

How to De-winterize and Sanitize Your T@B with the Alde system

"Winterize" can mean different things as there are several methods to prepare your T@B for freezing temperatures. As a result, there are different spring time tasks required to "de-winterize". **Here are 3 ways a T@B with the Alde can be de-winterized and sanitized based on how it was winterized.**

(New Owner Hint: Ask the seller where antifreeze was used in the T@B.)

AF = antifreeze

Open Valve = parallel with the pipe

Closed Valve = perpendicular to the pipe

****Before starting, turn off your Alde and assure all plumbing connections are intact - including your water pump!**

Needed supplies:

City water supply

Water pressure regulator and filter

Fresh water hose (optional water tank filler adapter)

1/4 cup of chlorine bleach and a clean, empty gallon container to dilute the bleach and add to the fresh tank

Sewer hose set (Best to hook up to a sanitary sewer line at home or at a campsite. Avoid AF in the storm sewers!)

A. AF added to the fresh water tank, plumbing lines, P-traps, tank valves and Alde water tank

1. Valves should be in camping season mode. Drain valves should be closed. Alde bypass valve should be closed, hot and cold water supply valves should be open (400 - turn the Alde bypass lever to Normal.)
2. Hook up the sewer hose to the gray tank / single outlet and to the sewer and open the gray tank valve.
3. Hook up the water hose, filter and pressure regulator to the spigot and to the T@B city water connection.
4. Turn on the water at the spigot, then flush your Alde tank and plumbing lines by opening all the T@B hot and cold water taps including the inside and outside showers. There may be sputtering until the Alde tank fills. Run the water until there is no pink AF color. Then close all the taps. (You can clear the toilet supply line and bowl of AF by flushing a couple times.)
5. At this point the Alde water tank is clear of AF and full of water and you need to isolate it from the sanitizing process. **To bypass the Alde water tank, open the Alde bypass valve and close the hot and cold water supply valves.** (400 - turn the Alde bypass lever to Bypass.)
6. Turn off the spigot, disconnect the hose from the T@B city water connection and add the fill adapter.
7. Fill the fresh water tank using the hose/adapter. Turn on the water pump. It may run a bit until it pressurizes.
8. Open a tap and empty your fresh water tank. Refill the fresh water tank and again open a tap. Repeat this step until the water runs clear. (The remainder of your plumbing lines have already been cleared of AF, so, there is no reason to open all your taps except for speed.)

Your system is now free of AF. **Close your gray tank valve** to prevent sewer gases from coming into the T@B. In preparation of sanitizing, **the valves are already set to bypass the Alde so no bleach will enter the Alde tank.**

9. Mix 1/4 cup of bleach with a gallon of water and pour the mix into the fresh water tank. Then fill the fresh water tank with water using the hose.
10. Open one tap at a time, run the water until you smell bleach, then close the tap. Do this for each tap in your sinks and showers. This assures that bleach enters your plumbing lines. Turn off your pump.
11. Let the bleach water dwell for several hours.
12. Next, **open your gray tank valve**, turn on the water pump, open all your taps and empty your fresh tank.
13. Fill your fresh tank again, open all your taps and run the water until empty and no further smell of bleach.
14. Repeat step 13 until you are satisfied that all bleach odor has been removed.
15. Close your gray tank valve and **close the Alde bypass valve and open the hot and cold water supply valves.** (400 - turn the Bypass lever to Normal) **Your valves are now back to camping season mode.**
16. Turn off your water pump if you choose to return to a city water connection.

B. AF added to the fresh water tank, plumbing lines, P-traps, tank valves - sparing the Alde water tank

1. Valves are in the "winterize mode" (AF bypasses the Alde hot water tank, but runs through all water lines). Drain valves and hot and cold water supply valves should be closed, the Alde bypass valve should be open, (400 bypass valve set to Bypass). **The Alde water tank is isolated and already free of AF, so start to flush the fresh water tank and plumbing lines first.**
2. Hook up the sewer hose to the gray tank / single outlet and to the sewer and open the gray tank valve.
3. Hook up the water hose and filter to the spigot and attach the filler adapter to the hose end.
4. Fill the fresh tank using the hose and adapter. Turn on the water pump. It may run a bit until it pressurizes.
5. Flush the fresh tank and all the lines by opening the hot and cold water taps including the inside and outside showers *one at a time*. (On pump, better pressure if you open and close one tap at a time.) Run the water until there is no pink AF color. Then close the tap. If the water remains pink as the tank empties, refill the fresh water tank and repeat this step until the water runs clear. (You can clear the toilet supply line and bowl by flushing a couple times.)

Your system is now free of AF and you are ready to sanitize. **Close your gray tank valve** to prevent sewer gases from coming into the T@B. **The valves remain set to bypass the Alde so no bleach will enter the Alde tank.**

6. Mix 1/4 cup of bleach with a gallon of water and pour the mix into the fresh water tank. Then fill the fresh water tank with water using the hose with adapter.
7. Open one tap at a time, run the water until you smell bleach, then close the tap. Do this for each tap in your sinks and showers. This assures that bleach enters your plumbing lines. Turn off your pump.
8. Let the bleach water dwelt for several hours.
9. Next, **open your gray tank valve**, turn on the water pump, open all your taps and empty your fresh tank.
10. Fill your fresh tank again, open all your taps and run the water until empty and no further smell of bleach.
11. Repeat step 10 until you are satisfied that all bleach odor has been removed.
12. **Close your gray tank valve and close the Alde bypass valve (400 - bypass turned to Normal) and open the hot and cold water supply valves. Your valves are now back to camping season mode.**
13. *Turn off your water pump* if you choose to return to a city water connection.
14. Now that the bypass valve is closed, the Alde water tank can be filled. The easiest way is to hook the hose up to the T@B city water connection - remember to use the **pressure regulator**. Open any hot water tap and let it run. This will allow water to enter the Alde water tank. The tap will sputter until the air from the Alde tank is eliminated. Once the sputtering stops, the Alde water tank is full. Close the tap.

C. Line blow out followed by addition of AF to P-traps and tank valves only

This method of winterizing is the most common method used by T@B owners and is also used by nuCamp for T@Bs leaving the factory. It works because the plumbing lines are short, but it still requires all tanks to be completely drained and drain outlets to be free of water prior to winter. Since there is no AF to be flushed from the tanks or pre-tap lines, you only need to sanitize!

1. First **bypass the Alde water tank** to prevent any bleach solution from entering the Alde tank.
320 - open the Alde bypass valve and close the hot and cold water supply valves.
400 - turn the bypass lever to Bypass. Hook up the sewer hose to the gray tank / single outlet and to the sewer, but keep the **gray tank valve closed for now**.
2. Follow steps B 6 through B 14 above.
3. Now go have some fun and camp!