are controlled via the REDARC™ ROGUE ™ control modules make use of intelligent electronic switches that do not require fuses.

Dedicated fuses located on the system control panel located within the electrical service hatch provide power to equipment such as the Brakes,

Trailsafe, Witi, Hot Water, Air Heater, and Awning.

• NOTE: If you are experiencing any problems with the REDVISION™ system, please refer to the product manuals or contact. REDARC™ technical support. Ph: 1300 733 272

## REDVISION MOBILE APP

With the REDARC™ control system, users can download the REDVISION™ App.to operate most items using Bluetooth connectivity to your caravan.

Check the App store for iPhone or Android cell phone compatibility.









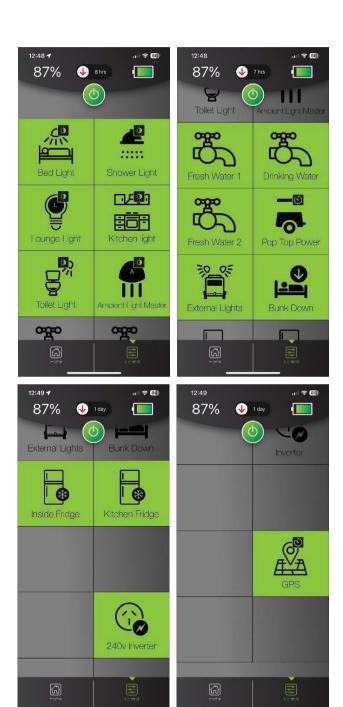
Refer to the REDARC™ REDVISION™ users guide for full details.



If difficulties are experienced when trying to pair or control your system, close the App and remove any devices labelled REDARC<sup>TM</sup> from your phones Bluetooth connection list and try to pair again.

The images below show the remote-control functions mirrored from the REDVISION™ control panel which also provide the benefit of labelling. Lights may also be dimmed by continually pressing a given tile.

A soft switch is provided to power up and check the GPS Odometer reading located within the electrical service hatch while the tow vehicle Anderson connector is not connected or live. It will automatically turn off within the time specified with the SYSTEM OPERATIONAL CHART section.



## REDARC BATTERY CHARGER

**LOCATION:** Inside the electrical service panel.



The charger is the heart of the caravan power system for maintaining charge of the storage batteries. It can draw current from the following sources with priority given to Solar Charging.

- Caravan Rooftop Solar and External Solar Socket
- 240V Side Wall Socket
- Tow Vehicle Anderson connector

Off-Grid power availability is governed by the quantity, charge and condition of the batteries installed. The "as new" power availability ranges from 400Ah (Amp/hour) for two batteries up to 800Ah for four batteries.

Always turn off unused electrical items to conserve battery charge while camping "Off-Grid".

Battery charging and protection parameters are preset at ZONE RV within the REDVISION<sup>TM</sup> control panel providing an accurate measurement of the battery capacity and state of charge. The battery Amp/hour setting may be altered via the REDVISION<sup>TM</sup> control panel when adding or removing batteries from the storage compartment to provide an accurate estimated level of charge and time to replenish the batteries to 100%.

Battery low charge protection is governed by the REDARC<sup>TM</sup> system. All loads including high voltage items that are powered via the 240V inverter are automatically turned off once the low charge threshold is reached. This is referred to as **Low State of Charge** (LSOC). Rapid charging may be achieved by connecting the caravan to a 240V supply. Supplemental charging is provided via the Solar panels during good daylight hours and via the tow vehicle Anderson connector. Charging time via the Solar and the tow vehicle Anderson connector is dependent upon the delivery of electrical power from those sources.

It is not recommended to make alterations to the battery charge protection or chemistry parameters. These have been preset for optimal battery life. The Lithium storage batteries supplied by ZONE RV incorporate an internal Battery Management System (BMS) which provide additional safeguards from total depletion of charge.

The charging system and power consumption may be monitored via the REDVISION™ control panel.

Press the Right Arrow of the lower right dual function key to view the system current flows and values.

The numbers and arrows display the magnitude of electrical current and direction. The Battery icon will change from Green to Red when power drawn from the batteries is greatervthan the charging current.



Typical Charging display via the REDVISION™



#### **BATTERY CHARGE SETTINGS**

All ZONE RV caravan battery charging systems have been preset at time of manufacture. When changing batteries, the charge settings for the MANAGER ALPHA 100 can adjusted via the REDVISION<sup>TM</sup> control panel.

Press the left key pointing arrow on the lower right dual function key to access the settings menu then press the switch adjacent the Battery icon to enter the Charger Settings menu page.

Ensure the Chemistry is set to match the battery type which is LiFePO4 for Lithium type batteries.

Set the Capacity in increments of 200Ah per battery. For example: Set Capacity to 800Ah for four batteries.

Set the Max Charge Current according to the number of batteries installed. The recommended maximum setting for caravans equipped with one battery is 50Amps. Caravans equipped with two to four batteries may be set to 100Amps.





#### CAR ANDERSON CHARGE SETTING

he maximum current draw from the tow vehicle can be set within the REDVISION<sup>TM</sup> control panel BMS Settings menu. The setting is dependent on the tow vehicle electrical system reserve charging capacity and cable size.

It is possible to set the current draw from the tow vehicle to a maximum of 100Amps, however, it is not recommended to exceed 50Amps and may be required to be set lower for some vehicles.

The setting should be made in consultation with a qualified Auto Electrician who has familiarised themselves with the tow vehicle electrical system, alternator capacity and type, fusing and the wiring gauge to the Anderson connector.

Power should be made available via an ignition switched relay such as the **SBI12** offered by REDARC<sup>TM</sup> to prevent draining the Tow Vehicle battery charge when the ignition key is off.

Refer to the latest user manual from the REDARC™ product webpage for complete instructions and specifications.

#### **Manager Alpha Instruction Manual**

**CAUTION:** Failure to correctly consider the maximum current draw may result in failure of the tow vehicle Anderson supply fuse and/or overheating or electrical fire of the wiring.



#### NIGHT MODE SETTING

When charging at maximum power, the MANAGER ALPHA cooling fan sound can be reduced if desired by enabling the scheduled **Night Mode** feature via the REDVISION<sup>TM</sup> control panel.

**1) NOTE:** Enabling Night Mode may increase the charging time.

Using the Left/Right and Up/Down dual function keys, navigate to the system settings page labelled CHARGER SETTINGS.

Press the key beside the crescent moon shaped icon to access the NIGHT MODE TIME settings.

Use the Left/Right and Up/Down dual function keys to enter the START and END time periods.

Press the key adjacent the GREEN tick icon to save and enable Night Mode.

Disable Night Mode by reopening the CHARGER SETTINGS and NIGHT MODE TIME pages and press the key adjacent the GREEN moon icon. The display will now show "Disabled" then press the GREEN tick key to save your selection.

Night Mode status is indicated by the crescent moon icon colour:

Green = Enabled

White = Disabled







## REDARC INVERTER

**LOCATION:** Under the right-hand side lounge seat. Lift the seat cushion to gain access to the inverter.



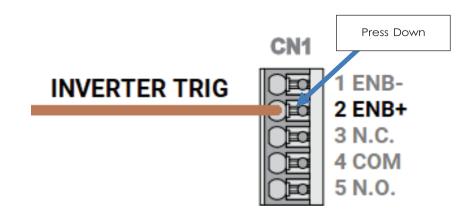
The battery system supplies the inverter with 12VDC to convert to 240VAC for appliances including the Air Conditioner, cooktop, washing machine and other appliances connected to the 240V outlets.

The inverter will automatically switch over to the 240V external supply socket when external mains power is detected. Inverter capacity may not provide enough power to operate all appliances at the same time. Limit the use of 240V appliances to manage storage power availability for lighting and other electrical items.

The storage batteries will require sufficient daily recharge via the Solar system when 240V mains power is not available.

**NOTE:** It is advised to turn off all 240V appliances (Air Conditioner, Cooktop) when is connecting the external side wall 240V power lead. The appliances may then be turned on to operate from the storage batteries.

• NOTE: If replacement of the inverter is required, ensure the operating trigger wire is reinserted into the correct terminal. Using a small flat blade screwdriver, press down on the spring loaded release tab adjacent to the terminal labelled 2 ENB+ to remove or insert the



## LIGHTING

#### TOWING CLEARANCE AND SIGNAL LIGHTING

This encompasses all exterior lighting required for highway towing such as, clearance, tail, stop and turn indicators. All lights are directly controlled by the Tow Vehicle 7 pin plug.

#### **STORAGE LIGHTING**

Dedicated switches are provided within the front and side storage compartments. The lights can be operated at any time to assist in packing up.

**CAUTION:** Ensure all storage lights are turned off when not in use to minimise caravan battery drain.

#### **EXTERIOR LIGHTING**

Lights are attached to the front and rear of the caravan to provide general lighting. They can be operated via the REDVISION<sup>TM</sup> control panel or the REDVISION<sup>TM</sup> App.

A switch located on the caravan entrance air bag panel provides lighting adjacent to the entrance door. Another secondary provides selection of white or amber lighting.

All external lights may be operated at any time via the air bag panel switches or the REDVISION<sup>TM</sup> control panel or the REDVISION<sup>TM</sup> App.

**CAUTION:** It is the responsibility of the tow vehicle driver to ensure the exterior lights are turned off when towing the caravan on public roads to comply with local laws.

#### INTERIOR LIGHTING

All interior lighting together with the kitchen and external front/rear lights may be operated via the REDVISION™ control panel located inside the carayan.

Momentarily press the desired lighting zone key to turn the light on or off.

Selected lighting zones incorporate a dimming function.

When a light is on, press and hold the switch to gradually reduce the brightness to the desired level.

When a light is off, press and hold the switch to turn the light on then release at the desired brightness.

For convenience, a master light switch is provided on the control panel for grouped lighting control of the Bed, Lounge and Vanity areas. It may be used to turn the lights on or off together or dim the lights in unison.





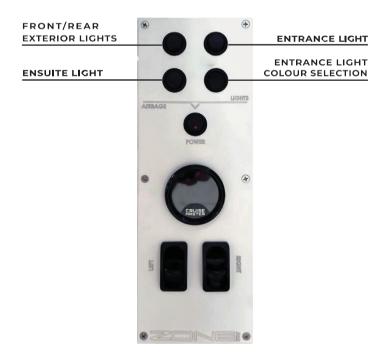
The outdoor kitchen has two switches. The left switch turns the lights on or off or press and hold for dimming and a colour selection switch.

#### **OUTDOOR KITCHEN LIGHT SWITCH**

An additional momentary action switch located on the entrance panel provides convenient access to the Ensuite light to turn on/off or dim the light.



#### **ENTRANCE AIR BAG PANEL**



#### **ENTRANCE AIR BAG PANEL**

All lighting zones that appear on the REDVISION™ control panel may also be operated via the REDVISION™ App.

To preserve power from the tow vehicle, some light functions are disabled while the vehicleAnderson plug is connected, and the ignition is turned on.

Refer to the section titled:

SYSTEM OPERATIONAL CHART.

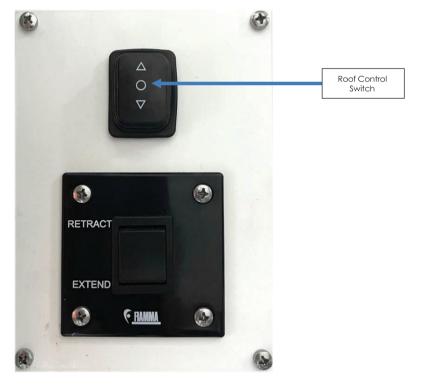
# POP TOP CONTROL

The ZONE RV Expedition is equipped with an electrically actuated pop top roof to minimise height whilst travelling or during storage. Raising and lowering the roof is made possible by pressing the safety lockout key on the REDVISION<sup>TM</sup> control panel which will provide power for roof movement for a limited time.

You may then use the bidirectional switch located on the entry control panel to raise or lower the roof.

For caravans fitted with the optional Bunk bed, an indicator adjacent the Safety Key is provided to show that the bunk is in the correct down position by illuminating GREEN and allow roof movement. This indicator is not present on caravans without the optional bunk.





**CAUTION:** Ensure the caravan is parked in a level stabilised position before activating the roof.

**CAUTION:** Please be mindful of the roof height in the closed position when entering the caravan to activate the safety lock-out switch on the REDVISION™ control panel.

caution: Prior to closing the roof, remove all items from atop of all cupboards, shelving and fridge and ensure the Bunk Bed is in the down position. Failure to remove all items may result in crushing and lead to possible damage to the roof structure and control actuator system and will void the warranty.

CAUTION: Ensure the roof is in the fully lowered position when towing. Failure to do so may result in damage to the caravan and will void the warranty.

#### **RAISING THE ROOF**

Enter the caravan and turn on the RedVision™ control panel via the Master switch.

Activate the safety switch on the RedVision™ control panel. Indicator will illuminate GREEN.

Exit the caravan, press and hold the main switch until the roof reaches the maximum height. The actuators will automatically turn off when this position is reached. The roof can be place into intermediate positions if desired.

#### LOWERING THE ROOF

Ensure that all personal items that protrude above the bottom edge of the canvas including on top of the storage shelving along the passenger side, on top of the fridge cabinet and the top of the washing machine vanity cabinet are removed. Failure to do so may result in damage to the roof and cabinetry.

Place the Bunk bed in the down position.

Remove the shower head from the holder, wrap it in a towel and place on the shower floor.

Zip all canvas windows closed. Unroll and zip the shower canvas door closed.

Activate the safety switch on the RedVision™ control panel. Indicator should illuminate GREEN.

● NOTE: For caravans fitted with the optional bunk bed: the bunk bed indicator on the REDVISION™ control panel will illuminate GREEN when placed in the fully down position.

Exit the caravan to operate the main switch to lower the roof.

Pause at regular intervals and perform spot checks while walking around the caravan to ensure that the canvas is folding inward and not protruding along the outside edge of the roof. and is not pinched as the roof approaches the fully closed position.

Continue to hold the switch in the down position until the actuators are fully retracted then complete a final walk around to ensure that the seal on the roof is contacting the body all the way around.

#### **RESETTING ROOF ACTUATOR CLOSED POSITION**

Periodically, it may be necessary to reset the fully closed position of all actuators.

Close the roof by the normal activation process. Release the switch then press and continuously hold the down switch.

After 10 seconds, any actuator that requires resetting will momentarily energise and move down and stop. The switch may then be released. If there is still an indication of the roof not sealing, it may be necessary to have it inspected by an authorised ZONE RV caravan service centre to perform checks and identify the cause of poor sealing.



## WATER CONTROL

The water delivery system comprises of two pumps and three tanks. Water selection can be made via the REDVISION<sup>TM</sup> control panel.

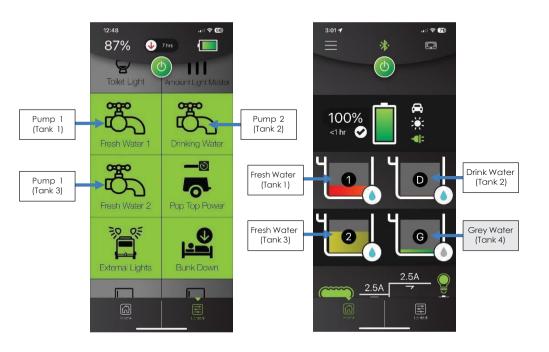
Fresh water may be selected from either Tank 1 or Tank 2 via electrically operated valves for general water use such as washing or showering. Water will also be made available for the optional washing machine by selecting either Fresh Water 1 or 2 and ensuring the separate manual tap is open.

A separate pump provides fresh water from the second tank to the dedicated kitchen drinking water tap. It is recommended to turn OFF all water delivery systems when not in use.

It is not neccassary to operate the Fresh water pump when mains pressure water is connected.

Tank levels are displayed on the control panel and REDVISION<sup>TM</sup> App.





Location of Water Solenoid Valves under vanity.



#### **VENTILATION SYSTEM**

Two low noise fans located above the bed provide air movement within the caravan.

They each have dedicated switch controls located on the fan base.

#### **USB AND 12V SOCKETS**

Many USB and 12V sockets have been places throughout the caravan.

It is advised to minimise the number of connected devices due to the shared fuse limitation.

The USB-A / C combination sockets have an integrated on/off button adjacent the sockets.

The socket will illuminate BLUE when power is available.



## **REFRIGERATORS**

The interior and external refrigerators are 12VDC and are powered from separate REDARC™ ROGUE™ modules.

Dedicated switches are provided on the REDVISION TM control panel to remotely turn the fridges ON (GREEN indicator) or OFF (Grey Indicator). The indicators can also show electrical faults such as overload by turning RED and displaying an error message on the REDVISION<sup>TM</sup> control panel.

Both fridges remain powered at all times when selected with exception to the situations as listed in the section **SYSTEM**OPERATIONAL CHART.

**NOTE:** The fridges have their own dedicated control circuitry which also influence their operation such as an on/off switch, thermostat and temperature protection.

## GENERAL MAINTENANCE & TIPS CIFANING:

Wash the inside of the fridge with warm water and a mild soapy solution. Never use abrasive or corrosive cleaning agents, steel wool or scouring sponges. A soft sponge, towel, or soft brush is recommended.

Always keep the inside of the fridge clean and dry. Remove any condensate build up or ice which may gather in or around the tray under the freezer compartment.

Periodically check and remove any build up of ice around the freezer door.

Keep the doors of the fridge ajar when the fridge is not in use, to allow fresh air to circulate within the fridge compartment.

#### **DEFROSTING**

Do not allow an ice layer build up of more than approximately 5mm. Turn the fridge power off and move your food and beverages to another cool place. Do not use any objects to remove the ice or frost, it must be allowed to melt naturally. Once the ice has melted, dry the inside of the fridge and freezer compartment thoroughly.

#### **Energy Saving Tips:**

- Ensure the fridge front ventilation grill is not obstructed.
- Keep the fridge out of direct sunlight whenever possible.
- · Minimise opening duration of the fridge or freezer.
- Allow hot food to cool down before placing inside the fridge.
- · Minimise frost and ice buildup.
- Set the cooling level as specified on the food packaging.

**NOTE:** Refer to the product manuals for further information.



# SYSTEM OPERATIONAL CHART

This chart lists the states in which the various output controls are  $\checkmark$  available.

 $\checkmark$ 1 – Switch controls are located on the appliance.

✓2 – Touch panel switch provided for checking the odometer reading. Active for 15mins.

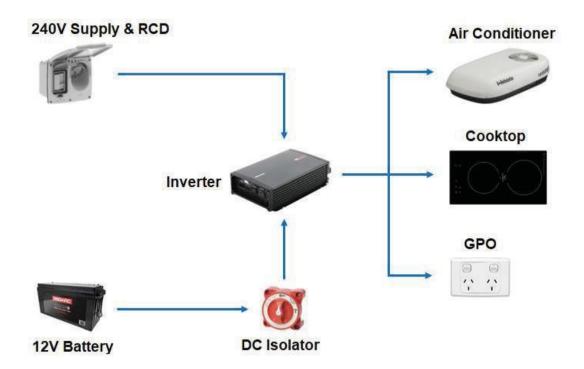
System	Separate Fused Power	Control Panel Soft Key	Remote Switch	Dimming	Control by Timer	RedVision Panel Master Switch	Car Ignition ON (Anderson Live)	Low State of Charge
Lighting – Kitchen (Dual Colour)		6	6	6		6		OFF
Lighting – Vanity		6	6	6		6		OFF
Lighting – Bed		6		6		6		OFF
Lighting – Lounge		6		6		6		OFF
Lighting – Shower		6		6		6		OFF
Lighting – Tunnel Storage			6					OFF
Lighting – Side Storage			6					OFF
Lighting – Side Entrance (Dual Colour)			6					OFF
Lighting – External Front and Rear		6	6					OFF
Interior Fans			6 <sup>1</sup>			6		OFF
Interior Fridge		6						OFF
Kitchen Fridge		6						OFF
Fresh Water Pump and Tank Selection		6				6		OFF
Drinking Water Pump		6				6		OFF
Toilet System								OFF
240V Inverter	6	6				6		OFF
Air Conditioner (when powered from inverter)						N/A		OFF
Cooktop (when powered from inverter)						N/A		OFF
Рор-Тор	6	6	6		6 <sup>2</sup>			OFF
Air Bag Suspension Height Adjustment	6		6					OFF
GPS Odometer	6	6 <sup>3</sup>					ON	OFF
Electric Brakes	6	N/A				N/A	N/A	N/A
Trailsafe	6	N/A				N/A	N/A	N/A
Witi	6	N/A				N/A	N/A	N/A
Electric Awning	6	N/A				N/A	N/A	N/A
Hot Water	6	N/A				N/A	N/A	N/A
Heater	6	N/A				N/A	N/A	N/A
USB 12V and TV power sockets	6	N/A				N/A	N/A	N/A

# ELECTRICAL SYSTEM DIAGRAMS

#### 240V SYSTEM LINE DIAGRAM

The inverter incorporates an internal switch-over mechanism that will automatically redirect the 240V mains input to the output when live.

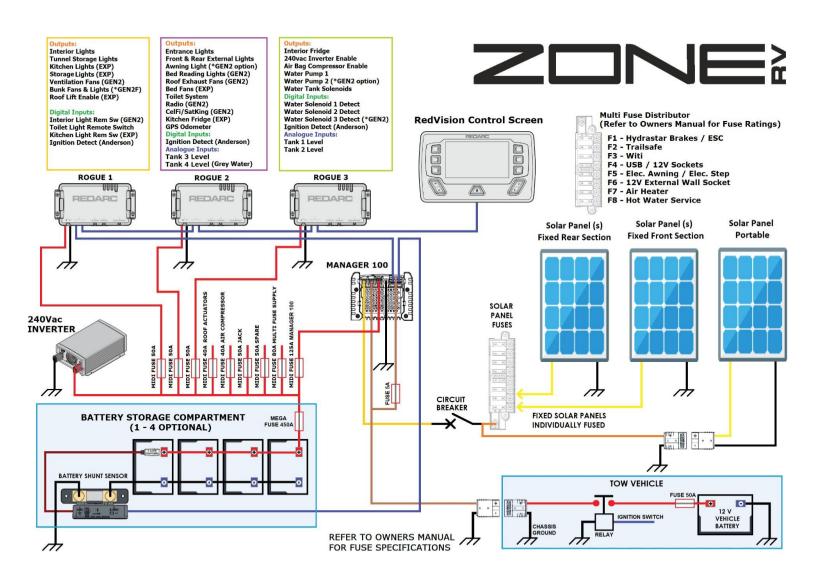
When 240V mains is not available, the inverter can be manually turned on or off via the Revision Touch Panel.





#### 12V DC SYSTEM LINE DIAGRAM

**Location:** Inside the electrical service panel.



# **ELECTRICAL SPECIFICATIONS**

#### **FUSE RATINGS**

8

15A

Fuse Number	Fuse Rating	System Supply Fuses
1	125A	MANAGER ALPHA BATTERY CHARGER (MEGA Fuse)
2	80A	MULTIWAY FUSE (LOCATED AT TOP OF ELECTRICAL PANEL)
3	50A	ROGUE MODULE 1
4	40A	AIR SUSPENSION COMPRESSOR
5	50A	ROGUE MODULE 2
6	50A	ROGUE MODULE 3
7	50A	SPARE
8	40A	POP-TOP ACTUACTORS
9	50A	SPARE

7	30A	SPARE
Fuse Number	Fuse Rating	Accessory Circuit Fuses
1	40A	HYDRASTAR
2	30A	TRAILSAFE
3	30A	WITI
4	30A	AUXILLARY USB & 12V SOCKETS
5	30A	AWNING MOTOR
6	20A	12V SOCKET (BELOW ELECTRICAL PANEL AT REAR OF FRIDGE)
7	20A	INTERIOR AIR HEATER

HOT WATER SYSTEM

Fuse Number	Fuse Rating	Multi Solar Fuse Panel
1	15A	SOLAR PANEL
2	15A	SOLAR PANEL
3	15A	SOLAR PANEL
4	15A	SOLAR PANEL
5	15A	SOLAR PANEL
6	15A	SOLAR PANEL
7	-	SPARE
8	-	SPARE

Fuse Number	Fuse Rating	Miscellaneous Fuses		
-	450A	BATTERY MEGA FUSE (located within battery storage compartment)		
-	5A	GPS (located within electrical duct of power board)		
-	15A	INTERIOR AIR HEATER (OEM Wiring located under lounge)		
-	1A	INTERIOR AIR HEATER (OEM Wiring Control, located under lounge)		
-	20A	HOT WATER SYSTEM (OEM Wiring Heater, located under vanity)		
-	1A	HOT WATER SYSTEM (OEM Wiring Control, located under vanity)		
-	25A*	WITI (OEM Wiring, located in front tunnel) *Mini Auto Blade Fuse		
-	30A*	WITI (OEM Wiring, located in front tunnel) *Mini Auto Blade Fuse		

#### **FUSE LOCATIONS**

System Supply Fuses



Accessory Circuit Fuses



Miscellaneous Fuses CHECK PICTURES



Heater Fuses





# PLUMBING SYSTEM

#### WATER TANK COUPLING LAYOUT

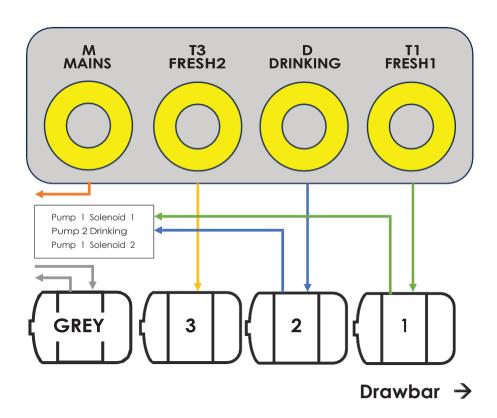
Located on the driver's side of the caravan below the electrical service hatch are individual ports for refilling each of the three water tanks.

The couplings suit a standard 13mm garden hose connection.

Tank1 (T1/Fresh1 located nearest to the draw bar) and Tank3 (T3/Fresh2) provide water for use in the Vanity basin, Shower and Kitchen sink.

Tank2 (D/Drinking located second from the draw bar) provides water to the secondary faucet located on the kitchen tap for drinking purposes.

The Mains (M) connection provides water directly to the Vanity basin, Shower and Kitchen sink bypassing the Fresh Water pump from Tank 1 and 3. Grey water from the Vanity basin, Shower and Kitchen sink flow into the rear tank. A hand operated valve is provided for draining the tank into an approved grey water disposal pit.



#### FILLING WATER TANKS

Connect a standard garden hose fitting to the coupling corresponding to the tank requiring to be refilled. Do not open the water supply tap to full pressure to allow air to escape the small tank breather tube during refilling.

Water may be expelled from the breather tube indicating the tank is completely refilled. Always refit the port covers on the water couplings.

#### **DRAINING WATER TANKS**

Bungs located on the side of each water tank to drain excess water. Unscrew the bung by hand in an anti-clockwise direction to allow the water to drain.

When replacing the bung, ensure it is done up hand tight only and do not use a tool as you may strip the bung thread. Ensure the bung seal and tank mating surfaces are clear of dirt and debris.

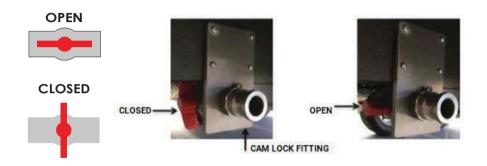




#### DRAINING THE GREY WATER TANK

A hand operated drain valve is located on the driver's side of the caravan behind rear wheel.

Attach the grey water hose securely to the Cam Lock fitting to an approved waste pit then turn the valve to the open position.



**CAUTION:** Never discharge wastewater directly onto the ground.

#### **GREY WATER BYPASS**

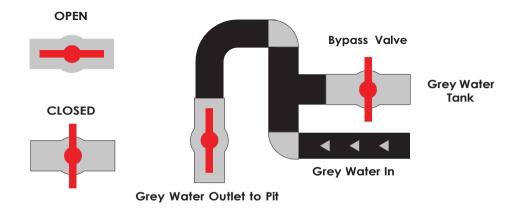
**Location:** Drivers side of caravan, behind rear wheel, next to arey water

A grey water tank bypass valve is provided to discharge wastewater water via the Cam Lock fitting directly into an approved disposal connection point or pit without the need to pass the water through the caravan tank.

Attach the supplied grey water hose to the cam lock fitting and waste inlet.

Turn the Bypass valve to the Closed position.

Turn the Grey Water Outlet valve to the open position.



#### **TOILET SYSTEM**

Your ZONE RV caravan is fitted with an OGO Composting Toilet.

Power is continuously supplied to enable the composting process and operate the small ventilation fan to the external wall vent.

For more information, please refer to the OGO Composting Toilet manual.

## REFILLING TANKS WITH PORTABLE WATER PUMP

The caravan water tanks may be refilled from a clean fresh water source using the optional portable pump.

Assemble the pump by connecting the coiled hose from the tank coupling port and the pump outlet.

Place the strainer hose into a clean water supply free of sediments and debris.

With dry hands, connect the pump to the auxiliary 12V socket located within the electrical service hatch. Water will begin flowing into tanks.

Refer to the SEAFLOW Wash Down kit manual for more information.

**CAUTION:** The pump may only be used for a period of 10 minutes before being allowed for aperiod of 20 minutes. Failure to do so may result in damage occurring.

**CAUTION:** Never allow the pump to run dry for prolonged periods.

#### FEATURES & BENEFITS



#### **WATER PUMP**

Periodically check the pump filter for obstructions and cleaning if required.

Refer to pump manual for service instructions.

The water pump for tanks 1 & 2 is located under the vanity cabinet in the ensuite.

The drinking water pump is located inside a cabinet in the underbed storage area.



CAUTION: It is recommended to turn off all water pumps when not in use. This will minimise the risk of the pump running dry and seizing if water is depleted from a tank. Periodically check the water tank levels displayed on the REDVISION™ control panel.

#### **WATER FILTERS**

The fresh water filter is located behind the inspection panel under the vanity. A secondary filter provided for the drinking water tap is located inside the cabinet in the underbed storage compartment on the drivers side of the van.

Replacement AQUAPRO AIC-K filters can be purchased from ZONE RV or resellers such as:

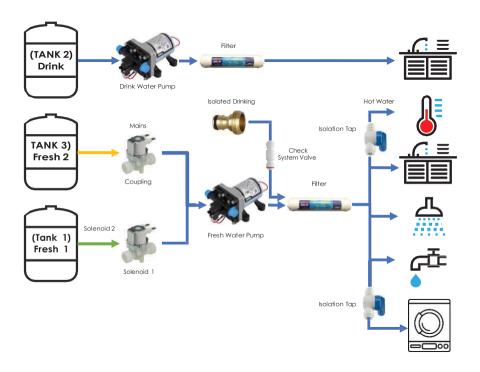
www.mywaterfilter.com.au



↑ CAUTION: Ensure water pumps are turned off via the REDVISON™ control panel prior to disconnecting water tubes and relieve pressure by momentarily opening a tap associated with the filter.

#### PLUMBING SYSTEM DIAGRAM - SINGLE PUMP

The diagram depicts the interconnection between water tanks and outlets.



A manually operated tap labelled "WASHING MACHINE" located within the vanity cupboard is used to isolate the water supply to the washing machine for maintenance purposes.

When using the washing machine, ensure the isolation tap is open and select either Fresh Water 1 or Fresh Water 2 from the REDVISION<sup>TM</sup> control panel.



Pump Location:

Fresh Water Pump: Inside vanity cupboard.

Isolated Drink Pump: Inside side storage within cover panel.

#### **HOT WATER SYSTEM**

Your Zone RV caravan is fitted with a diesel heated hot water system which is located within the vanity cabinet.

The temperature controller is located on the vanity and is used to switch the unit on and off and to set the desired temperature.

A diesel fuel tank located at the front toolbox supplies fuel to the hot water system via a pump and filter which are fixed to the inside of the chassis rail.



Turn the heater on approximately 20 minutes prior to use to ensure sufficient heating of the water reservoir.

Turn the hot water off via the thermostat control when it is not required to conserve fuel and minimise residual heat within and around the surrounding benchtop and cabinetry.

**NOTE:** The hot water system must only be switched on or off using the WEBASTO control thermostat. Failure to do so may result in the unit malfunctioning requiring a system reset.

Turn the system off using the thermostat control prior to turning off the battery master DC Isolator switch.

If the fuel tank has become completely empty, it may be necessary to reprime the fuel line. Refer to the WEBASTO product manual for instructions on priming the fuel system.

A cold water supply isolation tap located to the left side of the hot water system is provided to shut off water from the pump when servicing or replacing the hot water system.





Periodical checks should be performed of the heating system tank fluid level and condition.

Ensure the hot water system has been turned off for a period of 24 hours before opening the filler cap atop the heater unit when performing the checks.

The system is fitted to a slide out tray for convenience. Some resistance may be felt when pulling out the tray towards to the toilet.

Ensure the hot water system filler cap is correctly seated when closing.



**•• NOTE:** It is necessary to remove the toilet system when removing the hot water system for repair or replacement.

**CAUTION:** During operation, avoid contact with the surface of the water unit as it can reachhigh temperatures which may cause contact burns.

**CAUTION:** Do not use if exhaust fumes are emitted into the living space.

**CAUTION:** Do not store temperature sensitive items such as, medicines, make up or flammable items within the hot water system cabinetry.

CAUTION: The heater buffer tank contains standard automotive glycol at a ratio of 2 parts glycol to 1 part water. Avoid contact with skin and eyes.

**CAUTION:** Do not open the filler cap whilst the system is hot.

## **CANVAS CARE**

#### CONDITIONING

To ensure optimum performance of the canvas it is critical that seasoning is carried out when it's new and after long periods of storage.

This may be achieved by raising the roof of the caravan and then wetting the canvas with clean, fresh water being careful not to get water into the vents.

Doing so allows the cotton thread to swell around the stitching holes to make it watertight.

Repeat the process three times with the canvas being allowed to dry between each hosing.

#### **ZIPS**

Care must be taken when using the zippers. Ensure that tracks are aligned correctly before sliding the zipper and move slowly without excessive force.

If the canvas gets caught, slowly reverse the zipper to release. A silicone based lubricant may be used to increase zip life.

If for any reason dirt gets in the zipper teeth it should be cleaned prior to use to ensure that abrasion or damage does not occur.

#### CLEANING

Clean using a sponge with warm water. Do not use detergent, soap, bleach, as these may remove the waterproofing and/or damage the fabric. Allow to air-dry completely before packing up and storing for long periods.

#### **GENERAL CARE**

Ensure that the canvas doors in the bathroom area are allowed to air dry completely before rolling up.

## **BUNK BED**

Where optioned, whilst travelling, the top bunk must be in the horizontal (sleeping) position. When stationary, with the roof in the raised position, the top bunk may be folded upright against the wall to allow the lounge to be used. The procedure is as follows:

- · Remove all loose items from the bunk.
- Remove the elastic locking loop from the button adjacent the fridge.
- Tilt the bunk towards the wall then pull down the roof mounted latch to hold the bed i the raised position.
- Fold the end support legs back against base of the bed and fix in place using the elastic locking loop.
- Remove the cushioned insert from the top of the table.
- Loosen the locking collars on the table pedestal and lift into position.
- · Tighten the locking collars.



To return the bunk beds to the sleeping position:

- While supporting the weight of the table top, loosen the locking collars on the table pedestal and gently lower.
- Once lowered, install the cushioned insert to complete the lower bed.
- Remove the locking loop from the support leg and rotate so that it is perpendicular to the bed base. The latches in the support leg will lock it in place.
- Push the bed towards the wall to unload the roof mounted latch and press the latch up towards the ceiling.
- With the latch pressed up, slowly lower the bed into the horizontal position, ensuring that no bedding is under the support leg.
- Fix in place using the elastic locking loop adjacent the fridge.

**CAUTION:** The top bunk is not recommended for children under 9 years of age. and has a weight capacity of 60kg MAX.

Ensure the bunk safety switch is free of items and is able to operate freely when the bunk is placed down in the horizontal position.





# ELECTRICAL JOCKEY WHEEL

Your ZONE RV caravan is fitted with an electric Jockey Wheel at the front. This system features a motorized mechanism for easy operation, allowing you to raise and lower the caravan effortlessly.

A hand crank is also supplied for manual operation, if needed. For more information on the electric Jockey Wheel please refer to the product user manual



# ATX SUSPENSION SYSTEM (DISC BRAKES)



#### **SETTING RIDE HEIGHT**

To achieve the best possible ride, it is important to correctly set your suspension ride height. This allows for the correct amount of travel and for all components to be operating as designed.

As this system is designed to allow for differing loads the best way to measure and set ride height is per below.

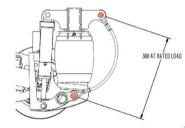
#### HEIGHT SETTING METHOD

Measure the distance from lower eyelet to upper eyelet of the rebound cable mounts (as shown).

360mm from eyelet to eyelet will give you the optimised ride height for the load being carried.

For easy confirmation of ride height your ZONE RV is fitted with travel height indicators on the inside of the wheel arch. This will eliminate the need to remeasure the spacing on every adjustment.





#### **OPERATING AT NON-STANDARD HEIGHT**

While the tow vehicle is attached, it is permissible to use the air bags to level the caravan for minor variances of site ground flatness while stationary and the tow vehicle parking brake is engaged and the transmission set to Park or place the vehicle into low gear with engine off for manual transmissions.

The caravan parking brake should also be released while adjusting the height then engage once levelling is complete.

#### **CARAVAN STORAGE**

If storing your vehicle for long periods, the suspension can be set to below standard ride height for improved access/ clearance. It is normal for air pressure to be lost during long term storage of your caravan causing the suspension height to lower.

#### "GET YOU HOME" MODE (EMERGENCIES ONLY)

In the event of air loss, it is possible to run the caravan on the bump stops. The "get you home" feature of the suspension has been successfully used on normal roads.

Extreme care and very slow speeds are required if running with airbags deflated. Off-road conditions especially can cause damage to airbags and drawbar mounting brackets. It may be advisable in these circumstances to lower tyre pressures to provide additional cushioning to road bumps.

**NOTE:** Warranty does not apply under these conditions.

### **AIRBAGS**

#### TRAVEL HEIGHT

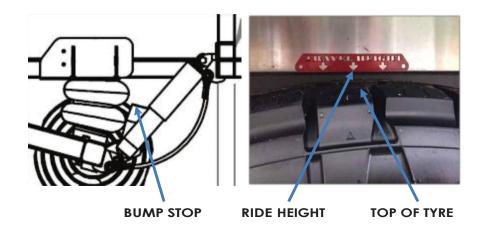
The critical function for the correct traveling arrangement is the HEIGHT of the caravan, NOT the airbag pressure. The following image shows the correct way to measure height for travel from the top of the bump stop to the bottom of the chassis rails.

**NOTE:** If the compressor has been off for some time, it will need a few minutes to fill the air tank before you can pump the airbags up.

**NOTE:** Your airbag pressure will likely be different from side to side when setting this up and that is normal.

**1) NOTE:** Airbag operating pressure must never exceed 100psi.

The normal operating PSI range is 45-60. Anything more than this can show overloading in your caravan or incorrect travel height. Traveling with the airbags higher or lower than these PSI settings can result in damage of your ZONE RV and may not be covered under warranty.



#### SAFE JACKING

- · Park the caravan on firm and level ground
- Chock the tyres on the opposite side securely so that no forward or rearward movement is possible.
- Jack up the caravan directly under the shock absorber at the lowest point of the swin arm as shown below.
- Secure the caravan on jack stands of adequate capacity front and rear.



ATX SUSPENSION JACKING POINTS

**1) Note:** It is recommended to have a qualified mechanic perform wheel bearing servicing.



### AIR BAG CONTROL PANEL - AUTOMATIC LEVELLING SYSTEM

Turn on the Air Compressor to ensure ample air pressure is available for the airbag system.

Monitor the AIR PRESSURE LEVEL GAUGE while performing height adjustments.

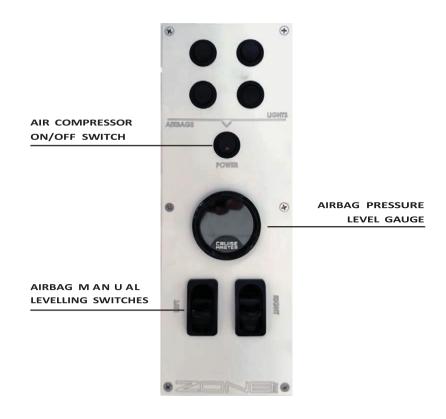
Levelling the caravan at campgrounds is carried out by toggling the MANUAL LEVELLING switches to raise or lower either side of the caravan.

Return the airbags to travel height before departure by operating the MANUAL LEVELLING switches until the desired suspension height is reached.

Refer to the ATX SUSPENSION section and the manufactures manual.

**Note:** Airbags may only be used to level the caravan side to side. Fore and aft levelling is achieved using the jack mounted on the drawbar of the caravan.

**Note:** It is good practice to periodically drain moisture from the air tank. A manually operate valve is located on the tank. Turn the Air Compressor OFF during draining.



## **MAINTENANCE**

**1) Note:** This document is only a guide. ZONE RV recommends that all service work be carried out by a qualified mechanic or a ZONE RV service centre.

#### CHECKPOINTS AFTER A SHORT TIME ON THE DIRT

Generally, 30min intervals are good to check your caravan to see if anything has worked loose.

This is a good practice until you are confident that all fasteners have bedded in and holding. During checks, also ensure there are no areas showing signs of dust ingress.

#### WHEEL HUBS

Always check the hub temperatures at least twice a day when traveling. They should be warm to touch. If one side is consistently hotter than the other, have them checked immediately by a Mechanic or Service Agent.

When traveling on dirt roads, check hub temperatures every time you stop or at least every hour.

When traveling on dirt roads check wheel nuts every morning before departure without fail, on both tow vehicle and caravan.

If the brakes or hubs become excessively noisy, hot or are grabbing, have them serviced by a motor mechanic or service agent.

**1) Note:** Please refer to the CRUISEMASTER manual and website for specific maintenance requirements relating to suspension components.

#### **DUST INGRESS**

Although your caravan has been fully sealed during production, there is a small chance the glues and sealants may have moved allowing dust ingress. It is always good practice to travel with a tube of silicon sealant to perform minor spot resealing.

Periodically check that your external hatches are sealing correctly. It may be necessary to adjust the locking levers from time to time.

#### **BEACH USE**

Although your caravan has been fully sealed during production, there is a small chance theglues and sealants may have moved allowing dust ingress. It is always good practice to travel with a tube of silicon sealant to perform minor spot resealing.

Periodically check that your external hatches are sealing correctly by evidence of dust ingress. It may be necessary to adjust the locking levers from time to time.



#### WELDING

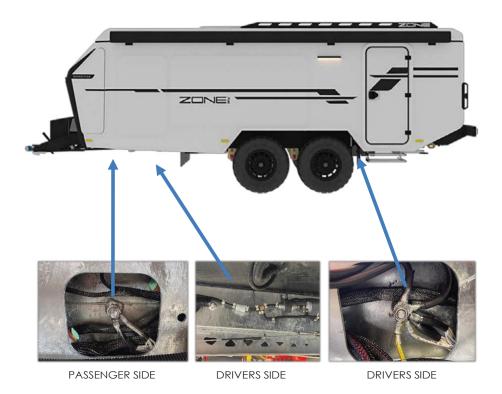
**NOTE:** Please contact ZONE RV prior to commencing any welding works on the chassis as doing so may void your chassis warranty.

**NOTE:** Prior to commencing welding, the batteries and all caravan electrical harnesses earth connections to the chassis MUST be completely disconnected. Failure to do so may result in damage and or fire of the wiring harnesses.

- Disconnect the battery negative cable at the battery storage compartment and insulate bare cable lugs with PVC electrical tape.
- Earthing points may be found in the following locations on the inside of the chassis rails.
- Forward of front axle inside chassis rail Passenger Side.
- Rear of back axle inside chassis rail Drivers Side.
- Ensure that all earth points are reconnected prior to attaching the storage battery cable and 240V mains power.

Care must be taken to reinstate the corrosion resistance where welding has taken place.

**NOTE:** Contact ZONE RV prior to performing any welding work on your chassis as doing so may void your chassis warranty.



# REPARING THE CARAVAN FOR TOWING

- · Close and lock awning.
- Ensure the roof is completely closed.
- Switch off the REDVISION™ control panel via the Master switch.
- Turn off all external convenience and storage compartment lights.
- · Close and lock all external compartment doors.
- · Fold away all external stabilising legs.
- Return the stairs to the travel position.
- · Set the suspension to the desired travel height.
- · Close and lock the main door.
- Couple tow vehicle to caravan including Anderson leads and trailer plug and fully retract the jack.
- Release caravan handbrake and remove and stow wheel chocks.



# PREPARING FOR OFF ROAD TOWING

#### THINGS TO CHECK

As with any vehicle, regular checks and visual inspections before and during OFF-ROAD driving is required on your ZONE RV. Although great care is taken for selection of the correct fastenings methods, these are not infallible to the rigours of off-road driving. Below is a list of things to check before off-road driving:

- Check cupboard fastenings are tight. Draw latch fastenings need to be tightened. Check all fastenings with a Philips head screwdriver.
- Ensure that all appliances (air conditioner, hot water system, air heater etc) are turned off.
- Check all fixtures for appliances and components like the water pump, inverter, fridge.

- Make sure hinge mounts for cupboard doors are tight as loosening of these can allow the door to come open. Check all draws and doors are latched correctly.
- Ensure that all loose appliances (induction cooktops etc) are appropriately secured.
- Check fasteners for drawbar components.
- Check all external fixtures (gas bottle box, spare wheel etc).
- Make sure your Anderson plug is tight into the back of your car. It is recommended that it be fixed (via cable tie) to the trailer plug so if it comes out or is disconnected it doesn't drag on the ground.
- · Check all hatches are closed tight.
- Walk around your caravan and visually inspect to see if there is anything unusual. Any component that looks loose, or any areas of damage
- · Check your tyre pressures and suspension height.
- Ensure gas bottle is secure.



# TOWING RECOMMENDATIONS

#### THIS IS A GUIDE ONLY

Some of the conditions that you may encounter during your travels can cause damage to your caravan if you do not take appropriate actions.

ZONE RV has the following recommendations for some of these conditions.

**1) NOTE:** These do not account for traffic or weather conditions.

TYRE PLACARD RECOMMENDED COLD INFLATION PRESSURE					
CARAV MODE		TYRE	UP TO 3000kg kPa (PSI)	MAX LOAD ATM 3500kg kPa (PSI)	MAX LOAD ATM 4000kg kPa (PSI)
ZPP ZSP ZSPF EXPEDITION	265 / 70 R17 121 / 118S	310 (45)	365 (53)	420 (61)	
	285 / 65 R18 125/122S	275 (40)	325 (47)	365 (53)	

#### SAND DRIVING

- Reduce speed and reduce all tyre pressures on both the caravan and vehicle.
- Try to drive on the harder sand. Maintain the momentum of your vehicle while negotiating soft sand and stay in the wheel ruts as they are usually harder than the soft sand.
- If your vehicle allows, select low range auto for beach access and high range 4WD for ard sand driving. It is advisable to turn the brake controller off as sudden stopping can bog the trailer.

#### WATER CROSSING

- It is recommended that you stop to allow cooling of your hubs and bearings for a period of approximately 20 minutes before making a water crossing, this may prevent ingress of water through the wheel bearing seals as the metal components may contract in size at difference rates.
- After making a water crossing, momentarily apply the brakes several times until braking is normal or use the brake controller to apply the trailer brakes for a period long enough to subjectively dry out the linings.
- Always check bearings after crossings and regrease as required.

# RECOVERY POINTS

Your ZONE RV caravan is equipped with two load rated recovery points at the rear to assist in recovery of the caravan if it becomes stuck and cannot be recovered by driving it forward.

These points should only be used with suitably rated recovery equipment (shackles and cables) and an equaliser strap.

Avoid using snatch straps or kinetic ropes when recovering your caravan.



# BIKE CARRIER (OPTIONAL)

Your ZONE RV caravan may include provision to install a bike carrier at the rear.

This socket is only intended for use with the iSi-442-400/40 - Extreme Duty Compact Beam carrier with a maximum bike load of 37kgs.



# **DEPARTURE CHECKLIST**

#### INTERNAL CHECK

- Turn off hot water heater and air heater.
- Place all fixed windows into the locked closed position.
- All fixed window blinds are placed in the open "Travel" position.
- TV has been removed from wall mount and placed in a secure position.
- · Lower the table to the "Travel" position.
- Place shower head on the floor wrapped in a towel or bathmat
- · Zip closed all canvas windows and shower door.
- Ensure both fridge doors are latched closed.
- Ensure all personal items are secured within all storage cupboards and draws.
- Switch Redarc REDVISION Panel to "Touring" mode.
- Press and hold the Master Power key on the REDVISION<sup>TM</sup> control panel to place the system into standby mode. (Battery charging will still occur, power will remain available for the fridge and it's control panel.)

#### **EXTERNAL CHECK**

- Close gas bottle valve, disconnect hose and stow in the gas cylinder storage box.
- Close the external kitchen door and secure catches firmly.
- Ensure all hatches and doors, including the entry door have been closed & latched correctly.
- · Awning is closed and latches secured.
- · Stabiliser legs in "Travel" position.
- Entry step retracted in "Travel" position.
- Disconnect mains water supply hose and grey water waste hose.
- Disconnect mains electricity cord from wall socket
- Ensure air bags are set to travel height.

#### SAFETY CHECK

- Check safety chains & brake-safe lanyardc are connected.
- · Check trailer & Anderson plugs are connected.
- · Check all lights & indicators.
- Check caravan coupling is secured to vehicle & cover cap is on.
- · Check jack is set in "Travel" position.
- · Check handbrake is fully released.
- · Check that suspension is set to travel height.

#### WHEEL NUTS/LUGS & BEARINGS

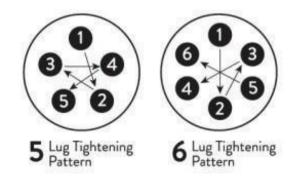
Wheel nut torque must be checked prior to each trip and following the first 100km of operation following a wheel change or removal to ensure that it is within specification.

Failure to do so could result in an accident or injury. Tightening sequence is as per the following image.

#### Recommended torque = 209Nm/ 154 f t-lbs

**NOTE:** A calibrated torque wrench should be used to ensure accuracy. Impact rattle guns are not recommended for achieving correct wheel nut torque.

**•• NOTE:** It is the tow vehicle driver's responsibility to check the wheel nuts prior to each trip.



**NOTE:** It is advised to check & re-grease the wheel bearings after immersing the axles in water. If you have done a large trip that includes traversing water crossings a wheel bearing service is required.

# VIN/COMPLIANCE PLATE, TARE & ATM

ATM or maximum load capacity can be found on the VIN plate located within the tunnel boot storage area. The TARE weight, tyre size and recommended tyre pressures for normal road use are also stated on the VIN plate.

		YRE PLAC. DED COLD INFLA	ARD TION PRESSURE	
CARAVAN MODEL	TYRE	UP TO 3000kg kPa (PSI)	MAX LOAD ATM 3500kg kPa (PSI)	Accessory of the Control of the Cont
ZPP ZSP ZSPF EXPEDITION	265 / 70 R17 121 / 118S	310 (45)	365 (53)	420 (61)
	285 / 65 R18 125/122S	275 (40)	325 (47)	365 (53)

CAUTION: EXCEEDING THE CARAVAN'S ATM & BALL WEIGHT IS ILLEGAL AND DOING SO WILL VOID YOUR WARRANTY AND MOST LIKELY INSURANCE.



# ZONE RV AFTER SALES SERVICE CONTACT

Refer to Owner's
Manual or
Knowledge Base

CHECK ZONE RV
Customer Support
Scan QR code below

Unable to resolve via
Technical Support

SUBMIT
WARRANTY CLAIM
Via ZONE RV
Online Form

Refer to Owner's
Manual or
Knowledge Base

ISSUE RESOLVED

Please leave
Customer Feedback

85 Quanda Road Coolum Beach QLD 4573 (07) 5471 6410 Knowledge Base <u>(zonerv.com.au)</u>



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While every care has been taken to ensure the accuracy and coverage of content within this manual, omissions and variations such as text descriptions, images and specifications may vary due to manufacturing processes, change of supplier components and legislative requirements.

Check the ZONE RV webpage for updates. Always confer with manufacturers latest manuals and knowledge articles.

The owner and tow vehicle driver must make use and rely on their own experience for assessment of situations to determine the suitability and usefulness of this information.

Accordingly, ZONE RV makes no representations, warranties, or guaranties, either expressed or implied, regarding the accuracy and suitability of usefulness of this information.

ZONE RV accepts no liability for any loss, damage, claim, or expense incurred by caravan owner, tow vehicle driver or any third party arising from the use of or reliance on the information provided within this manual.



# **AMENDMENTS**

PAGE	SECTION	CHANGE NOTES	DATE
		Edition 1 released	24/05/24

# **OWNERS NOTES**