

## **WINTERIZING YOUR BATTERY**

Winterizing your batteries/ long periods of storage: We have spec'd the Opus so you have the ability to leave your Opus plugged in at all times to maintain your battery using the charge wizard charge controller installed. We have done this because the CO/LP Alarm is hard wired to your batteries and therefore your batteries will supply a constant current to this appliance.

If you are unable to store your OP15 plugged in then it is possible for your solar panels to maintain your battery providing it is not stored under a cover, solar panels are clean and free from debris and dirt and there is adequate sunlight available on the panels.

We highly recommend testing and measuring the solar panel charge capabilities at your chosen storage location at multiple times of day and weather conditions before storing this way for long periods. A camper that spends a large part of the day in the shade or in very low sunlight conditions may not provide enough solar charge to maintain your batteries. If you determine that the solar charging is not an option, in order to prevent your batteries from being completely depleted over long periods of storage you will need to disconnect and remove your batteries entirely from your system. Please follow the below instructions to do so:

1. Completely charge the battery before storage.
2. Store the battery in a cool, dry location. Heat is a battery killer.
3. Completely remove all loads from the battery posts.
4. Monitor the specific gravity or voltage.
5. Once below 70% charge, give it a boost charge.
6. Completely recharge the battery before putting back in service.
7. Equalize the battery before putting back in service.

We recommend periodically checking your camper or batteries during storage to ensure your chosen storage option continues to work appropriately. Batteries that are not stored appropriately and are allowed to fully discharge may need additional charging outside of your OPUS as the battery charger will not work below a certain voltage. Batteries that are left to discharge below 12volts may get damaged and not hold charge properly going forward. This damage is not covered under your OPUS warranty.

## **POTABLE WATER SYSTEM**

Please ensure you sanitize, flush and drain the water tanks before first use and after any period of storage. To maintain the cleanliness of your potable water tanks please ensure all water is flushed from your potable water tanks after each trip or every two weeks when in use. Do NOT store water in the tanks for more than two weeks.

### **TO DRAIN YOUR POTABLE WATER SYSTEM:**

1. Turn off the water pump
2. On bottom of both potable water tanks is a drain plug. Open this plug to allow remaining water to gravity drain. Ensure water is collected and disposed of in a responsible way.
3. Ensure the drain plug is closed again before re-fill the tanks.
4. Open your faucets/ shower / flush your toilet (you may need to step on the toilet pedal several times to flush the toilet system fully) and allow any residual water to drain. Close the faucets again.

We strongly recommend sanitizing your potable water tanks at least once every six months. If you suspect an issue with the quality of the water in your tanks or notice discoloration, odor or foul taste you should sanitize immediately. Always check your potable water source and use a fill hose listed for use with potable water.

### **TO SANITIZE YOUR POTABLE WATER SYSTEM:**

1. Flush all water from system as detailed above
2. Use a potable water sanitizing product such as Camco TastePURE Spring Fresh Water System Cleaner
3. Do NOT use bleach to sanitize the tanks as they are stainless steel and it will cause corrosion
4. Follow the steps as directed on your potable water sanitizing product to fill, sanitize and purge as required.

# WINTERIZING YOUR POTABLE WATER

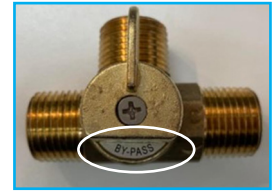
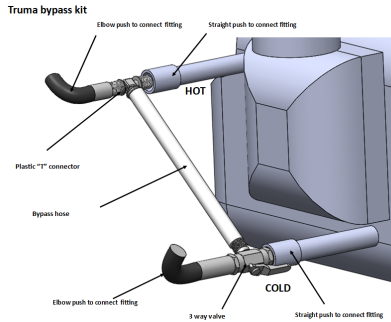
As a reminder, the OP15 is not a 4-season camper and as such should not be subjected to freezing temps without after-market heating pads/ insulation kits added (something we do not offer as an option). Please follow the instructions on the label carefully to determine the correct dilution or amount of fluid to use. **DANGER!** Do NOT use automotive antifreeze to winterize your potable water system as they are highly toxic and ingestion may leave to serious injury or death

## TRUMA COMBI & WATER HEATER BY-PASS VALVE

**IMPORTANT!** Before winterizing your OP15 you must have a water heater by-pass kit installed. Running RV winterizing fluid through your Truma Combi water heater can cause corrosion and Truma advise against this in their manual therefore you must use the by-pass kit to winterize your camper.

If your OP15 was manufactured prior to 2022 and does not have a water heater by-pass kit installed, please contact OPUS HQ for information on ordering a kit and discuss with your local RV service department.

Please be advised that your Truma Combi system has a holding tank in it. Please ensure you carefully read the Truma Combi system manual for steps to drain the water heater tank of this appliance and prepare it properly for winterization. Always wait for the water heater tank to cool before draining. More information can also be found online at [www.truma.net/about/news/winterizing-your-truma-aquago-or-truma-combi](http://www.truma.net/about/news/winterizing-your-truma-aquago-or-truma-combi).



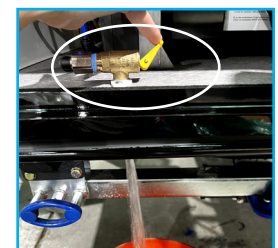
BY-PASS POSITION  
FIGURE A



BY-PASS VALVE



DRAIN VALVE- CLOSED POSITION  
FIGURE B



DRAIN VALVE- OPEN POSITION  
FIGURE B2

## TO WINTERIZE YOUR POTABLE WATER SYSTEM:

### SET YOUR WATER HEATER TO BY-PASS MODE AT YOUR TRUMA COMBI:

1. Open the drain valve by moving the lever 90 degrees ( **Figure B** ) and drain water from Truma Combi (2.64 Gal/ 10 L for the complete drain) Note: make sure to keep a bucket underneath the drain valve
2. Turn the drain valve back to the closed position.
3. Turn the 3-way valve ( **Figure C** ) handle in a vertical direction ( bypass position - **Figure A** )

### EMPTY YOUR TANKS AND SYSTEM

Drain the water from your potable water system following the steps listed in the section above. ( **Figure B2** ) DO NOT use the water pumps to run your tanks dry.

### AT YOUR WATER PUMP:

1. Remove the water filter
2. Remove the factory-installed cap from the 3-way valve
3. Turn the 3-way valve handle in a vertical direction ( bypass position )
4. Attach the clear vinyl hose to the 3-way valve & hand tighten
5. Insert the end of the hose into the winterization fluid bottle
6. Using the water pump, run this winterizing fluid through the entire water system including the faucets and shower as well. This will lubricate and protect your water pump and fittings during storage. Close the outlet and turn the pump off.



PUMP & 3-WAY VALVE  
FIGURE C

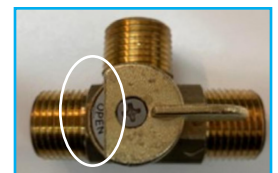


WATER FILTER

### DE-WINTERIZING – RETURN TO THE ROAD

To de-winterize your potable water system follow these procedures:

1. Fill your water tanks with water and flush the water system with freshwater Note: Open all water release points ( Shower, Sink, etc.). Make sure all the winterization fluid is flushed from the system.
2. Follow the steps above to sanitize your potable water system
3. Turn the 3-way valve handle of the water pump into a horizontal direction ( Open Position - **Figure D** )
4. Turn the 3-way valve handle of the Truma into a horizontal direction ( Open Position )



OPEN POSITION  
FIGURE D

## GREY WATER TANK

Open your grey tank drain valve and drain into an appropriate receptacle. Dispose of grey water responsibly at a dump station or drain point. Always check the rules for the state and campground that you are visiting to see what limitations may apply. Do not dump illegally. We recommend flushing your grey tank after dumping to help remove any unwanted build up.

For best maintenance of your grey water tank do not allow dirt, debris, hair or other solid material to drain into the grey tank. You may want to dump your gray tank after your black tank and use the grey water to help wash residue from the black tank sewer hose. See below section for winterizing your grey and black water tanks.

### TO CLEAN YOUR GREY WATER TANK:

1. Fill your grey tank at least half way full with clean water. Add an RV grey water tank cleaning solution/ tablet and follow the instructions for that product or use dish soap or laundry detergent 1/2- 1 cup.
2. Do NOT use bleach as it will corrode your tank, seals and gaskets. Any damage caused by using bleach is not covered under warranty.
3. Take your OP15 for a spin to allow the grey water to slosh around and clean the inside of your tank and the tank sensors fully.
4. You can then drain the grey water tank as above and we suggest rinsing it using a wand-style rinser afterwards.
5. Following cleaning, use an RV grey water tank treatment to help dissolve grease and soap build up and prevent odors. We suggest using a natural, biodegradable enzyme based product that is formaldehyde-free such as Energen Grey Water Tank Treatment.

## BLACK WATER TANK

We recommend emptying your black tank when it is at least 1/2 to 3/4 full and after every camping trip. Emptying your tank sooner may result in solid waste being left behind in your tank; a fuller tank allows more opportunity for breakdown of solid waste. If you are on-site camping and connecting to a campground sewer we recommend keeping the tanks drain valve closed until you need to drain to assisting in purging the tank of solid waste. Follow the OPUS tips for best results when using your OP15 toilet.

Please use caution when emptying to avoid contact with waste which can carry harmful bacteria. The black tank must ONLY be disposed of in designated dump stations. Do NOT dump illegally and follow all state and campground guidelines for safe and clean dumping. Use the black tank drain hose stowed at the rear of the trailer in the holding tube to drain your black tank.

1. Remove the black tank hose from the storage tube by twisting the cap off
2. Connect the drain hose to the drain valve by twisting on to receiver hooks
3. Ensure the other end of the drain hose is directed into the appropriate dump point.
4. To empty, pull the valve to open.
5. Leave the valve open until you can no longer hear liquid waste draining then close the valve completely. Close the valve at this point

**WARNING:** Do NOT leave waste in your tank during storage. Always remember to close the drain valve after draining the black tank and before removing the drain hose.

### TO CLEAN YOUR BLACK WATER TANK:

1. Drain and dump any waste by following the steps above
2. Take measures to remove any build up from the tank walls. We recommend wand-style rinsers such as the Camco Swivel Stik that can be used with the toilet drain open to access the black tank.
3. Use a treatment product to clean your black tank. We recommend using a biodegradable, eco-friendly product that is enzyme-based. Please take care to ensure your treatment is formaldehyde-free—many dumping regulations now require this as standard. Follow the instructions on your chosen cleaning treatment to ensure the appropriate dilution as required. If you need to add water for your chosen product, you can do this by filling and flushing the toilet bowl several times.
4. If your sensors are not reading accurately and flushing the tank does not resolve the problem, tank sensor cleaning products are available to help remove buildup.
5. Your drain hose should also be regularly cleaned and sanitized.