How to Winterize the nuCamp TaB 320 S and CSS with the Nautilus P2.5 System

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(FYI: nüCamp RV has not endorsed nor approved this procedure. Follow at your own discretion.) Please submit comments via Private Message to author Sharon_is_SAM on the nuCamp TaB forum.

Although there are manufacturer prepared user instructions for the Nautilus P2.5 System, generic instructions do not always address the nuances unique to each brand and model of an RV. These instructions aim to fill that gap. Keep in mind that there are other tasks to complete in preparation for prolonged storage as outlined in the nuCamp Owner Manual.

Although the nuCamp Owner Manual states the safest method to winterize requires the use of antifreeze (AF) throughout the plumbing, many owners choose to only blow out their water lines and to use limited AF. With that in mind, directions have been provided.

Nautilus P2.5 User Instructions

You need to winterize:Before storage in freezing or potentially freezing temperatures

Before travel to and/or through freezing temperatures

Before camping in freezing or potentially freezing temperatures

Required supplies: Non-toxic pink RV AF (keep the extra)

A standard oil-less air compressor or a 12 volt portable compressor

A 3 gallon bucket to measure the Alde drain volume An RV blow out plug (ACE, Walmart, Amazon, etc.)

A small towel while draining the water pump

Add this if you plan

to add AF to the lines: A short section of garden hose with a male, threaded connector

Access to the following: The Alde Safety/Relief Valve (yellow flapper valve)

The Alde water tank drain (directly under the yellow flapper valve)

The hot and cold low point plumbing line drains

The fresh water tank drain valve

Note: Please note that there are separate sections for those owners who wish

to only blow out the lines and for those owners who wish to use AF throughout the plumbing. Everyone starts at "Nautilus Setting #1".

Nautilus Setting #1: "Tank Fill"

Drain first Turn off the Alde and allow the tank to cool before draining the Alde Hot Water Tank.

- Place a bucket under the Alde Safety Relief/Drain Valve to catch and measure output.
 Open the yellow flapper valve located inside the TaB. Allow the Alde to drain.
 Sometimes it helps to open a faucet while draining the tank.
 (If the tank was full, you should get about 2.5 gallons of water.)
- 2. Open the Fresh Water Tank Drain Valve and drain the tank until it stops dripping.
- 3. With the T@B stabilizers up, raise the tongue to the highest position to enhance drainage of both tanks. Then, return to level after drainage is completed.
- 4. If possible, unscrew the shower head(s) / hose(s) and drain the hose(s).
- 5. Next, empty your plumbing lines by opening the low point drain valves.

 Open a hot and a cold tap to expedite the drainage. Close the faucets and drains.
- 6. Place a towel under the water pump, disconnect both pump hose fittings and allow to drain. Unscrew, empty and clean the filter and cup then re-secure.

Nautilus Setting #2: Blue and green handles to a <u>45 degree angle</u>. (Allows drainage of the Nautilus Harness.)

1. Screw the RV blow out plug into the *City Water* inlet and attach your compressor. Start the compressor, slowly increasing pressure, limiting to a maximum of 40 PSI. *This will blow out water only from the plumbing harness of the Nautilus.*

***Owners who are <u>not</u> adding AF to the plumbing continue with this section.

Nautilus Setting #3: "Winterize"

Continue to blow out the remainder of the plumbing lines one outlet at a time.

Blow until only air exits the outlet.

- 1. Blow out the toilet flush valve by holding the flush valve open. Repeat. Then, blow out hot and cold taps one at a time (sinks and showers). Lastly, blow out the low point drain valves.
- 2. Turn off and remove the compressor and RV blow out plug.
- 3. Confirm closure of all drain valves. You may leave faucets open.
- 4. Leave the Alde Safety Relief Valve/Drain open until the next time used.
- 5. Remove the exterior shower hose after blowing it out to prevent residual water from flowing back into the faucet.
- 6. Empty the gray tank. Close the valve, replace the cover.
- 7. Pour enough AF down the sinks and showers drains to get AF into the gray tank. Then, briefly open and close the gray tank valve to replace residual water with AF.
- 8. Add AF to the toilet bowl to keep the seal wet.

*** Owners who are only blowing out the plumbing may exit here, leaving the Nautilus handles at this setting. Consider bypassing the Alde (see below) in preparation for spring sanitizing.

***Owners who are adding AF throughout the lines continue with this section.

- 1. Turn off and remove the compressor and RV blow out plug.
- 2. Confirm closure of all faucets and drain valves.
- 3. Leave the Alde Safety Relief Valve/Drain open until the next time used

Bypass the Alde

The Alde Bypass (red handle in the Nautilus cubby) was designed to prevent AF or bleach from entering the Alde water tank by diverting fluids away from the Alde tank. Turn the handle to "Bypass".

Nautilus Setting #3: "Winterize"

- 1. Attach the garden hose to the Nautilus inlet labeled "Sanitize/Winterize". Place the other end of the hose into the gallon AF container.
- 2. Turn on the pump switch and allow the pump to pressurize. The pump will then run when a faucet tap is opened.
- 3. Open one plumbing tap at a time, hot and cold. When AF appears, run enough to fill the P traps under the sinks and shower.
- 4. Press the button that adds water to the cassette toilet until you see pink. Leave a puddle of AF in the toilet bowl to keep the seal wet.
- 5. Don't forget the outside shower!
- 6. When completed, turn off the pump and disconnect the hose.

Nautilus remains in "Winterize" mode and the Alde bypassed until it is time to dewinterize.

- 7. Empty the gray tank. Close the valve, replace the cover.
- 8. If you haven't already added enough AF to the P traps, pour more AF down the sinks and shower drains to get into the gray tank, then, briefly open and close the gray tank valve to replace any residual water with AF.