



## Operations manual

2021 CAMPERS AND HYBRIDS | [WWW.MAVERICKCAMPERS.COM.AU](http://WWW.MAVERICKCAMPERS.COM.AU)





# INTRODUCTION

Congratulations and thank you for purchasing a Maverick Camper Trailer or Hybrid Caravan.

You are now part of the Maverick Family. We are a passionate group of enthusiasts who love the great outdoors and offer our customers an incredibly special product to make your journey through our beautiful country stylish and comfortable with the confidence of being engineered to handle any obstacle or challenge.

Through many years of research, development and listening to our customers' requirements, your camper or hybrid has been carefully designed, engineered, and manufactured by our team to provide a reliable and feature packed vehicle so you can enjoy creating memories for many years to come.

Once you have picked up your camper it is recommended that, at your earliest convenience, familiarise yourself once again with all aspects covered during your handover, and promptly report any queries to your branch, or place of purchase.

This Operations Manual aims to cover all aspects of your camper or hybrid as well as processes, procedures for maintenance and pre-travel checks as well as trouble shooting.



# ABOUT THIS MANUAL

This manual is a guide to the operation and maintenance of your Camper or Caravan.

Caravans sold by Maverick Campers are available in several sizes and models, so accessories and components may differ.

Some equipment described in this manual may not apply to your camper or caravan. If you find the components vary significantly from what is described, contact your branch to ensure you have the correct information. Nothing in this manual creates any warranty, either expressed or implied, nor does it cover every possible detail of equipment, standard or option, installed on or in your camper or caravan.

Information, illustrations, and specifications in this manual reflect the most current models available at the time of publication and may not reflect actual size or identical products and features in your particular model.



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# OWNER'S RESPONSIBILITIES

To get the most out of your Maverick Campers camper trailer or hybrid caravan it is incredibly important to regularly maintain and care for your van or trailer.

As the owner of a new recreational vehicle, you are responsible for regular care and proper maintenance as described in the Care and Maintenance section of this manual. Proper maintenance will help avoid situations where the Limited Warranty does not cover items due to neglect. Maintenance services should also be performed in accordance with the corresponding manufacturer's warranties on components included within your camper/caravan.

Reviewing and adhering to the information contained in this manual and all supplied component information is the responsibility of the owner.





# WARRANTY

As an owner of a Maverick Camper or Hybrid you can breathe easy knowing you have purchased a high-quality product backed by one of the best warranties in the industry. Your trailer or van comes with several types of warranties to provide you with peace of mind.

Warranties commence from the original date of purchase for the original purchaser and are not transferrable.

## CAMPER TRAILER WARRANTIES

Ranger Limited, Ranger Limited Slide, Ranger Limited Lite, Hornet V2 & Matrix Limited

- lifetime chassis and draw bar warranty.
- Tents and workmanship are covered for a period of 12 months.
- All products installed as part of these models are covered by manufacturers warranties.

Ranger Air, Ranger Slide, Matrix and Hornet V1

- 5-year structural warranty on chassis and draw bar
- Tents and workmanship are covered for a period of 12 months.
- All products installed as part of these models are covered by manufacturers warranties.



## HYBRID CARAVAN WARRANTIES

Viper 11, 13, 16X, 16 & 18

- lifetime chassis and draw bar warranty.
- Canvas and workmanship are covered for a period of 12 months.
- All products installed as part of these models are covered by manufacturers warranties.

Raptor 11, 13 & 16

- 5-year structural warranty on chassis and draw bar
- Canvas and workmanship are covered for a period of 12 months.
- All products installed as part of these models are covered by manufacturers warranties.



For more information on warranties and the process for claiming warranties, please see our Warranties page at Maverick Campers Operations Manual 2021



[www.maverickcampers.com.au/warranty](http://www.maverickcampers.com.au/warranty) or [click Here](#) or call us on 1300 628 494

# THE HANDOVER PACK

At your Handover Appointment you will receive either a hardcopy of this manual or a USB Key which contains this and other useful documents to assist you with getting the best out of your Maverick Camper product.

The Handover Pack given to you when picking up your camper or caravan contains original equipment Manufacturer (OEM) Operator manuals, the signed Hand Over Checklist, information about warranty and registrations. It is important you read through all documentation within the prescribed time limits to avoid loss of warranty coverage.

This Manual or USB Key should always reside in the camper or caravan. If the caravan is sold, they should remain with the camper or caravan for the next owner.

# SAFETY ALERTS

Observe and note all operating instructions and all safety labels within your camper or caravan. You must follow these instructions for your own safety, and the safety of others.

Please call your Maverick Campers branch or if you are unsure how to proceed.

Always use the appropriate safety gear when servicing or maintaining your camper/caravan.

## WARNING!

If a gas appliance is used under the awning, all windows and doors must be open. Mesh is permitted over vents and must be kept clean and unrestricted. (clause 7.3.1 under gas regulations AS/NZS 5601.2-2013)

**WARNING: ONLY CYLINDERS AND THEIR ASSOCIATED EQUIPMENT ARE PERMITTED IN THE CYLINDER COMPARTMENT. ELECTRICAL EQUIPMENT, BATTERIES, OR IGNITION, SOURCES MUST NOT BE INSTALLED IN THE CYLINDER (AND/OR STORAGE) COMPARTMENT.**

GAMECO SM - SCS



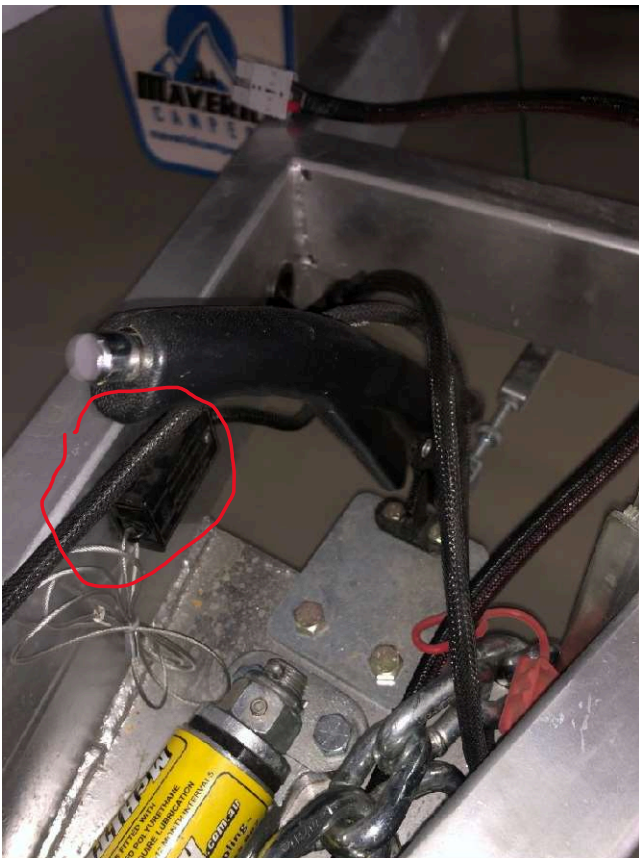


# SAFETY FEATURES

All Maverick Campers Trailers and Vans include safety features to protect lives and your trailer or van from serious damage.

## BREAK SAFE

A device that links your trailer or van to your car via a lanyard. In the case of catastrophic failure of the hitch and chains connecting your car to your trailer or van where you have separation of the two during travel, the pin within the Break Safe is released causing the electric brakes on your van or trailer to engage. The batteries on your van or trailer will provide full power to the trailer or vans brakes which will stop the van or trailer at a rapid rate to prevent it from travelling in to oncoming traffic or pedestrians and will hopefully prevent damage by slowing the impact or preventing the impact into obstacles.



### IMPORTANT NOTE:

Improper use of the Break Safe can lead to serious damage to batteries, wiring and brakes. Never pull the pin out of the Brake Safe for any reason. Do not use it to slow or stop the trailer or van when moving the camper or van by hand. It is only to be used in an emergency. Failure to leave the pin in the break safe and commence towing the van or trailer can

lead to damage to your camper or van including drained batteries, worn brake pads and even risk fire and complete write-off. Always leave the pin in the break safe.

#### CORRECT USE OF THIS FEATURE:

- Loop the lanyard to an eyelet at the rear of the car near the tow ball so that it is securely attached.
- Ensure that the lanyard is free from other cables and not caught on other items near the front of the trailer or van such as the hand brake or hitch and that there is freedom for the cable to move as your car turns
- Ensure that the lanyard does not drag on the ground or has the ability to drag on the ground during driving
- Before driving check that the pin is firmly in the Break Safe – The pin will only go into the Brake Safe in certain ways so ensure that it is all the way in
- Once driving, if you feel there is resistance in the trailer or van, ensure you pull over and check the steps above to ensure the Brake Safe is not engaged.

## HAND BRAKE

A device that manually applies the brakes on your van or trailer to stop it rolling. The hand brake works in the same way as your car hand brake. The higher you lift the hand brake, the greater the pressure applied to the brakes and the stronger the brakes will hold the trailer or van in position.

To release the hand brake, press the button at the end of the hand brake and slightly lift up to release the lock and then slow lower to disengage the brakes.

#### IMPORTANT NOTE:

If you do not lower the hand brake slowly you may run the risk that the trailer or van begins to move which if not prevented could lead to the van or trailer running away from you. This particularly the case on uneven surface with a heavy trailer or van.

You should avoid releasing the hand brake until you are hitched to your car or you have wheel chocks in place to avoid the van or trailer rolling away uncontrollably.





#### CORRECT USE OF THIS FEATURE:

- Whilst stationary and in position for storage or setup place chocks either in front or behind the wheels to prevent movement
- Pull the handbrake upwards til you reach suitable resistance
- Unhitch your car from the trailer or van
- Apply extra pressure upwards to handbrake if you notice movement of the trailer
- To release handbrake, press button at end of handbrake with a slightly upwards pressure on the handbrake to release
- Ensure you slowly lower the handbrake and look for signs of movement of the trailer or van.
- If you notice movement, engage the handbrake again and chock wheels or jockey to prevent movement

## FIRE EXTINGUISHER

A Fire Extinguisher is a device for putting out fires. All trailers and vans are installed with a fire extinguisher usually located either near the front door or under a lounge or in a cabinet. Ensure you locate and identify the location of the fire extinguisher before planning your first trip and also ensure you know how to use one. Our extinguishers are installed with a safety latch/housing to ensure they don't move during off road travelling and are simply unclip and removed for use. We use the following fire extinguisher usually or an equivalent:

MEGAFire 1.0kg ABE Portable Fire Extinguisher - Nozzle





#### CORRECT USE OF THIS FEATURE:

- Using the D-shackles provided attach the chain to the eyelet of the tow bar on the opposite side to the side of the trailer or van
- Repeat this with the opposite side to create a criss-cross pattern
- Ensure there is enough lag in the chain to allow movement between the vehicle and the trailer whilst avoiding the chain dragging on the ground
- If the chain is too long, relocate the D-shackle a couple of links of chain from the end of the chain to provide more tension
- Tighten the D-shackles by hand until you get good resistance
- When undoing the D-Shackles, you may find it is difficult to loosen by hand. The D-shackle bolt has a small hole at one end which can assist with untightening by using a piece of metal or clip from the camper or van to thread through the hole to give you more leverage. Otherwise a clamp or pair of pliers will also do the job.

## ELECTRIC BRAKES AND INDEPENDENT SUSPENSION

These two features combined represent the strength and safety that Maverick Campers are famous for. The combination of heavy-duty struts and springs on an independent wishbone suspension platform provides stability and durability in challenging terrain situations but most importantly provides safety to you and your family by ensuring the trailer performs in a safe and controlled manner. The electric brakes installed on your trailer or van mean you can stop quickly in an emergency knowing that you are not putting unnecessary strain on your vehicle and its braking systems. This ensures you are in complete control of your towing setup in any situation from highway driving to off-road heavy duty 4wding.



# STANDARD FEATURES

All Maverick Camper models whether van or trailer have these important features to make your travelling experience second to none. Below is a list of standard features you can expect to see in your model.

## MCHITCH OFFROAD HITCH

Australian made with a Toyota uni-joint, simply put, this is the best on the market. Your trailer or van is proudly accompanied with this best of the best hitching product. The MC Hitch Offroad hitch is rugged and tough with 3.5T towing capacity and ability to get your van or trailer out of the toughest of entry and exit points of any track in Australia. If you don't believe us, check out this Youtube video to show you what it can do:

(5) How Tough is the Maverick Ranger Limited As Seen on 4WD24/7 (Cape York Trip) - YouTube

<https://www.youtube.com/watch?v=yaaB0orne58>

Go to page X to see the process for hitching and unhitching you McHitch.

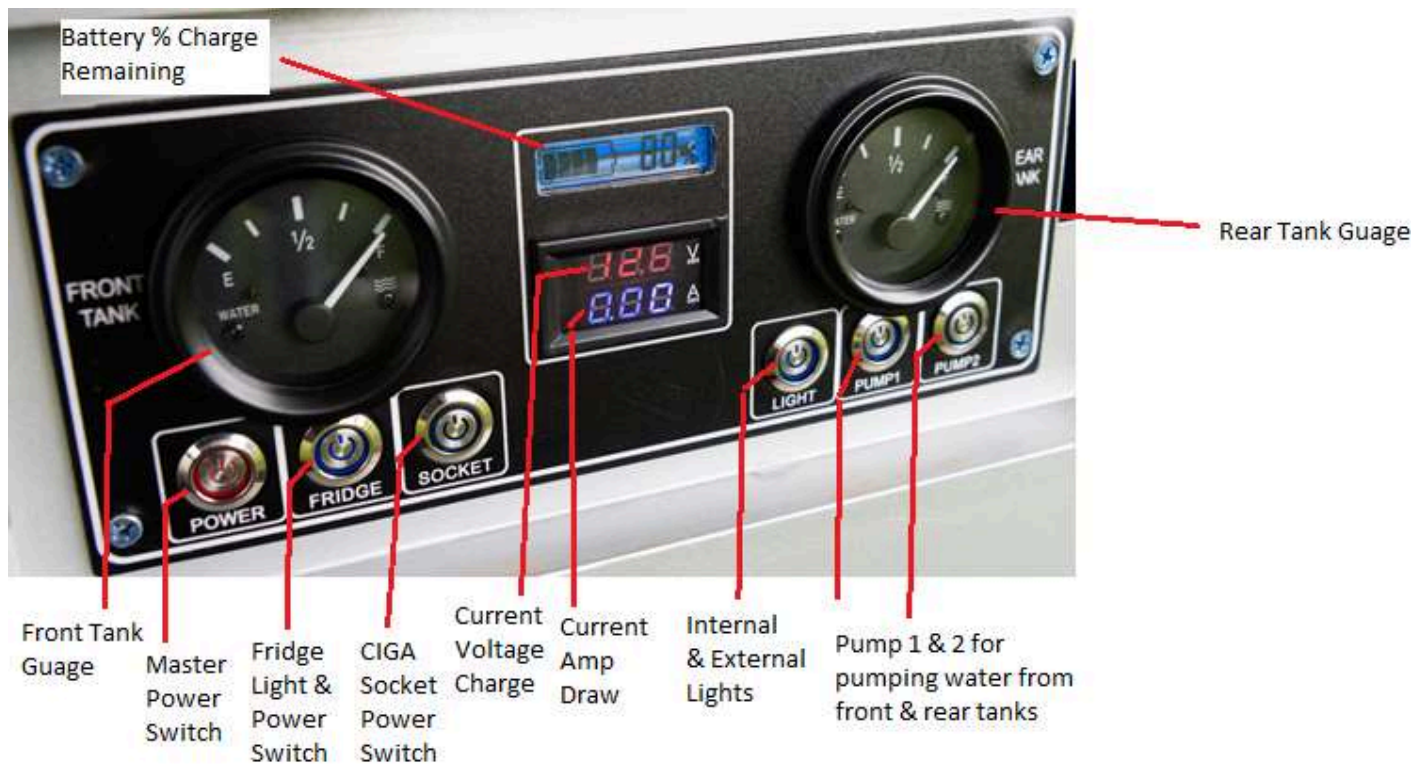




## CONTROL PANEL

Every Maverick Campers model has a control panel to allow you to control the features of your model but also ensure you conserve battery power.

Control Panels will vary from model to model depending on what equipment and features are included. Here are a couple of examples of our Control Panels:



## EXTERNAL 12V FRIDGE STORAGE & SLIDE

All Maverick Camper trailers and vans come with an extra large external fridge storage & slide compartment. This allows you to fit up to a 96L 12v Fridge which can be easily accessed via the heavy duty fridge slide.



By pressing the blue latch at the front of the slide in the downwards position, this will release the fridge slide lock and allow the fridge to slide in and out of its storage compartment. The fridge storage section includes both a Ciga and Anderson plug providing you with 2 options to power your fridge. To power your fridge, you must turn the fridge power switch to the on position on your control panel.

The fridge compartment also includes heavy duty seals to prevent dust entering the storage area and damaging the fridge. This will give you a certain degree of water resistance in water crossing scenarios however pro-longed water crossings where you are stationary or moving too slowly may mean water is able to penetrate this section of the van or trailer.

The fridge compartment has an electric venting system to extract heat away from the fridge. Heat build up will affect the fridge's performance as well as shorten the life of your fridge. The venting system prevents these issues by constantly extracting warm air out of the compartment.



#### IMPORTANT NOTE:

Due to the nature of off road touring, it is essential that you strap your fridge to the fridge slide to prevent movement or damage. The photo above shows the fridge correctly strapped to the slide. This method is ideal as you can still access the fridge doors and remove the contents.

Also be mindful of water crossings as they can lead to damage to the fridge if the water is high enough and the vehicle is stationary for long enough for water to seep into the compartment. Always ensure your seals are in good condition and you have adjusted the locking clamp bolts to ensure a good seal.





## EXTERNAL KITCHEN

A favourite feature among our customers is our easy-to-use external kitchen system. There is nothing quite like cooking in the outdoors with a beautiful scenery as your backdrop. The external kitchen system will vary from model to model however all have some similarities in their features and functions.



All External Kitchens run on a slide mechanism to easily setup and pack down in a matter of seconds. When using the kitchen ensure you have good ventilation for the heat and gases to escape safely. Our Kitchen Slides come with the following features:

- Quick connections for gas, water and power
- 2, 3 or 4 burner stoves (2 and 3 burner stoves are Dometic stoves) depending on your model
- Sink with faucet mixer
- Cutlery and utensil storage
- Water drainage plumbing
- Wind guard
- Benchttop space for chopping and meal preparation
- LED flexible lighting
- Storage for gas and water hosing and electrical power lines
- Drainage racking for drying dishes and storing kitchen items



For the kitchen to function correctly, you must ensure that the water and gas lines are connected and the power connections are also connected. The gas cylinder must be turned on for stove operation.

You will usually see quick connects on the side of the kitchen to allow easy connection of water lines. Depending on your model, there may be 1 water quick connect for cold water or if you have a water heater installed or connected, you may also have a second quick connect for hot water. This allows you to use the water faucet above the sink. The faucet will only function when the water pump power switch is in the on position on the power control panel.





In this image you can see the hot and cold water connections in place and above that is two small black power connections for stove ignition and kitchen led light. A Ciga connection is above that which can be used as a charging connection or for running other 12v appliances.

Below the cold water line is the locking latch for when the kitchen is packed and ready for travel to prevent the kitchen moving.

The kitchen remains in place whilst travelling thanks to locking pins similar or identical to below:



Always ensure that your external kitchen is disconnected from quick connects, power and gas before packing down and closing for travelling. On some Hybrid models, the water and power lines are on a snake track meaning they are permanently attached however by law you will need to always connect and disconnect gas lines for safety reasons.

For more information on the domestic range of kitchen stoves, please see the link below:

[dometic-hbg-2370\\_9600027607\\_82656.pdf](https://epi.dometic.com/externalassets/dometic-hbg-2370_9600027607_82656.pdf) or

[https://epi.dometic.com/externalassets/dometic-hbg-2370\\_9600027607\\_82656.pdf](https://epi.dometic.com/externalassets/dometic-hbg-2370_9600027607_82656.pdf)

Maverick Campers Operations Manual 2021



## ARK 750 OFF ROAD JOCKEY

Ark's XO Series Jockey Wheels are the toughest, most advanced Jockey Wheels in Australia today. Not only are they tough, but versatile also – with multiple height options, a highly manoeuvrable trailing yoke design, different yoke locking positions, Maverick Campers proudly includes an Ark XO on every model. Thoroughly tested and continually improved, the XO Series Jockey Wheels have fast become a standard within the camper trailer and caravan industry.

This jockey wheel will provide you with plenty of flexibility on unstable And uneven terrain to ensure you can hitch and un-hitch you trailer or Van with ease.

You will see from the image on the right that there is a large Blue handle to swivel the jockey into travel position or loading position.

There is also a silver smaller handle which allows the movement of the jockey up and down to accommodate level differences between your car and the trailer or van.

The winder allows you to adjust the height of the hitch for connection and disconnection from the towing vehicle and is removable when travelling.

### IMPORTANT NOTE:

When repositioning the trailer or van once unhitched, ensure that the Jockey wheel is lower than the 'Maximum Safe Height' for movement which is located on the stem of the jockey wheel. If the Jockey is set too high and you attempt to move the van or trailer, it can damage the jockey or cause failure of the jockey.



## 50AMP ANDERSON PLUG ON A-FFRAME

It may seem a little underwhelming that we are mentioning the Anderson plug as a feature however it's a really important feature because it allows you to charge your batteries in the following ways:

- From the vehicle's alternator when the car is running
- From the solar blanket during day light hours

Both methods ensure you get the most out of your camper trailer or van by giving your batteries charge when you are traveling or at your destination.



## PROJECTA CHARGER

Almost all Maverick Camper models are fitted with a Projecta 16amp Battery Charger. Our charger is more than just a product that charges the batteries. It is a complete battery management system that protects your batteries gives them the best chance of performing at peak performance for many years to come. It will also manage power charging from solar panels and blankets, 240v and your vehicle alternator via the Anderson plug at the front of the trailer or van



For more information on the Project Charger, please see below:

[PC400-2100 instructions Issue1.pdf \(squarespace.com\)](#) or

[https://static1.squarespace.com/static/5939e22ac534a5226114de77/t/598953cccd39c3ced74408fb/1502172116990/PC400-2100\\_instructions\\_Issue1.pdf](https://static1.squarespace.com/static/5939e22ac534a5226114de77/t/598953cccd39c3ced74408fb/1502172116990/PC400-2100_instructions_Issue1.pdf)

## HOW TO CHARGE YOUR BATTERIES VIA THE CHARGER

Most importantly, the Master Power Switch on the control panel must be on to allow the charger to charge your batteries:

- **For fixed solar panels on Hybrids** – Ensure the Master Power switch is on, the van is already wired to take power from the solar panels mounted on the roof through the charger (please note that in triple battery sets up may have a different brand of charger that is 30amp in size)
- **For solar blankets on Hybrids or Campers** – Connect the solar blanket to the Anderson plug located on the a frame of the trailer or van. The charger will handle the unregulated power and convert it into regulated 12v power to charge your batteries. The Master Power Switch on the Control Panel must be on
- **For vehicle alternator charging on Hybrids and Trailers** – Connect the Anderson plug at the front of the trailer or van to the Anderson plug (if installed) at the rear of your vehicle and ensure the car is running and the Master Power Switch on the control panel of the trailer or van is on
- **For 240v charging on hybrids and trailers** – This can be done in two different ways depending on the features of your trailer and the location of the battery charger. If you model has an external 15amp power inlet you can purchase a 15amp to 10amp converter (Bunnings sell one called a mini amphibian) to allow you to plug or trailer or van directly into a 240v socket. See image on next page.





## PROJECTA 1000W MODIFIED SINE WAVE INVERTER

Most Maverick Camper models come fitted with a Projecta Inverter as part of the options pack. The inverter converts 12v DC power into 240v AC power to run household appliances whilst off-grid or remote. The types of appliances that you can run off an inverter include:

- Mobile phone chargers
- Laptop Chargers
- Some coffee machines
- Some electric kettles and induction stoves

It is also important to mention that in order for an appliance to function using the inverter you will need to ensure that its maximum wattage doesn't exceed the maximum load rating on the inverter. If you run an appliance that exceeds the maximum load rating of the inverter, the inverter has a safety mechanism to cut off the power supply.

Appliances such as vacuum cleaners and hair dryers are notoriously high wattages and therefore would not operate on this inverter. Also, appliances that are sensitive to fluctuations in voltage and amperage may not function correctly with this inverter. More sensitive appliances require a pure sine wave inverter which you can upgrade through Maverick

Campers. We also offer high wattage inverters up to 3000 watts allowing almost any appliance to operate when off-grid.

Please contact your Maverick Campers showroom for more information or call us directly on 1300 XXXXX

#### IMPORTANT SAFETY AND USAGE INFORMATION:

- Inverters can be extremely dangerous if mis-used or tampered with. You should never undertake work or servicing of these unless you are qualified to do so
- Excessive use of an inverter can drain your batteries very quickly. You should consider the cost vs benefit of running a 240v appliance on the inverter before doing so



To operate your inverter, undertake the following steps:

- Turn on the Master Power Switch on the Control Panel
- Locate the inverter inside your trailer or van (usually under a seat or bed)
- Connect the appliance you wish to use either directly to the 240v outlet socket on the inverter, or if you have a 240v outlet in or on the outside of the trailer or van connect the appliances to this outlet.
- Turn on the inverter and check for warning lights or normal operation (you will hear a fan sometimes especially when the inverter is under load to cool down the product)
- Use the appliance.
- Once finished repeat the steps above in the opposite direction.
- If the inverter cuts out or sounds a warning buzzer, check that the appliance you are using is rated for the inverter and if necessary, click the reset button or on/off button on the inverter to restart the process

Here is the Operation Manual for the Projecta 1000w Modified Sin Waver Inverter:

[Layout 1 \(squarespace.com\)](https://static1.squarespace.com/static/5939e22ac534a5226114de77/t/59b73444f43b558af359590b/1505178701499/I-M150-2000_instructions_Issue1.pdf)

[https://static1.squarespace.com/static/5939e22ac534a5226114de77/t/59b73444f43b558af359590b/1505178701499/I-M150-2000\\_instructions\\_Issue1.pdf](https://static1.squarespace.com/static/5939e22ac534a5226114de77/t/59b73444f43b558af359590b/1505178701499/I-M150-2000_instructions_Issue1.pdf)



## 160W SOLAR BLANKET

This product is included in the options pack and is really handy and easy to use. This product is used to maintain charge in your batteries whilst you are off-grid and stationary. Its perfect for when you arrive at your destination and want your batteries charged without having to run your vehicle alternators or if you don't have access to a 240v outlet.

How to Use this Product:

- Simply unpack the blanket and either attach it to the annex pole tip of your annex or lay it on the ground or across the windshield of your car and angle it towards the sun
- Connect the Anderson plug of the solar blanket to the Anderson plug on the a-frame of the trailer or van
- Turn the Master Power Switch on the Control Panel to allow the battery charger to regulate the solar power to 12v DC

IMPORTANT INFORMATION:

It is important to understand that the ability of the solar blanket to charge your batteries is impacted by the strength of the sun's rays, the direction that the blanket is facing in relation to the sun's position and the amount of usage of the batteries by you as the operator. You may find that with heavy usage of the batteries to run, tv's, dvds, inverters, lights and fridges that the batteries will continue to drain due to the amperage usage being higher than the solar charge input. If this occurs you either need to reduce the usage to allow the batteries time to charge up or you need to increase the power into the batteries by way of larger wattage solar blankets, or running your vehicle alternator connected to the trailer or van via the Anderson plug or by use of a petrol or diesel generator.





# MAVERICK CAMPERS EXTERNAL HOT WATER SYSTEM

Whilst all Hybrids and the Matrix Limited camper have on board hot water systems, the rest of our camper trailer range come with an external hot water system as part of the options pack.

We offer our customers a highly effective solution for providing hot water to both your external kitchen faucet and for showers. The Maverick Campers hot water system is a stand alone product with its own pump and heating element. The system works by connecting the unit to a gas line, 12v power and a water source.

Depending on your model of camper trailer there may be quick connects on the a-frame to allow you to draw water from your onboard water tanks to provide hot showers and hot water to your faucet. If your model does not have water quick connects at the front of the trailer, you will need to use a bucket or some other solution to hold water to draw from.



For more information on how to use this appliance please see below:

[Microsoft Word - JSD12N Instruction Manual SEPT 2020.docx \(shopify.com\)](#)

[https://cdn.shopify.com/s/files/1/0480/4041/1293/files/Instruction\\_Manual.pdf?v=1603871731](https://cdn.shopify.com/s/files/1/0480/4041/1293/files/Instruction_Manual.pdf?v=1603871731)

## BLUETOOTH STEREO/DVD/MP3 PLAYER

All Maverick Camper trailers and vans come with a pre-installed stereo system capable of playing AM and FM radio, Bluetooth connection to other devices, DVDs, CDs and MP3. The unit also allows for internal speaker and external speaker usage by way of the fader to control where you hear the sound. A hard copy of the manual is provided with unit and can be located in one of the storage compartments of the van or trailer. Be sure to read the manual before operation and install batteries into the remote provide to control various features of the unit.

To operate the stereo system, first turn on the Master Power Switch on the Control Panel and then turn on the unit's on switch to power the stereo. From there it's a matter of either putting a CD or DVD into the disc insert or selecting the radio station you wish to listen to.

To run Bluetooth enabled devices you must first pair the devices in order to control sound outputs. Refer to the provided manual for more instructions on this.

To run DVD's you also need to turn on the TV which in Hybrids is a switch on the Control Panel and for camper trailers is just a matter of turning on the tv once the power is connected to an available CIGA connection and turning the CIGA button to the on position on the Control Panel.



## 19 INCH HD TV UNIT



As part of the options pack you are provided with a 19inch HD TV. To operate the TV you need to power up the TV via the control panel (for hybrids) or by connecting the TV to an available CIGA connection and ensuring that the Sockets button on the control panel is on.

The TV runs off an antenna which provided and can also connect into the stereo system on board to run DVDs. Refer to the owners manual for operating the TV unit.

For Hybrids only, there are both internal and external mounting brackets and connections to allow you to operate the TV both inside the van and outside the van. Ensure you connect the power, av and antenna connections to get optimum performance. If you are remote and the TV signal is weak, you can connect both power lines from the back of the tv to the connectors in both the internal and external locations nearing the mounting brackets to boost the signal. If all else fails and you are too far from a signal, ensure you have plenty of DVDs to keep the kids busy 😊.





## ONBOARD HOT WATER SYSTEMS

All Hybrids and the Matrix Limited Camper Trailer have onboard hot water systems. All Hybrids are installed with a Truma 14L Rapid Hot Water System and the Matrix Limited comes with a Duetto 10L Hot Water System. Here are details about both units:

### TRUMA HOT WATER SYSTEM FOR HYBRIDS

A Truma Hot Water System is very similar to the usual cylinder storage style hot water system you use in your home...just smaller. The hot water system runs of 12V and 240V which allows for versatility in any situation whether in a caravan park or in remote areas of Australia. Hot water is never too far away.



For more information on how to operate the Truma Hot Water System please use the following links:

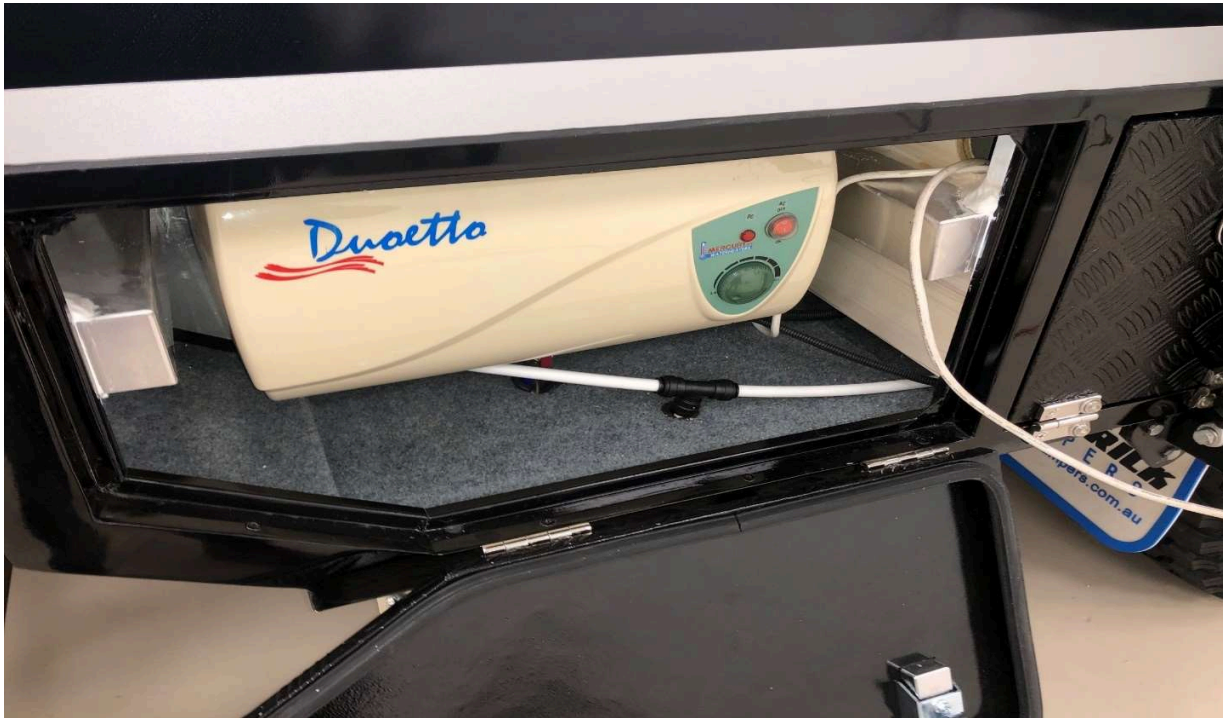
[UltraRapid - Inform now \(truma.com\)](https://www.truma.com)

<https://www.truma.com/au/en/products/truma-hot-water-system/ultrarapid#to-7c6e30c5-2c7a-4f16-b54f-b16d12d4b3a7>

## DUETTO HOT WATER SYSTEM FOR MATRIX LIMITED

The Matrix Limited is the only Camper Trailer in our range with an onboard hot water system connected to the water faucet in the slide out kitchen and the external shower unit.

This system has a 10l water capacity and heat the water to 70C within 15 mins. It runs on both 240v and 12v and is simply a matter of turning it on and ensuring the Master Power and Water Pump switches on the Control Panel are in the on position.



For more information on how to operate the Duoetto please see links below:

[DuoettoManual-1.pdf \(ausj.com.au\)](#)

<https://ausj.com.au/wp-content/uploads/2018/05/DuoettoManual-1.pdf>

# ONBOARD DOMETIC AIR CONDITIONING AND HEATING

All Maverick Camper Hybrids and the Matrix Limited Camper Trailer are equipped with a Dometic Reverse Cycle Air Conditioning unit.

Whilst the Hybrids come with a roof mounted unit, either the Harrier Lite or FreshJet models, the Matrix Ltd has an underbench model. All versions work effectively in the same way and can either heat or cool your van or trailer effectively. Most important to note with the air conditioner units is that they do require either 240v via a 240v outlet or via a generator.

The underbench version on the Matrix Limited does have venting underneath the floor of the camper trailer which means water crossings are not recommended and may cause damage to internal components of the air conditioner if water finds its way up through the vents

## Rooftop Unit on Maverick Camper Hybrids



For more information on the operation of the Harrier Lite, see link below:

[harrier-lite-roof-top-adb\\_9600009483\\_74864.pdf \(dometic.com\)](#)

## Underbench Unit in Matrix Limited



For more information on the operation of the underbench unit, see link below:

[harrier-lite-roof-top-adb\\_9600009483\\_74864.pdf \(dometic.com\)](#)



## DOMETIC ONBOARD FLUSHING TOILET

All Maverick Camper Hybrid models come with an inbuilt Dometic flushing toilet and cassette system. These units making travelling a breeze and are very easy to use and maintain.



As for the use of the unit, the most important points to remember are:

### **Preparation for use**

- Ensure the fresh water tanks have water in them to allow flushing
  - Ensure the Master Power Switch is in the on position on the control panel to allow the electric flush operation to function
  - Prior to using, ensure you have added approximately 500ml of water to the waste catchment section of the cassette along with toilet chemical to stop odours and assist the with the breakdown of waste and toilet paper.
- Below are a couple of options which you can find almost anywhere online:



### To use the toilet

- Open the lid
- Pull the tab to open the middle divider between bowl and waste storage
- Do your business 😊
- Press the flush button until all waste and used paper move from the bowl to the waste storage
- Push the tab in to seal the bowl from the waste storage section
- Job done

### To empty and clean the toilet cassette

- Ensure the tab is in the closed position to seal the waste storage section
- Head to the outside of the van where you will see a door like this in the image below:



- Usually it will be locked so find the key that fits and open it
- Inside is the waste cassette which needs to be removed and taken to a dump point
- Below is a photo of the cassette inside the external door in the locked position for use



- To remove the cassette, lift the green tab behind the pull out black handle as see below:



- Completely remove the cassette from the housing
- Pull the handle out to full extension and wheel the cassette to the dump point



- Once you arrive at the dump point, swivel the black pipe upwards as seen in the image above and unscrew the cap
- Be very careful as you are now in the danger zone for spillage of some very bad stuff 😊



- Pour the waste into the dump point by lowering the handle and very carefully turning the unit upside down to allow the flow of waste through the black pipe
- Locate the green button on the unit and press it in. This allows the safe entry of fresh air into the waste storage to improve the flow and complete emptying of the waste storage unit.
- Once empty it is highly recommended that you use the hose at the dump point to flush the unit several times to ensure it is clean once more
- You can flush the unit by putting water into the black pipe, giving it a swirl and then emptying again or you can manual open the middle seal to fill water directly into the storage unit
- Which ever way you chose to flush it, just be incredibly careful and take your time
- If you get spillage on yourself, clean it immediately and disinfect the area

For more information on your Dometic toilet please see link below:

[https://epi.dometic.com/externalassets/dometic-cts-4110\\_9107100618\\_71735.pdf](https://epi.dometic.com/externalassets/dometic-cts-4110_9107100618_71735.pdf)

# PORTABLE TOILET

This is included as part of the options pack on Maverick Campers Camper Trailers. Whilst there are various models that could be provided as part of the options pack, the theory is all the same.

The unit can be divided into two sections. The toilet bowl and the waste storage section. Most toilet bowls are 20L manual pump solutions. This means that when filled with water, the top section can hold up to 20l of fresh water which can be manually pumped to flush waste into the waste section.

## Preparing the Portable Toilet for Use

- Fill the top section with water to desired level but usually up to 20l
- Add a flush liquid to improve the smell. See below as just one of many options:



- Add a small amount of water – approx. 500ml to the bottom section (waste storage) by pulling the tab on the outside front or side of the toilet to release the middle seal.

- Add waste solution to the bottom section to assist with the breakdown of waste and toilet paper – see below



- Your toilet is now ready for use

### **How to use your portable toilet**

- Open the lid
- Ensure you have fresh water in the top section for flushing
- Open the middle tab to open the middle seal
- Do your business
- Then press the manual flushing pump on the top of the toilet to flush the waste and toilet paper into the bottom section
- Close the middle seal by pushing the tab in to stop splashing and smell from the waste section

The knob on this side is the Manual flushing mechanism



The cap on this side is the Fresh water filling for flushing.

You may notice the middle tab at the bottom of this image to open and close the middle seal dividing the two sections

### **How to dump and clean your portable toilet**

- Ensure the middle tab is in and the middle seal is closed
- Unlatch the top section from the bottom section to detach both
- Take the bottom waste section to the dump point
- At the dump point swivel the dumping pipe and remove the cap
- Very carefully turn the unit upside down and aim the dump pipe to the dump point hole
- To assist with proper removal of waste and toilet paper, press the button on the unit which draws fresh air safely into the unit to provide a more thorough dump of waste
- Use the hose at the dump point to hose out the waste storage unit via either the dump pipe or manual opening of the middle seal (look for a switch or swivel tab on the unit which opens the seal)
- Be very careful in undertaking this entire process and should you get spillage of waste on yourself, be sure to immediately clean the area and disinfect.



# TOWING GUIDE

## TOWING

The loaded mass of your trailer must not exceed:

- The ATM rating as specified by the trailer manufacturer; or
- The maximum towing mass specified by the tow vehicle's manufacturer; or
- The maximum ball weight specified by the tow vehicle's manufacturer.

## LOADING CARAVANS

It is important not to overload your caravan. You should not exceed the maximum load specified or recommended by the trailer manufacturer, nor should you exceed the tyre or coupling capacity. All trailers shall have a plate affixed displaying the ATM (Aggregate Trailer Mass) which is the maximum allowable weight of the loaded trailer. For safety and ease of towing the ball mass (the mass towards the front of the trailer carried by the tow ball of the towing vehicle), should be about 10% of the total laden trailer weight. The ball mass can be measured either at a weighbridge by resting only the jockey wheel on the scale, or by placing a ball mass scale under the coupling then taking the weight off the jockey wheel. Depending on capacity, bathroom scales can also be used.

## RATINGS & MASSES

The GTM (gross trailer mass) and ATM (aggregate trailer mass) are ratings... supplied by the caravan or camper-trailer manufacturer.

### **ATM Rating:**

The total permitted mass of the laden trailer/caravan when carrying the maximum load recommended by the manufacturer. This includes the mass imposed on the tow-vehicle.

### **GTM Rating:**

The total permitted mass of the laden trailer/caravan transmitted to the ground by the caravan tyres, when carrying the maximum load recommended by the manufacturer, when coupled to a tow-vehicle. This rating must not exceed the axle-group (wheels/tyres/suspension/axle) rating stated by the chassis manufacturer.

### **Tare Mass:**

The actual mass of the trailer/caravan with all OEM (original equipment manufacturer) items fitted. The tare mass is weighed with empty water tanks, empty gas cylinders, and without any luggage or personal effects.

Fluid not essential for the caravan to operate on public roads can be excluded from the tare mass, as it is part of the load- carrying capacity, which is included in the Gross Trailer Mass (GTM).

Fridges, stoves, hot water service, water tanks and gas bottles are standard equipment on most trailers/caravans and do not need to be filled to a nominal fluid capacity in the tare mass. Manufacturers are required to weigh each caravan they manufacture before it leaves the factory and have the tare mass stamped on the Consumer Information Plate, which is affixed to the vehicle. With reference to the section in this handbook entitled “Load- carrying Capacity”, items fitted to the caravan after it leaves the manufacturer’s factory are not considered to be part of the tare mass.

## **RATINGS & MASSES CALCULATOR**

There are many ways to easily determine whether your car and trailer or van will work in combination to be a safe method of transport and towing. We recommend you review the towing vehicle information found on the vehicles plate with the VIN plate on your trailer or van and enter it into a Towing Calculator found on the internet to ensure you are within safe range of use. Below is one such calculator that can assist you with the calculations:

Towing Weights Calculator - L2SFBC - <https://l2sfbc.com/towing-weights-calculator/>

This website will tell you very clearly if you are over the limits that are considered safe. If you find you do not meet the mass and rating limits, you can take steps to correct this to a certain extent. Ideally, you undertake this research prior to pairing a car with the trailer or van and then only making the purchase when the combination is legal and safe. If your car is not suitable for the trailer or van you have purchased, you should talk to motor vehicle specialists such as ARB or TJM on the process of GVM upgrades or other solutions to correct the problem.



# STORAGE GUIDE

Whilst we would all love to be out enjoying the beautiful land, we call home all the time, sadly, for most of us we still have to work and therefore the Maverick Camper trailer or hybrid needs to be stored between trips. Below is a list of actions you should take to ensure your trailer or van are always ready to go and in peak condition for the longest period possible. Here is the list of actions we recommend:

- **Store your trailer out of the weather** – Ideally in a garage or somewhere where rain, sun and wind cannot affect the condition or look of your trailer or van. Whilst the trailers and vans are built tough, the Australian climate can have impact on metals, rubbers and electrical over time if not protected. If you are not able to store your trailer or van in a garage, we highly recommend purchasing a heavy-duty cover to protect your prized possession. This is a cost-effective solution to fix the problem.



- **Clean your trailer or van regularly** - At the end of each trip, take your trailer or van to the self-service car wash and give it a proper clean inside and out. Mud, dust, rocks, twigs, grass etc are all objects you can expect to see on or in your van or trailer after a decent off-road trip. To maintain a clean and tidy environment free from the threat of rust, mould, fire hazards and other risks, it is highly recommended you clean and dry all aspects of your van or trailer ready for your next trip.
- **Connect your onboard charger to 240v** – Batteries have a life expectancy of approximately 3 to 5 years. By keeping them charged and managed by the charger you are prolonging their life and keeping them at peak performance. If you don't not regularly charge your batteries, they will slowly drain voltage and will eventually die. When this happens, you are looking at replacement which on a dual or triple battery setup (as found in our campers and hybrids) you are looking at nearly \$1,000 to replace. Keep them
- **Leave the doors open if possible** – This helps with increasing the life span of the seals due to not having them constantly under pressure. It also allows the van or trailer to breath.



- **Empty all water tanks** – Open the tap at the bottom of each tank to drain the tanks. This ensures no build up of stale smells or algae. Always flush the tanks prior to filling with clean water for your next trip also.



- **Empty and turn off fridges** – Also leave the doors or lids open on the fridges to ensure they dry properly after cleaning and prevent the build up of mould and stagnant water smells.
- **Flush the toilet cassette** – It sounds obvious but flushing the cassette after every trip to the dump point and at the end of the trip is critical to ensure the unit functions for years to come, remains hygienic and safe to use and to prevent the build up of unwanted smells.
- **For Long Storage** - Condensation can occur inside the trailer or van due to that constant change in temperature between night and day. As the condensation build it can turn into mould and stale water causing bad smells. To prevent this, you can purchase a moisture condensation bucket (from Bunnings). These absorb condensation keeping everything dry. Ideally you should purchase 2 buckets with 1 being in or under a seat and one on the floor.



# BEFORE TRAVELLING

## TRAILER AND VAN PREPARATION

At least the day before you travel but ideally several days before the trip you should undertake a check of your trailer and van as follows:

1. **Check battery charge** – Your trailer or van has a control panel. Once you click the power button the voltage, charge and amperage draw displays will light up.



As the image above shows the charge of the batteries is 80% and the actual voltage of the batteries is 12.6V. The trailer is not drawing any amps from the battery. As you start to turn on the internal lights, the fridge or the pumps the amperage will increase. This indicates that the batteries are being used. You should charge your batteries to full charge prior to travelling

2. **Flush your water tanks** – Flush the fresh water and grey water tanks prior to travelling by doing the following:
  - a. Open the tap or valve at the bottom of each tank to drain any residual water from the last clean or last trip and then close the tap or valve up.
  - b. Open the water inlet cap located on the side of the trailer or van and using a hose fill the tanks to full capacity
  - c. Then repeat the opening of the tap or valve to empty the clean water out
  - d. Your tanks are now flushed



3. **Refill your fresh water tanks** - Depending on your travel plans, you may wish to refill the fresh water tanks with clean water or wait til you are close to your destination and fill up then. Whilst its ideal to travel without water in the tanks for fuel efficiency purposes, it will depend on whether you have a trusted water source close to where you are going. If uncertain, always fill the fresh water tanks up to ensure you have plenty of drinking and cleaning water. If you are planning on using the water in your tanks for drinking, we recommend buying an inline water filter to improve the quality and taste.



4. **Check the trailer or vans features are operating correctly** – Its important to check the following before any trip
  - a. Check wheel nuts are tight
  - b. Check all pins are engaged on the latches
  - c. Ensure the handbrake has tension when engaged
  - d. Check lights are operating (brake, park, driving and indicators)
  - e. Check Control Panel is functioning and test pumps, water gauges, lights and CIGA connections are functioning
  - f. Ensure your McHitch uni-joint is moving freely
  - g. Check your Break Safe pin is engaged in the housing
  - h. Check you fridge is functioning once in the slide and that power is going to the fridge and the external exhaust fan is operating to draw heat away from the fridge compartment
  - i. Ensure you have all necessary canvas items in storage for that particular trip including awning, annex and side walls as well as floor if required
  - j. Ensure the PSI in the tyres and spares are up to the standard recommended pressure
  - k. Ensure your gas bottle has sufficient gas in it for the trip
  - l. Ensure all stabilisers are in good operating condition
  - m. Ensure you have chocks, stabiliser winder and tools for any repairs or maintenance including a socket set for retightening bolts and nuts, battery monitor etc
  - n. Check that all latches are locking correctly and that the tension bolts on the inside of all external hatches and draws are tight to prevent dust coming inside
  - o. Ensure external kitchen slide is locked and all connections are disconnected
  - p. Ensure gas cylinder tap is off



5. **For Hybrids** – Also check the following:

- a. Check the onboard hot water system is functioning
- b. Check the A/C unit is function and free of excessive dust in the intake and filter
- c. Check the shower head is secured in the correct position for travel
- d. Check the TV unit is secure using the Velcro straps to prevent vibration
- e. Ensure all hatches are locked down and secure for travel
- f. Ensure all window latches are locked
- g. Ensure external kitchen slide is locked
- h. Ensure gas cylinder tap is off

## LOADING YOUR TRAILER OR VAN FOR YOUR NEXT TRIP

The amount of items that are loaded into your trailer or van will affect the performance of the trailer or van, the ease in which it is towed, the pressure on your towing vehicle and the fuel efficiency of your journey. Every trip you do needs to be properly assessed on what you need and what you don't need. A trip planner is a great way to determine fuel usage and destinations for refuelling and resupplying. Ideally you want to plan your trip to take what you need without overloading the trailer or van beyond what you need. Overloading your van or trailer can increase the chances that you start to creep over the maximum load limits in the worst case scenario meaning you are towing unsafely and illegally.

Here is a couple of options in terms of planning your trip to assist in the process:

[Road Trip Planner | Camp Around Australia](#) or <https://www.camparoundaustralia.com.au/road-trip-planner/>

Wiki Camps – Recommend you download the phone and tablet app

Even if you are not over the maximum load limits the trailer or van can perform differently under load especially if the load is at the rear of the van or trailer. Heavily loaded to the rear can cause swaying which can be very dangerous. You should always try to load to middle or front of the trailer or van to reduce swaying whilst not overloading your ball weight.

To mitigate this issue, plan to stop along your journey to fill up your water tanks, this will save weight and fuel usage. You can do the same with food and drinks by stopping at a supermarket closer to your destination.

Items to consider when preparing for your next trip:

- Water & Food - What to buy, where to buy, planning for remote travel
- Fuel – Where to buy, ensuring you have ample for remote travelling, budget for higher rates in regional areas
- What season are you travelling in – clothing, heating, cooling and driving challenges such as water crossings
- What climate will you be travelling into (even NT and the Kimberlies get hot in winter)
- If travelling for an extended period of time, plan to book your van or trailer in for a service that aligns with your itinerary and book it in ahead of time
- How remote are you going – plan to have at least 2 if not 3 forms of communication (phone, cb radio & satellite phone)

# DAY OF DEPARTURE

## FINAL CHECKS AND PACKING

Before hitching and departing on your journey you should do one final check:

- All latches, locks and clips to make sure not parts of your trailer or van move during the journey.
- You should also commence running your fridge prior to filling it with food and drinks to keep them from spoiling.
- Ensure you have ample fuel, food and drinks on board prior to your first stop

## ATTACHING THE MCHITCH TO THE TOW VEHICLE

Before we commence this process here are the different parts of the McHitch system:



To the left is the hitch pin. This is installed to the towing tongue connected to your vehicle's tow bar.

The team at Maverick Campers will install the hitch pin to your vehicle during the handover process.



To the left is the locking pin which doubles as a handle to tighten the hitch

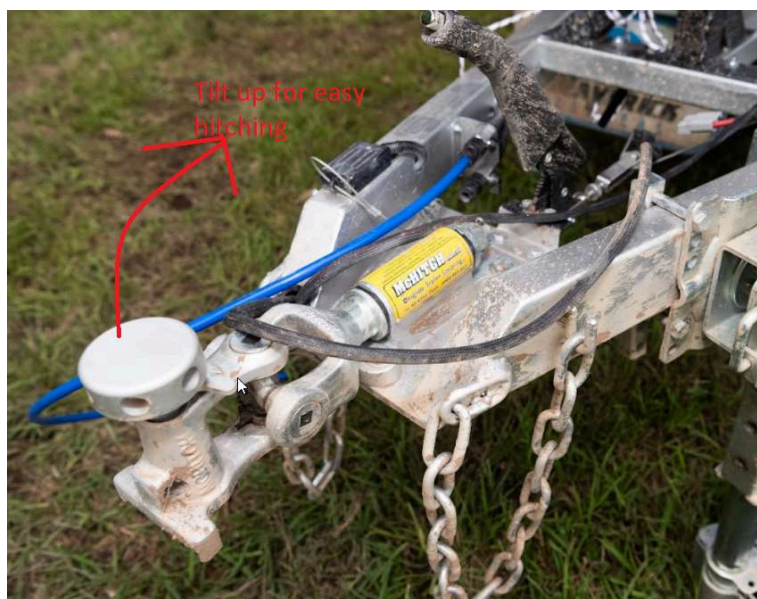
To the left is the smaller pin which prevents the locking pin from moving during travel



Above is the actual hitch which is attached to the a-frame of the van or trailer and includes a Toyota unijoint. The circular cap with the multiple holes is the screwing cap which ensures a tight lock between trailer/van and vehicle

Use the following instructions to safely attach your trailer to your vehicle or van:

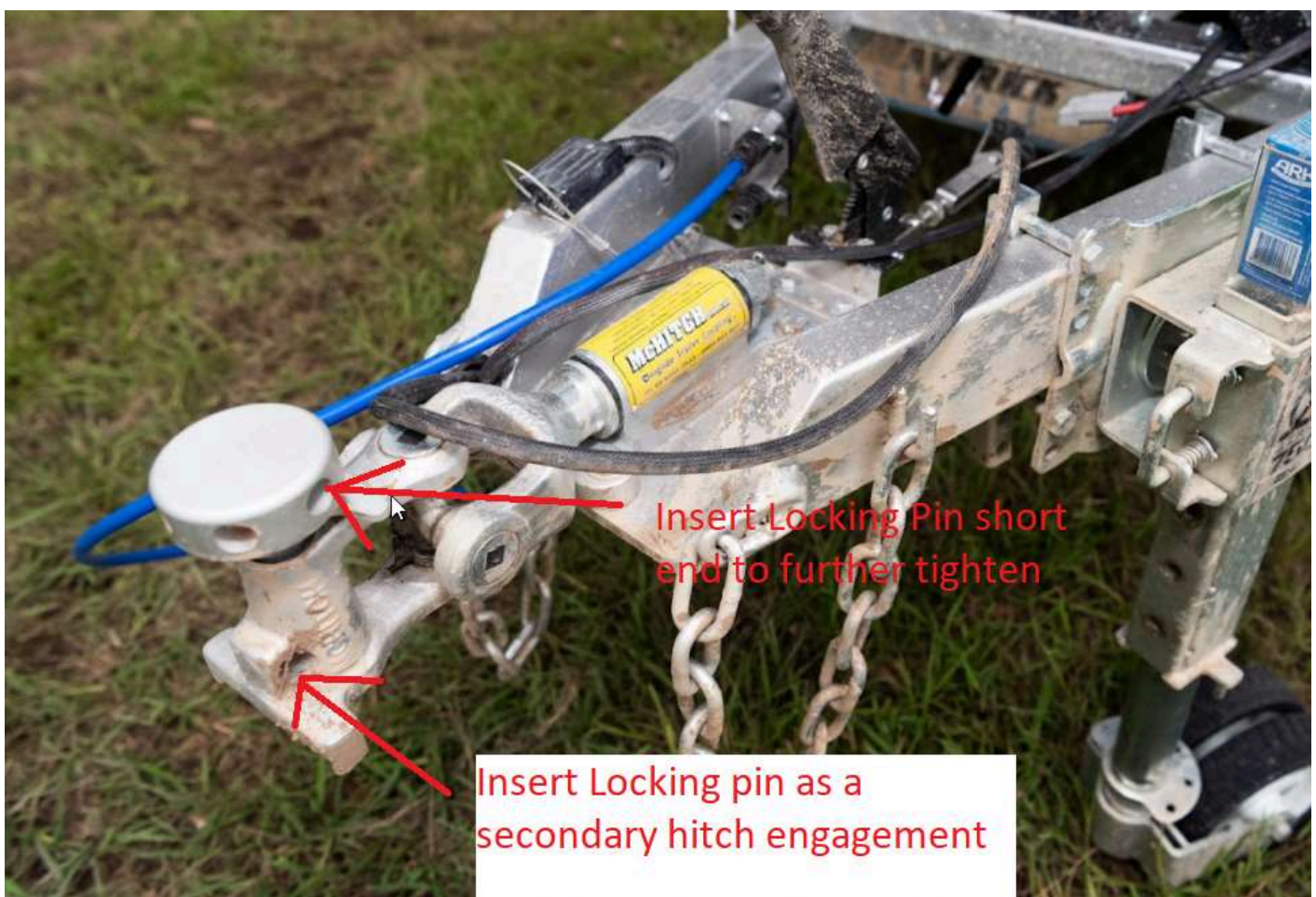
1. Ensure the handbrake is engage on the van or trailer to prevent movement during the hitching process
2. Slowly reverse your vehicle to within a few feet of the coupling. You may need a helper to stand with their hands showing you where the hitch is or use your reversing camera to position the tow pin and hitch as close as possible. A great idea is to have the McHitch tilted up so that when you reverse, the tow pin attached to your tow bar can position in a way that you can drop the McHitch straight on top of the tow pin



3. Once in position, use the jockey wheel to adjust the height of the hitch to ensure you can drop the hitch onto the tow pin



4. If possible you can manoeuvre the trailer or van to ensure the hitch and tow pin line up. Only do this if you are on safe level ground with the handbrake disengaged or slightly engaged to control the movement
5. Depending on model, either lower the trailer by means of the jockey wheel assembly onto the coupling of the vehicle or pull the trailer/van towards the tow vehicle so that the male part of coupling enters the receiver. Once the hitch is sitting over the male part of the coupling, slowly lower the hitch into place using the jockey wheel.
6. Once the coupling is flush with the tongue of the tow bar and the tow pin can no longer be seen you can commence completing the link for travel however, if the hitch is not flush, give the trailer or van a-frame a slight jiggle to ensure the two are connected and flush.
7. Using your hand, commence turning the top of the McHitch in a clockwise position until it is too tight to do by hand.
8. Use the locking pin to tighten the handle further by placing the short end inside the top of the hitch handle holes and using leverage to give a tighter lock
9. Once you cannot tighten any further, remove the locking pin from the hole and thread it through the base of the hitch which will provide the secondary bond between trailer/van and vehicle.



10. The locking pin as a small hole at one end which needs to have the small pin inserted to prevent the locking pin from sliding out of position



11. Once the coupling/hitch is locked in place, ensure the positive locking pin is locked in. Next fully raise the jockey wheel before unclamping it and rotating the jockey wheel, finally, locking it fully raised



12. Connect safety chains with appropriately rated shackles. Chains should be crossed over and long enough to allow tight turning, but not too long that they touch the ground. The idea of crossing the chains is they act like a cradle and catch the hitch should it become disconnected.

13. Plug in the lighting plug and check all lights and indicators. The electrical plug only fits one way, so line up its cut-out with the lug on the bottom edge of the socket. Maverick Campers uses 7 pin rectangular connections as standard. You can purchase alternative connectors to change from rectangular to circle to suit your car.
14. Connect the Anderson plug on the a-frame of the van/trailer to the Anderson plug on your tow bar to drive power from your vehicles alternator to the battery charger to charge your batteries whilst you are driving
15. At this stage you can also attach the lanyard of the emergency break safe (see break safe for more info)
16. Disengage the handbrake and check the handbrake cable is loose to allow for free movement
17. Turn the Master Power Switch inside the Control Panel to On to allow charging from the towing vehicle's alternator via the Anderson plug and ensure all doors and cabinets are closed and locked and all latches are tension enough to not move during transit
18. Your van/trailer is now ready for departure

**Locking your trailer:** Please ensure that all cabinets/door and tailgates are locked prior to any departure as locks can sometimes pop open in transit. Doing this will ensure you do not lose any of your belongings whilst on the road or track.

# TRAVELING WITH YOUR VAN OR TRAILER

You are now travelling with a heavier load than just your car and therefore you should make sure you are taking extra care in the following:

- Braking distances
- Turning angles
- Speed of entry and exit of turns
- Unstable roads and obstacles
- Blind spots
- Overtaking

Whilst towing safely is outside the scope of this manual, there are plenty of very helpful websites available to get the most of your journey in the safest way possible. Here are just a couple of such websites:

[Preparation and Driving Tips for Safe Towing - Consumer Reports](https://www.consumerreports.org/car-safety/preparation-and-driving-tips-for-safe-towing/)

<https://www.consumerreports.org/car-safety/preparation-and-driving-tips-for-safe-towing/>



# SETTING UP AT YOUR DESTINATION

The quick steps to setting up are as follows with more detail below this section:

- Locate a suitable location for you camp site
- Position the van/trailer on the site
- Secure the van/trailer to ensure its safe to unhitch
- Unhitch the van/trailer from the towing vehicle
- Reposition the towing vehicle near your camp site
- Stabilise the van/trailer
- Unpack/setup the van/trailer
- Connect gas, water and power as needed
- Open the awning and annexe (if required)
- Turn on lights and stereo (if required)
- Turn on A/c or Diesel Heater (if installed and required)
- Check fridges to ensure food and drinks have stayed cool

## LOCATING A SUITABLE LOCATION FOR YOUR CAMP SITE

The ideal site isn't always available as seen on many youtube videos and travelling shows but it is important to pick the right site to suit your needs. Here is a list of things to consider when finding a suitable site to unhitch and enjoy your Maverick Campers' van or trailer:

- Size of the site
  - o Select a site that will allow the positioning of the van/trailer, your towing vehicle, you camp setup for fires, cooking, relaxing
- Level and terrain of the site
  - o A level site is ideal to ensure you don't run the risk of the trailer or van moving and that when you are inside your van/trailer that the occupants don't feel a sense of unbalance when sitting or sleeping
  - o Ensure that the terrain is suitable for camping. If its too rocky, on unstable surface, too wet or the grasses are too high it will impact your enjoyment of the experience
- Location of the site
  - o Be mindful of bush fires, safety of children, flood areas, croc infested rivers, quality of the scenery, land based wild animals such as buffalo, cattle, dingoes etc

# POSITIONING THE TRAILER/VAN IN THE CAMP SITE

At a caravan park, this is a fairly simple procedure. You will place the trailer or van on one side closest to the power, water and drainage facilities and leave the other side free for setting up kitchens, seating areas and your vehicle. When it comes to remote travelling you have a great deal more freedom in how you position your van or trailer however you should consider the following:

- Position the van/trailer in a location where you can easily hitch and unhitch without having to physically move the van/trailer
  - o This is very important as a fully loaded trailer/van on uneven terrain will be near on impossible to move around easily
- Ensure the van/trailer is positioned in a way that gives you good space for outside seating, cooking and enjoying for your family and friends
- Make the most of the view
  - o It's a great idea to make sure the van/trailer windows are aimed at that million dollar view to ensure you enjoy it for the entire time you are at camp
- Consider the elements
  - o Positioning under a tree may be a good idea if it's a summer time vacation however if strong winds are forecast, then the tree may become a dangerous object that could see branches fall and damage your van/trailer or harm someone. Trees also drop sap which can stain your van/trailer external surfaces
  - o Be mindful of the sun, you may be able to maximise or minimise the impact of the sun by the position of the van/trailer in relation to other objects that cast shadows such as mountain ranges, trees etc
  - o What is the wind doing – There is nothing worse than camping in a windy location. Use objects and obstacles to block or reduce the wind. Great example of this is camping behind a sand dune to stop the off-shore wind ruining your holiday

For more information on positioning your van/trailer check out the link below. There are plenty of sources of good information on this topic:

[How to Level and Position Your Caravan or RV | Snowys Blog](#)

<https://www.snowys.com.au/blog/levelling-positioning-caravan-rv/>

## SECURING THE VAN OR TRAILER PRIOR TO UNHITCHING

Once you are in position for unhitching, make sure you follow the next steps carefully:

- Engage the handbrake on the van/trailer to prevent movement
- If you have wheel chocks available, apply them to either the front or rear of the tyres to assist with preventing movement
- Disconnect the power connection (7 pin rectangular) between the vehicle and the van/trailer
- Positioning the jockey from the travelling position to the vertical position and adjust the sleeve to suit the level of the terrain
- Commence winding the jockey until it is firmly on the ground but not under load
- Assess if the jockey is at risk of moving and either chock the jockey wheel or swivel the wheel to counteract any movement
- Undo the safety chain d-shackles from the car and hook onto the chassis hooks provided
- Disconnect the Anderson plug between the towing vehicle and the trailer
- You are now ready to safely unhitch

## UNHITCHING THE VAN OR TRAILER

The unhitching process is the reverse of the hitching process:

- Remove the small pin from the locking pin attached to the base of the McHitch
- Slide the locking bolt out of the base of the McHitch
- Using the lock bolt inserted into one of the holes on the side of the top of the McHitch, apply pressure in a counter clockwise position whilst pulling the safety release switch below the top of the McHitch as the image below shows:



The images above show how to release the safety switch and unwind the hitch cap with the locking pin at the same time.



- With enough pressure the cap of the McHitch will start to unwind and then you can release it completely by hand
- At this stage it's a good idea to lift the McHitch off the towing pin on the tow bar of the towing vehicle and re-insert the locking pin and clip to ensure they are not lost during the holiday.
- You can now safely drive your vehicle away from the van/trailer

# SETTING UP YOUR TRAILER

Due to the uniqueness of the models, this section is split into separate sections for camper trailers and hybrids. Refer to the contents page or skip to the page that mentions your particular model.

## CAMPER TRAILER SET UP PROCESS



### **Step 1: Lower the stabilizer legs**

Included with your Maverick Camper Trailer is a winder for manually winding down your stabilizer legs. All trailers except for the Hornet V2 have a stabilizer leg on each of the 4 corners. The Hornet V2 only requires two at the rear of the trailer.

To lower and set your stabilisers legs undertaking the following process

- Pull the blue handle of the stabiliser leg to unlock the leg
- Be careful as the leg will swing once unlocked
- Push the blue handle once the stabiliser leg is in the downward position
- Please not on uneven surfaces your stabiliser leg may not be vertical but slight off vertical to accommodate the uneven terrain
- Commence winding the stabiliser down using the winder provided
- Ensure that the stabiliser is firmly touching the ground to prevent movement when inside the trailer but not so firm that it puts the stabiliser at risk of breaking or failing
- Repeat this process on the remaining stabiliser legs
- If you still feel bounce when moving around the camper trailer, try to identify which stabiliser leg is not firmly touching the ground and extend until the bounce goes away

### **Step 2: Unlatch and fold over the boat rack**

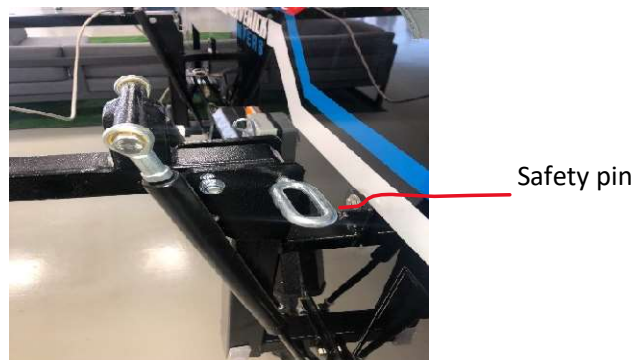
Almost all of our camper trailers have a boat rack installed. This is a valuable addition to your camper and acts as a storage device for swags, camping gear, as a bike rack (with the appropriate rack installed), boat rack, kayak rack or just about anything else you can fit securely onto it. Its rated to 100kg which gives you ample storage options.

The process for unlatching the boat rack is as follows:

- Remove the safety clips located in the eyelets of the boat rack latches
- Unhook the latches securing the boat rack to the roof of the camper trailer



- On the other side of the camper trailer is the boat rack mounting system. You will see 1 eyelet bolt in each boat rack post which needs to be removed to allow the boat rack to pivot over
- Remove the safety pin and then pull the bolt out on both posts



- The boat rack is now free to be pushed over
- Ideally have another person on the boat rack mount side to catch the boat rack when it is pushed over
- Push the boat rack over gently



- Reinstall the safety pins to prevent the boat rack moving or,



- If you have a boat or kayak attached to the boat rack you can allow the boat rack to fully tilt over to allow for the boat or kayak to land on a trailer set up
- There are two positions for installing the safety pins depending on the position you want to hold the boat rack in

### Step 3: Open your Camper Trailer

- Your camper trailer will usually come with 3 latches attached on each side (6 in total) which hold the roof of the trailer to the base of the trailer
- Remove the safety clips and put them in a safe place where they won't get lost
- Unclip each latch starting with the latches closest to the rear of the trailer on both sides and then moving towards the front on both sides
- You will notice that the canvas tent inside wants to naturally open to a certain extent thanks to the gas strutted bow poles that force tension on the roof of the canvas tent
- Commence pushing the roof of the trailer over making sure to avoid putting your hands/fingers between the gas strut and the trailer as this can be very dangerous due to the pressures and movement of the various parts of the trailer during opening and closing



- You may find that pushing is difficult around the fully vertical stage of the fold over. If this is the case, lower the roof and start again with more pressure and allow inertia to assist the fold over
- Once the roof is past the midway point of the fold, ensure you move to the front of the trailer and to the side to catch the roof as it comes down. Whilst the roof folding mechanism is gas strut assisted, it will not speed up or slow down the motion so it is important that you are doing the initial and final controls of motion to prevent damage to the trailer



- Once you have the roof down and touching the plate above the fridge compartment, use the front winch on the a-frame of the trailer to keep the roof firmly down and free from movement



- Now that the roof is secure, you can start to attach the external canvas skirts of the tent to the camper body via the eyelets and special hooks





- Open the door via the unique keys included in key chain set that look like a triangle grooved into one end and fold down the steps



- You can now enter the trailer to commence tensioning the poles to create the room and tensioned roof
- Lift the gas strutted bow poles at each end of the trailer and push them upwards to create the end walls



- Once the walls have reached a good level of tension, clamp the pole in place with the quick clamp mechanism on the pole as per below:



- You can now tension the main bow pole in the centre to create the apex of the roof using the same technique used for the end poles.
- You should now have a fairly good looking set up. You could leave the internal pole set up as is for a short stay and if there is no wind however to further create tension to the roof and prevent sag and movement during windy conditions, you can also add spreader poles to the roof which clip between the bows and allow stretching the canvas between the bows to add tension.



- To complete the inside of the trailer move the cushions into position and set up the folding table to create the club lounge
- Also set up the bed in readiness for sleeping



- To open the windows, unzip the windows and use the appropriate poles to tension the window awning. If the window awnings are not properly tensioned, heavy rain can cause sag and not run off correctly.



#### Step 4: Power Up the Camper

- Open the control panel and turn on the Master Power switch (if not already on)
- Turn on the fridge button if commencing the use of the fridge at the destination.
- Turn on the lights button to allow internal and external lights to be used as needed.

- The internal lights of the camper trailer or permanently installed and permanently wire so there is no need to connect or disconnect the lights. Each light has a switch to allow independent use of lights in various locations of around the trailer.
- Only turn on the CIGA and Pump lights when you are planning to use them to save power.

### Step 5: Connect and Setup the Awning

- Firstly, unpack the canvas awning from storage and find the awning pole map kept in the camper trailer.
- Set aside all poles used in the process of setting up the awning to make it easy to access them.
- Attach the zip fly of the awning to the zip on the side wall near the roof at the front of the camper.
- Use the fly string/rope to pull the fly along the track to zip the entire awning to the camper trailer to the other end.
- Install the hook poles into the eyelets located along the 3 to 4 positions along the side wall of the camper. They may be hidden by a circular piece of canvas.



- These 3 or 4 poles form the roof of the awning.
- Then connect these roof poles to the floor poles (which are easy to identify as they have a rubber black foot)
- Attach spreader poles between the roof poles to create tension and secure the roof.
- Repeat this process until you are left with a roof structure as per below:





- Use the supplied ropes to add extra strength to the roof structure as wind is never a friend to an awning.

#### Step 6: Prepare the Kitchen

We provide several different types of slide out kitchens however all have similar function and setup processes, firstly,

- Open the door of the kitchen slide.
- Disengage the latches holding the slide in position.
- Pull the kitchen out slowly until the latches engage. You will hear a click.





- Pull the drainage racks up and secure them in place.
- Open the wind guards and open the glass lid of the stove (on Dometic stoves only)







- Lower the supporting stand or leg to prevent kitchen drooping.
- Remove the waste pipe and extend it into a bucket or away from the trailer.
- Identify the water and gas lines inside the kitchen slide (usually in the first draw of the slide nearest the connections or under the sink)
- Pull them out and connect them to the quick connects and gas connection. (see image above)
- Pull the electrical wires out from under the sink and connect them into the power outlets on the side of the trailer. One is the for the flexible kitchen LED light and the other is for the stove ignition.
- Turn on the Pump switch on the control panel.



- Open the gas cylinder tap to release the flow of gas.
- Test the water is flowing through the faucet of the kitchen and test the stove is igniting and staying alight.
- Pull out the additional benches for chopping etc as required.
- The kitchen is now ready for use.

### Step 7: Attaching the Annex

- Identify the walls and floors and separate the two
- To attach the walls, the process is the same as the annex, you zip the wall to the annex and then ensure the Velcro sections attach to create a strong, water and wind tight seal
- Once all walls are on, ensure you also attached the trailer skirt which attaches either by Velcro or studs. The skirt ensures that wind does not flow under the trailer into the annex and completes the enclosure walls
- Finally attach the floor by way or Velcro and the job is complete

## PACKING DOWN YOUR CAMPER TRAILER

The process of pack down is the opposite of the setup however there are some critical points to note so that this process is made as easy as possible.

- Separate and pack down the annex and awning first. Some customers have mentioned to us that they leave the annex attached and pack it in with the main tent. Whilst this is not recommended by us as it can put added pressure on locking clips and bows, this is a decision you can make for yourself however please note, any damage caused by this is not covered by our warranty.
- Make sure you move the cushions and table into their travel position before packing down, this means the table is folded and stored in the groove just below the seating cushions and the back rest cushions are laying flat across the folded table.
- Fold the bow pole down nearest the end of the trailer. The bow is gas strutted but will stay down once folded down
- Prior to folding over the bed section of the trailer, you can assist with the packing process by looping the mattress holding straps around the gas strutted bow to ensure it stays down during the folding process
- Whilst pushing the bed section over, continue to check around the entire trailer for pinched canvas. This is a common issue that you need to avoid to ensure you don't damage the canvas. This is just a matter of constantly pushing canvas into the centre of the trailer as you lower.
- To lock the roof of the trailer into place. Start at the rear and using body weight, pull the top of the roof down to the body of the trailer and using the locking clamps to hold it in place.
- Once the rear left and right side locking claps are engaged move towards the front of the trailer locking the clamps into place along the way. You will notice these clamps are much easier to lock that the rear end ones due to the roof now being firmly in the closed position
- If you find you can close the roof, try the following:
  - o Check no canvas is pinching on all four sides
  - o Check the bow poles are folded down sufficiently
  - o Check there are no obstructions inside the camper such as poorly packed items or table or cushions preventing the proper closure
- Once secure, the boat rack can now be folded over and secured into position
- Always check that all gas, water, electrical and other non-permanent connections are turned off and are disconnected

# SETTING UP YOUR HYBRID

Depending on which Hybrid model you purchased, the setup process will slightly vary.

For instance, the Viper 16 setup doesn't require the rear fold out of the bed section where as all other models of Hybrids do require this process.

The general process of setting up a hybrid is as follows;

## **Step 1: Lower the stabilizer legs**

Included with your Maverick Camper Hybrid is a winder for manually winding down your stabilizer legs. All Hybrids have a stabilizer leg on each of the 4 corners.

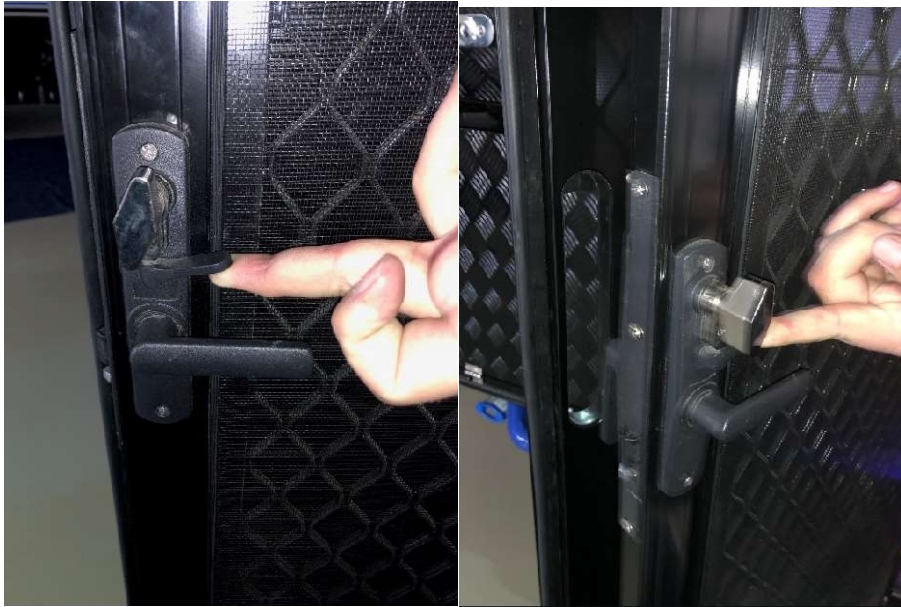
To lower and set your stabiliser legs undertaking the following process

- Pull the blue handle of the stabiliser leg to unlock the leg
- Be careful as the leg will swing once unlocked
- release the blue handle once the stabiliser leg is in the downward position
- Please note on uneven surfaces your stabiliser leg may not be vertical but slight off vertical to accommodate the uneven terrain
- Commence winding the stabiliser down using the winder provided
- Ensure that the stabiliser is firmly touching the ground to prevent movement when inside the trailer but not so firm that it puts the stabiliser at risk of breaking or failing
- Repeat this process on the remaining stabiliser legs
- If you still feel bounce when moving around the camper trailer, try to identify which stabiliser leg is not firmly touching the ground and extend until the bounce goes away

## **Step 2: Open the Main Door**

During travel the main door should be locked and closed. To open it, use the provided key to unlock it and then use the lever to open it. Some models require the level to be lifted up or down before turning the key to unlock it.

To separate the safety fly screen from the main door, locate the latch on the inside of the door as per below image shows:



Lift the latch and the screen door will separate.

Be sure to pull out the fold away step under the door prior to entry for safer and easier access to the inside of the hybrid and pack it away when travelling.

### **Step 2: Push up the Roof**

- On the outside of each corner of the roof is a roof latch that stops the roof from lifting during transit. Unlatch the roof latches by standing on the rock slider bars



- Enter the hybrid via the main door and watch your head as the roof will be in the lowered position and it is easy to bump your head
- Unpin the internal roof bars at each end of the hybrid.





- Push the roof bar at the rear of the hybrid first and then engage the pins through the roof bar holes to secure the roof into position and prevent it accidentally dropping



- Repeat the same at the front of the hybrid
- The roof should be fully up and safe for use



### Step 3: Unfold the Rear Bed Wall

- First, you will need to swing the spare wheel bar down. This is a matter of removing the two locking screws and 2 to 3 latches to allow it to swing down. To assist with the lowering, the bar is gas strut supported but will need to be controlled by yourself on the descent to prevent damage





- At the bottom left and right of the rear wall is a push latch, push the latches to unlock the rear wall which becomes the roof above the bed



- Lift up the rear wall and with your spare hand or the assistance of another, pull and twist the chrome handle in the centre holding the two side walls in place
- Swing both side walls out and lower the roof to rest on top of the side walls



- You will see two black push latches at the top left and right side of the underside of the bed frame
- Push these latches and gently lower the wall down Note: this does have some weight and is not gas strut supported



- The underside of the bed frame should rest on the brackets at the bottom of the side walls







- Using the handles either side of the rear window, pull the rear wall up and towards yourself to enclose the bed section



- There are two types of locks that hold this wall in place. One is a bolt style locking the rear walls to the side walls and the other secures the roof to the rear wall





- Once completed, go inside the hybrid through the main door and unfold and setup the bed as required

#### **Step 4: Power up the Hybrid**

Maverick Camper Hybrids come with several options to power the Hybrid:

- Fixed solar panels on the roof which charge the batteries
- Anderson plug to charge via car or solar blanket
- 15Amp inlet for powering from a caravan park
- The battery charger can also be connected directly to a generator (not provided) to give you 240v remotely

Which ever choice you make for power, always make sure the Master power button is on from the control panel located inside the cabinetry of the hybrid to allow the use of the features within the hybrid that required power

- To power the fridge, ensure you press the fridge button as soon as you want the fridge active
- To power the water pump, you must turn on the pump button
- To power the power sockets including ciga, usb etc, you must turn on the socket button
- To power the tv, you must turn on the tv button
- 



### Step 5: Water Tanks & Water Inlet Setup

Maverick Camper Hybrids come with 2 options for water supply. You can fill up the fresh water tanks prior to departure or at a reliable, clean water source at your destination via the water inlet.



- Unlock the water cap located on the side of the hybrid and open the cap
- Fill with a hose to desired level
- Repeat on the second tank if required
- Close and lock the water tank

Our hybrids come with an isolation valve to change which tank the water pump draws from. The isolation valve is located under the bed base or dinette seating depending on which model you have purchased. Turn the valve to the desired tank labeled on the handle mechanism to choose the tank





### Step 6: Start up the hot water system as required

The hot water system requires the following process to start up:

- Turn on the tap on the gas cylinder at the front of the hybrid (not included)
- Turn on the water pump on the control panel
- Remove the cover from the gas vent on the outside of the van
- Press the Truma Hot Water System switch to either 60 or 70C
- When the red light has extinguished on this panel, the system is ready for use



- For more information on this system including troubleshooting, refer to the owners manual at the end of this manual

### Step 7: Opening the Electric Awning

The electric awning installed on all Maverick Camper Hybrids is the quickest and easiest solution for shade. To operate the unit follow these instructions:

- Turn the main power switch to on located on the control panel
- Locate the awning button usually above or near the main door to the hybrid



- Press the button to open
- You will hear the motor starting to push the awning out

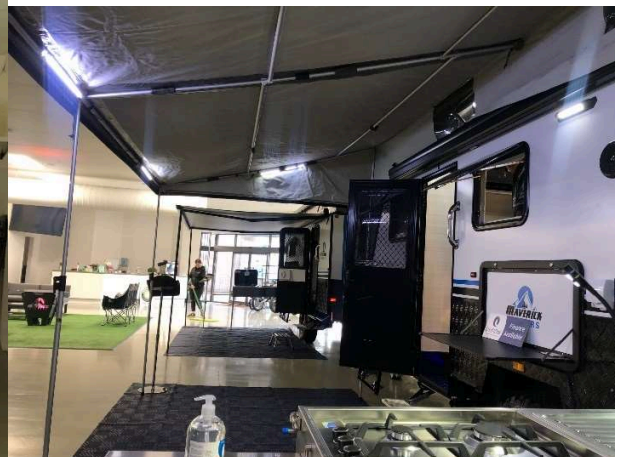
- Move to the outside of the hybrid and assist the pushing out of the awning by supporting the end and unfolding the legs stored in the end of the awning.
- To fold out the legs pull them outwards, you will hear a click
- Then pivot the legs around to the vertical position and using the screw, adjust the length to the desirable height
- Be sure to attach guide ropes in case of wind present

IMPORTANT NOTE: Do not use the awning in strong winds as it can damage the awning – this is not covered by warranty

### Step 8: Attaching the Canvas Awning and Annex

To undertake this process its helpful to have a second person available.

- First remove the canvas from the storage compartment and identify the awning from the annex walls and floor
- Slide the sail rope section of the awning roof through the guides on the roof of the hybrid from rear to front
- Then install the awning roof poles which are identifiable by the rubber foot that sits against the roof of the hybrid
- Then attach the floor poles to the roof poles and attach spreader poles in between to create a strong structure.
- Repeat this process until all poles are in place



- To attach the annex walls, use the Velcro side and zip to attach to the awning and attach its wall to one another as you progress
- Finally install the floor by laying it down inside the annex and attaching the Velcro sections to form a bug and weather proof seal

### **Step 9 – Slide out and Setup the Outdoor Kitchen**

This process is identical to the process documented in the camper trailer section. Please review this page on how to setup and pack down the slide out kitchen.



# CARE AND MAINTENANCE

## CANVAS CARE

### Seasoning the Canvas:

The idea around seasoning your canvas is to seal up any little holes in the canvas that water could potentially penetrate. These openings could be around the seams or in the canvas weave itself. It is best done by applying water to the entire tent, which soaks the individual strands of cotton causing them to swell, then contract as it dries out, ultimately minimising the size of the holes until it is watertight.

The process of seasoning your canvas before use is an important one but an easy process. This process is best done on a warm sunny day with no rain expected.

1. Set up your camper and annex with all doors and windows zipped up and closed.
2. Using your garden hose apply a light spray of water over all the external canvas areas. Wet out the canvas without allowing water to pool in any section then allow to dry thoroughly.
3. Repeat the process of wetting and allowing to dry another 2 times.
4. On the third time check for any leaks in the canvas particularly along the seams. If a seam is weeping water through, allow the canvas to thoroughly dry then apply a wax stick along the area of the seam. This is done by lightly rubbing the wax stick over the area. Once applied wet the canvas and check again.  
NOTE: It is not unusual for seams that are not able to be seam sealed with tape to weep after seasoning. This is not a reflection of canvas or workmanship but simply a characteristic of canvas tents.

### Wet canvas:

Canvas that is wet will develop Mold/Mildew in a noticeably short period of time always ensure that your tent is packed away dry after use.

Always open the tent ASAP to allow it to dry even if it is still raining as it is better to continue to get wet. It only takes a couple of days for mold to start forming.

# MAINTAINING YOUR CAMPER

**Care and attention to maintenance will keep your camper safe, reliable and ensure it has a good resale value**

There is not much in the way of ongoing equipment maintenance when you're into tent camping, but when you add a tonne of trailer to the mix, along with all its mechanical components and the comforts that it's designed to carry then you have a regular schedule of maintenance that you should be undertaking to keep your investment – and your mobile home – in tip top condition.

Camper trailers seem inherently simple: A wheeled box designed to cart the stuff that once filled your boot, back seat, and roof rack, along with the added bonus of a pre-made bed on top. Well, that is how the concept started, back in the 1960s and 70s. And it stayed that way for twenty or thirty years but come the early 2000s it started to dawn on both consumers and manufacturers that you could squeeze in all manner of extras.

In those long-gone early days of the camper trailer evolutionary tree maintenance was pretty simple. It involved doing the bearings once a year and occasionally checking the tyre pressures.

## TORQUE SETTINGS

### Wheel Nuts:

Wheel nuts should be tightened to correct torque using a torque wrench. Never trust a "rattle gun" as these may over or under tighten. A quality torque wrench will ensure nuts are tightened correctly. It is important to remember to check your wheel nuts at 100km, 500km and 1000km and periodically thereafter. The correct torque setting of 125Nm for 12mm studs, 140nm for 14mm studs and alloy wheels and 200nm for 14mm studs with steel rims. Refer to the plate on your drawbar

## ELECTRIC BRAKES

Your trailer is fitted with electric brakes that require a brake controller that can be operated from the driver's seat.

1. Manual adjusted to provide the correct braking capability for varying road, off-road and load conditions.
2. They can be modulated to provide braking force, thus easing the brake load on the towing vehicle.
3. There is little lag time between the moment the tow vehicle's brakes are actuated and the moment the trailer brakes are actuated.
4. They can provide some braking independent of the tow vehicle in the event of an emergency.

## BATTERY CARE

Your Maverick Camper is fitted with 100Ah AGM Batteries. Storage type batteries require periodical maintenance to perform at their peak and extend their service life.

You also have the option of charging your batteries via the onboard battery charger to do this you will require access to a 240-volt power supply, this can be a powered camp site or via a generator. The onboard battery charger will assess your battery system and return the required charge in a short space of time, we utilize a smart charger to not overheat the batteries and cause damage. During charging it is not unusual to see voltage reading as high as 14.6 volt however shortly after the charger is disconnected the battery should return to a resting charge between 12.7v to 12.9 volts.

The following is an outline on how to gain the best performance and lifecycle from the battery fitted in your camper:

- Always use a quality charger that caters to the voltage requirements of an AGM battery. Absorption charging is from 14.6v to 14.8v, float charging is from 13.2v to 13.8v.
- Never leave your battery stored at low volts. Before storing your camper ensure that battery/s is fully charged, and all power is disconnected/switched off.
- When possible leave the battery connected to a smart charger that will cycle and maintain the battery during storage. If this is not possible check and charge at regular intervals to prevent excessive discharge.
- Allowing your battery voltage to drop below 12.5v can permanently damage its performance and reduce its service life.

When driving attach your 50-amp Anderson plug to the vehicle so the car can maintain the battery and as soon as you start camping once again attach the solar or 20-amp charger to maintain voltage.

Note- never attach a warm 12 volt camping fridge to your camper trailer before leaving home as it will draw a lot of power from the batteries to get cold. Always chill the fridge to optimum temperatures by using its 240 lead at home first, have the food cold and when you are about to leave then switch over to 12 volts.

PLEASE NOTE – IF YOU HAVE AN ISSUE WITH CHARGING YOUR BATTERY YOU CAN NOT JUST KEEP USING THE BATTERY.

This will damage the battery to a point it will not recovery.

Batteries that have reading of less than 10 volts need charging immediately. Solar and chargers will need to be examined and the battery checked before this stage to be inspected.



## CHARGERS & INVERTERS

For detailed information on the appliances installed in your camper please refer to the manuals included in your camper handover.

**PLEASE MAKE SURE THE INVERTER IS SWITCHED OFF, OTHERWISE IT MAY DRAIN THE BATTERY POWER.**

**No warranties for batteries presented less than 10 volts.**

AGM BATTERY STATE OF CHARGE	
Level	Voltage
100%	13.00V
90%	12.75V
80%	12.50V
70%	12.30V
60%	12.15V
50%	12.05V
40%	11.95V
30%	11.81V
20%	11.66V
10%	11.51V
0%	10.50V

## GAS & WATER SYSTEMS

### Hot Water System:

If your camper came with a Country Comfort portable hot water system, please refer to the owner manual or their website for more information.

<https://countrycomfortlpggas.com.au/>

### Water Pumps:

The pump when switched on is activated by the release of pressure at the tap and will pump water continuously until the tap is turned off and pressure restored. Should the pumps activate while the tap is turned off this could indicate a leak and require investigation and rectification.

Please note: Switch water pump off when not in use.

### Connecting the Gas:

Your camper is fitted with plumbed gas with the regulator and gas bottle placement at the front of the trailer. Always ensure gas bottles are serviceable and within the 10-year service life. This information is stamped on the bottle base. Once you connect your gas bottle you can connect the kitchen gas hose to the bayonet connection provided.

## WHEEL BEARINGS

Call it nostalgia if you like, but wheel bearings are still front and centre for the maintenance of your camper. These are designed to keep the wheels rolling smoothly on the axles, over corrugations, through water, deep dust, in baking heat and freezing cold, crawling along a narrow track or at 110kmh along the motorway. They cop a fair bit and so need to be looked after.

For those who do a series of small trips up or down the coast, out to your favourite camp ground a few hundred kilometres away from home, then they need to be looked at about once a year. Pick a quiet time of year, when you're unlikely to be camping, and do it then. Try to choose some regularly recurring event – a birthday, holiday, anniversary – that will trigger your memory and work to get it done about then.

If you're off on one of those dream trips that you will remember for the rest of your life and will involve 10,000km or more then give them a look over before you go, and then after you get home do it again. It may seem a nuisance but it's got to be better than kneeling in the dirt on the side of a track with dust blowing around trying to keep things clean and dealing with solvents, grease and tools.

The process isn't onerous, as long as you can stand having grease on your hands and requires only about an hour per side and basic tools – screwdriver, hammer, pliers, large shifter spanner, old paint brush and bowl and a solvent and replacement split pins, unless you find a damaged bearing in the process. If the latter occurs, then simply grab one from the spare pair of bearings which you, as a well-equipped camper owner, carry at all times.

If you're uncertain of the process, there are a number of how-to videos on YouTube or similar.

As an ongoing theme, every time you stop on a trip, whether to look at the landscape, get some fuel or buy a coffee, walk past the camper, and place the palm of your hand lightly on the hub at the centre of the wheel. Expect it to feel warm to the touch, but not so hot that you can't touch it. If the latter, then you have a serious problem that needs fixing before the whole bearing goes into meltdown and welds itself to the axle.

**PLEASE NOTE – IF YOU KNOW THE BEARINGS ARE, OR ARE BECOMING, VERY HOT, STOP- YOU WILL CAUSE EXTRA DAMAGE WITH ANY FURTHER TRAVEL. YOU WILL ALSO JEOPARDISE YOUR AND OTHERS SAFETY. SEEK IMMEDIATE ASSISTANCE AND THEN GET IT REPAIRED.**

## SHOCK ABSORBERS

A scarce item on early camper trailers, but now to be found on them all, shock absorbers are one item that cops a tough item. They are pummelled by stones, heated beyond endurance on long stretches of corrugations (the constant hammering generates intense internal heat) and have their mounting bushes pushed to collapse.

There is no specific schedule of maintenance here, but before any major trip get underneath and take a good look. Signs of oozing fluid down the sides, dented outer bodies and any ability to be able to shake or rattle the upper or lower mounting points (which means the bushes are worn out) means a fix is due. And if they were okay to start a major trip, check them after you get home to see how they've done.

Even if you're not going away on any major journeys make it part of that annual maintenance, when doing the bearings, to give them a thorough check over. Don't imagine that worn shock absorbers are something you can live with.

## S U S P E N S I O N S

Most suspensions these days do not need any form of regular maintenance, aside from checking the shocks. However, leaf spring suspensions often come equipped with greaseable shackles. If you have such fittings, then you should every three months or so give the shackles a fresh injection of a quality multi-purpose grease. Pump it through until you see clean grease coming out at the back, around the shackle pins. If you haven't had the camper out on the road in that time then you can bypass this, but if you are off on a major trip or just returned from one then it's almost mandatory, most especially if water crossings or heavy exposure to a lot of dust are involved. If off on a lengthy trip take your grease gun with you and keep up the grease injections after any water crossings or lengthy dusty tracks.

## B R A K E S

Brakes should be checked and adjusted as necessary with new campers after the first 500km when the brake shoes and drums have 'bedded in', and at every 5000km interval, or as use and performance requires. While you have the drums off doing the bearings is a good time to check them.

## T Y R E S

Every time you get fuel take a look at the tyres. Before any trip starts check the tyre pressures. Ideally you should have a pressure, when the tyres have done 10km or more, that is about 4psi higher than when it was cold. Anymore and it indicates that your tyre pressure when cold was too low, and the tyre walls are undergoing too much flexing and becoming too hot. Any less and your tyre pressures when cold were too high, and the tyre sidewalls are too rigid. The former will produce excess wear to the outer edges of the tyres; the latter will produce excess wear to the centre as the tyres will have more of a dome shape in cross-section.

After a major trip run your hands over the tyre tread and any feathering of the edges of the tread pattern could indicate an alignment problem because the tyres aren't rolling squarely on the road but are at an angle. This can be fixed at home, if you know what you're doing, but is better left to experts.

All tyres suffer from a hardening process, as exposure to the sun and other factors continue the course of vulcanisation. This results in tyres becoming brittle and liable to catastrophic failure completely out of the blue, usually, according to Murphy's Law, when it's least convenient. Tyres should not be older than six years of age or you're in danger territory. Every tyre has the date of manufacture moulded into the sidewall, a four-digit number usually in a smallish size, which might read something like 1012, which would indicate the tenth month of 2012. Check yours. If they are older than six years, you're on thin ice.

If you have just picked up a soft floor camper trailer the tyre pressure for road travelling is 38 psi. On hard floors is 40 psi.



## HITCH

It may seem strange that a hitch would require maintenance, but as the major link between your camper and your tow vehicle you want to make sure it's doing exactly as you desire. Give the mating surfaces a light lubrication before each use – a spray with a silicon lubricant is good – and occasionally give the grease points a fresh injection of a good multi-purpose grease.

Maybe the once-a-year wheel bearing check is a good time to check all the mounting nuts and for any slack in the bearing surfaces and for the correct adjustment of the major castle nut and pin. The only tools required are a grease gun, grease, lubricant and a set of spanners or sockets.

## GAS STRUTS

It might also seem strange that you need to maintain your gas struts: What could you possibly do to keep them working as designed? Gas struts depend on the internal gas pressure for their function, and this is sealed internally by an O-ring or seal around the main shaft. Any gas strut that's exposed to the external environment will be subject to fine dust, at best, and stone damage, at worst.

Once a year use an old toothbrush to scrub around this entry point of the shaft into the body of the gas strut to prevent any material from entering and damaging the seal and thus destroying the efficiency of the strut, and at the same time check the shaft for any sign of damage from a stone or other foreign body. Such damage could also injure the seal and compromise the strut's performance.

## COMPRESSION LATCHES

Compression latches are widely used on camper trailers as they are an effective way of sealing a door against a rubber seal. Compression latches will have to be adjusted to sustain pressure about a year after new and then checked annually after that. Do not overtighten as you can crush the rubber pinch weld and lose seal. Do not compress the pinch weld's bulb by more than 20-25 percent. Check around corners, especially for signs of dust entry and after washing for signs of water ingress. A small shifter spanner and/or a screwdriver are all the tools you'll require.

## WATER TANKS

Mars Campers recommend that you should clean your water tank when you pick up and take home. Buy a reputable tank cleaner from your camping store and follow their instructions on care and maintenance. Remember there are different techniques for stainless tanks to plastic tanks.

## GAS BOTTLES

Next time you fill a gas bottle on your camper, before you use it, please weigh it, so you can get an idea of the full weight of the bottle. Weigh an empty bottle and the difference will be the weight of the gas (the noted weights of the different size bottles - 9kg, 4kg, etc - are notional only) and can enable you to work out if one is about to become empty. There are various magnetic strip attachments which are supposed to tell you this but they are very unreliable in our experience.

Before a major trip make sure at least one bottle is full. If you have a camper with just one gas bottle, think seriously about having an option for a second fitted as finding you've run out of gas with only one bottle can be a major problem

in some areas as refills can sometimes be difficult. Carry a spare regulator and one of those small gas cartridge cookers as an emergency alternative if possible.

Check the gas hoses for any kinking or signs of damage and replace as necessary. Give joints a wipe over with soapy water while under pressure to test for any leaks (indicated by the formation of soapy bubbles).

If your canvas has been wet immediately before the last leg of a trip home, then get it out to dry as quickly as possible afterwards. Scrub off any bird droppings or sap or other material from trees with warm water and a little light detergent then hose with fresh cold water and dry. If the trip has been dusty a hose and gentle scrub with a soft broom will get rid of much of the red dust, though leaving it in place is a badge of honour, telling all that you have been outback.

Once a year give your zips a light spray with silicon to keep them sliding easily and check any press studs, bungee loops or other fasteners and give the stitching a once-over to make sure nothing is coming apart.

# YOUTUBE VIDEOS BY MODEL

Whilst we have tried cover as much as possible of all the features and functions of every model in our range, the old saying that a picture paints a thousand words certainly rings true when you are stuck and not sure how something operates. Below are a link of Youtube Videos provided to you as a customer to assist with operating your Maverick Camper Trailer or Hybrid:

## HOW TO GUIDES

### HOW TO PREVENT DUST IN YOUR CAMPER TRAILER

(6) Maverick Tutorials – How to help prevent Dust in your Camper Trailer or Hybrid Caravan – YouTube

<https://www.youtube.com/watch?v=4tzA9Tle3mM>

### HOW TO USE THE ARK XO 750 OFFROAD JOCKEY

(6) Maverick Tutorials - How to use your Ark XO 750 Off Road Jockey Wheel - YouTube

<https://www.youtube.com/watch?v=y3hB31MUqNE>

### HOW TO SETUP GAS ON YOUR TRAILER OR VAN

(6) Maverick Tutorials - How to setup your Gas for Your Camper Trailer or Hybrid Caravan - YouTube

<https://www.youtube.com/watch?v=m4eYUiCxgwl>

### HOW TO USE YOUR ELECTRICAL SYSTEM ON YOUR HYBRID

(6) Maverick Tutorials - How to use your electrical System On the Matrix - YouTube

<https://www.youtube.com/watch?v=1eq-1OWSFf4>



## HOW TO USE YOUR STABILISER LEGS

(6) Maverick Tutorials - How to use your stabiliser Legs - YouTube

[https://www.youtube.com/watch?v=k\\_yoRoSeRk](https://www.youtube.com/watch?v=k_yoRoSeRk)

## HOW TO USE YOUR TRUMA HOT WATER SYSTEM

(6) Maverick Tutorials - How to use the Truma Hot water System - YouTube

<https://www.youtube.com/watch?v=M0CXreOcdfA&t=1s>

## CAMPER TRAILER YOUTUBE VIDEOS

### HORNET V2

(6) Maverick Hornet V2 Walkthrough Rooftop Camper – YouTube

<https://www.youtube.com/watch?v=AlBa14Tdp6A>

### RANGER LIMITED

(6) Maverick Ranger Limited – Camper Trailer Of The Year – 2021 Finalist – YouTube

<https://www.youtube.com/watch?v=vpDI5QFObEk>

(6) Maverick Campers Forward Fold Ranger Limited Walk Through Video – YouTube

<https://www.youtube.com/watch?v=Izn4ZrYezw4&t=67s>

### RANGER AIR

(6) Maverick Campers Ranger Air Light Weight Forward Fold Off-road Trailer Only 920KG Tare!! - YouTube

<https://www.youtube.com/watch?v=snwMM-xymx0&t=117s>

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## RANGER SLIDE

(6) Maverick Campers Ranger Slide Forward Fold Off Road Trailer - YouTube

<https://www.youtube.com/watch?v=zjLsRBOkzig>

## MATRIX

(6) Maverick Campers Matrix Double Fold Camper Walkthrough - YouTube

<https://www.youtube.com/watch?v=r7leNcEVjio>

## MATRIX LTD

## HYBRID VAN YOUTUBE VIDEOS

## VIPER 11

(6) Maverick Campers Viper 11 Ensuite OffRoad Hybrid Caravan – YouTube

<https://www.youtube.com/watch?v=pU2keQT7Dio&t=65s>

## VIPER 13

(6) Maverick Campers Viper 13 Hybrid Off Road Caravan - YouTube

[https://www.youtube.com/watch?v=isCPV\\_5sDaY](https://www.youtube.com/watch?v=isCPV_5sDaY)

## VIPER 16X

(6) Maverick Campers Viper 16X Hybrid Off Road Caravan - YouTube

<https://www.youtube.com/watch?v=ubJx5ztD6Jk>

## VIPER 16

(6) Maverick Campers Viper 16 Hybrid Off Road Caravan - YouTube

<https://www.youtube.com/watch?v=5ZmDHePCvjE&t=18s>



# QUICK PRE-TRIP CHECKLIST

Working from a checklist will help you avoid in forgetting the important regarding to safety. Please use the steps below as a guide.

## PRE-HOOK UP

- Water Tanks full & locking cap secure
- All latches and door locks secure
- Bearings checked and serviced at last service
- All cables and plugs are in serviceable condition
- Wheel nuts tight and torqued to correct tension
- All external fittings secure
- Stabiliser legs working & secure in travel position
- Stabiliser leg handle in trailer
- Gas bottles and jerry cans secured

## PRE-HOOK UP

- Hitch secured to receiver all pins and locks engaged
- Trailer lights plugged in (And checked)
- Anderson plug connected
- All cables clear of possible damage
- Safety chains and shackles connected to car. Crossed and at correct length
- Trailer is sitting at correct level
- Jockey wheel is raised and locked
- Do a walk around and check visually

# MANUFACTURES OPERATING MANUALS

## DOMETIC STOVE MANUAL



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9600027607\_82656.p

## TRUMA 14L HOT WATER SYSTEM USER MANUAL



Acrobat Document

## DUOETTO HOT WATER SYSTEM



DuoettoManual-1.p  
df

## DOMETIC INTERNAL TOILET MANUAL



dometic-cts-4110\_9  
107100618\_71735.pc

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For more information and assistance feel free to visit our website: [www.maverickcampers.com.au](http://www.maverickcampers.com.au) or call us on 1300  
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