

Tech Tip 132: 10/15/04 - Fresh Water Tank

The fresh water tank is designed to contain a set amount of water for motor home use. You can choose to fill this tank with a clean supply of fresh water, or bypass the fresh water tank when connected to a city water connection. Use the water valve located in the water service center to open or close access to the tank. Consult your individual operations manual for the holding capacity of the fresh water tank and practice caution to not overflow.

Fill the fresh water tank using a clean source. If water evidences a strong odor, this could likely indicate the presence of minerals that over time can clog up the RV water system. If necessary, seek an alternative supply. To further protect the holding tank, fill using a hose specifically designated for potable water use only. When not in use, secure the hose ends to keep out dust and insects.

When the motor home is not connected to a sewage system, water from the fresh tank drains into the onboard gray and black holding tanks. Prior to refilling the fresh water tank it will be necessary to first evacuate these waste tanks.

Use the on-board monitor panel or Aladdin system to oversee current holding tank capacities. Check the gauges when the tanks are initially prepared to confirm accuracy. If gauges read inaccurate, consult a qualified technician for assistance in calibration. If water supplies are mysteriously disappearing, this may indicate signs of a leak.

Regularly sanitize the fresh water tank. It is recommended to treat the RV holding tanks using chlorine bleach solution. Use caution when disinfecting the tank with high concentrate bleach solutions. Non-diluted bleach can potentially dry out plumbing seals. The use of hydrogen peroxide is generally ineffective in killing bacteria and mold. Chemicals commonly used to treat swimming pools are designed to treat water exposed to excess sun and human bacteria and is incompatible for motor home fresh water supply. It is recommended to disinfect the RV fresh water tank using chlorine bleach solution. Multiply the number of gallon capacity of the fresh water tank by 0.13 to calculate how many ounces of bleach to add.

Prior to disinfecting, drain the fresh water tank, remove all filters and close the bypass valve to the hot water heater. Fill the tank with water and add the recommended amount of bleach. Turn on the motor home water pump. Open each faucet until you detect the odor of chlorine and then close the faucet. Wipe the solution from sink basins to protect against stains. Allow the disinfectant to work in the system for at least four hours, driving the motor home during this time to slosh the liquid around the interior of the tank. Drain the remaining solution from the fresh water tank. Fill the tank with clear water and flush each faucet thoroughly until the chlorine smell is gone.

Reinstall new water filters. Filters are used to trap particles, not to disinfect. Filters are rated in microns. The smaller the micron, the more sediment will be removed. Size particles less than 40 microns are not visible to the human eye. Faucet screens further filter water and should be regularly cleaned to avoid the build up of lime deposits and debris from faucet heads that can further contaminate fresh water supplies.

Other components of the RV water system include the water pump that works to move water through the lines. To conserve on battery power while dry camping, leave the water pump off when not in use. An on board hot water heater is provided to store heated water. When filling the fresh water tank for dry camping, open the bypass valve to the water heater to fill the tank and reduce draw on the fresh water supply when arriving at your destination. Save on battery power by waiting to turn on the water heater until shortly before hot water is needed.

Protect the fresh water tank against potential freezing during cold weather. Drain the tank during winter storage. When hooked to a shore supply during cold weather, keep in mind that a weak freeze point may be the shore faucet and it may be a good idea to disconnect from the shore faucet when temperatures are expected to drop overnight. In the event that freezing occurs at an outside connection, thaw the ice using a hair dryer.