Draining and Compressed Air Blow-down of Entire Plumbing Circuit

Freeze protecting the entire plumbing system involves a complete drain down and compressed air blow out of the entire circuit followed by a final antifreeze fill. Following the outlined procedure (1 through 27) should remove all but trace amounts of water in the plumbing circuit and prepare the unit for final antifreeze protection.

NOTE: *All contaminated fluids present in the gray water tank and gray water pump circuit must be collected and disposed of adhering to applicable federal, state and local regulations. Always drain gray water into containers approved for hazardous materials.*

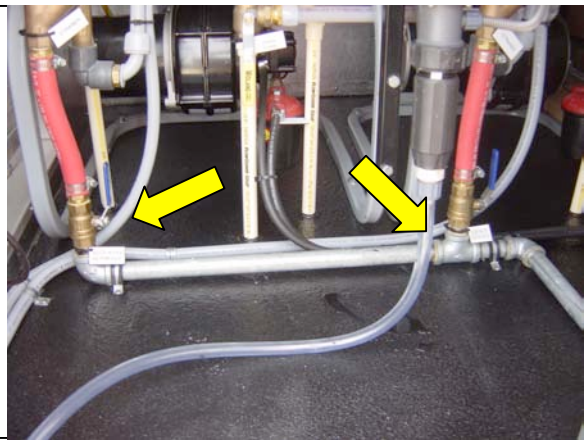
1.

Remove 1-1/2 fire hose inlet plug and open inlet valve (yellow handle).

Water will begin to drain from main inlet pipe.

2.

Open all water heater isolation valves (see yellow arrows) so as to allow the water heaters to drain down through main inlet pipe.

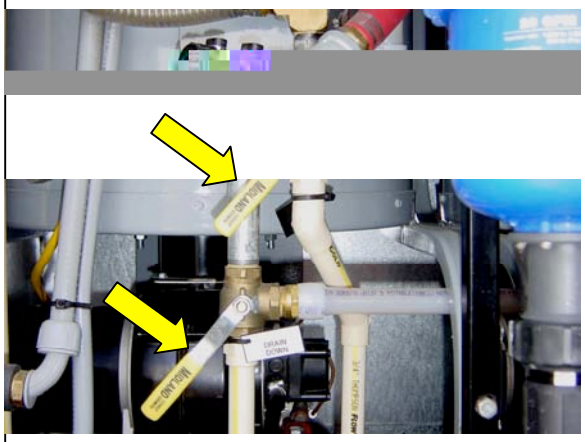


3.

Open all temperature and pressure relief valves. This will allow air to enter the water heater circuit and aid in draining the water out of the heater coils.

4.

Place all heater drain down valve handles at a 45 degree angle as shown (see yellow arrows). This will assist in draining all transition, dosing pump inlet and outlet plumbing.



14.

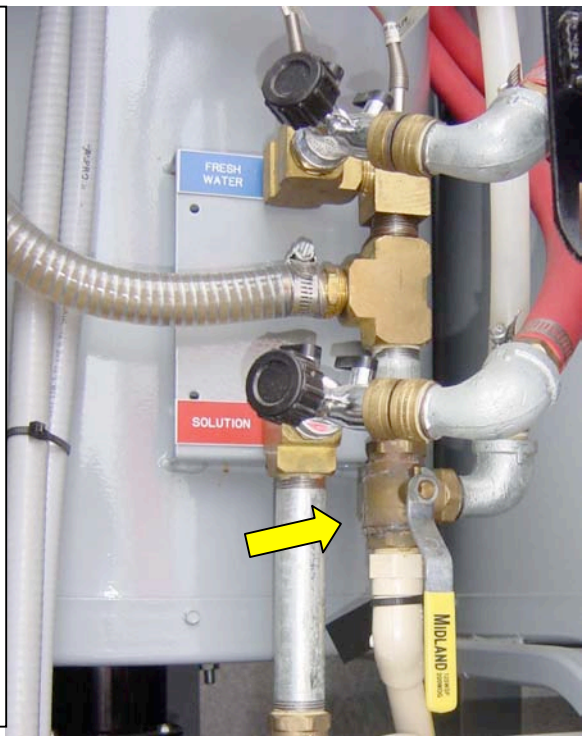
Close temperature and pressure relief valves.

15.

Close all water heater outlet valves.

15.

Close water heater fresh water drain-down valve (this will force the purge air through the dosing pump inlet circuit and evacuate the dosing pump check valves).



16.

Connect the source of compressed air to the blow-down adaptor on to the inlet fitting and begin a one-minute blow-down of all water heaters and dosing pump inlet.

17.

After initial blow-down reassemble the dosing pump making sure the upper piston lip is carefully inserted into the upper end of the pump and that the o-ring is properly placed on the flange of the bottom half. Tighten the ribbed nut by hand firmly.

18.

Close water heater solution drain-down valve.

19.

Open all water heater valve outlet valves.

20.

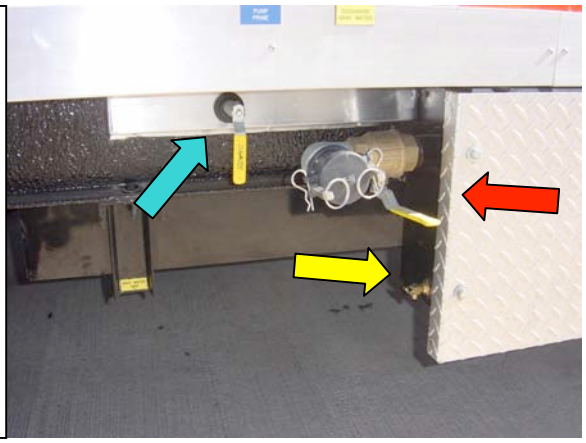
Close all inside (and outside if equipped) shower boom control valves.

21.

Close all outside drain down valves.

22.

Close pump prime valve (blue arrow). Cap gray water discharge port and close valve (red arrow). Close pump drain down valve (yellow arrow).

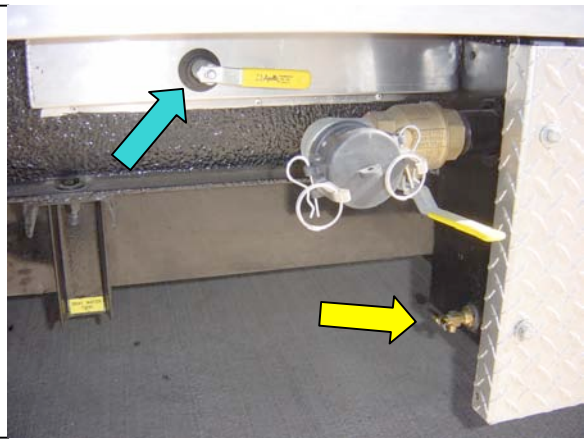


23.

Begin a continuous blow out of plumbing circuit while following 24 through 27.

24.

Open pump prime valve (blue arrow). Open pump drain down valve (yellow arrow).



25.

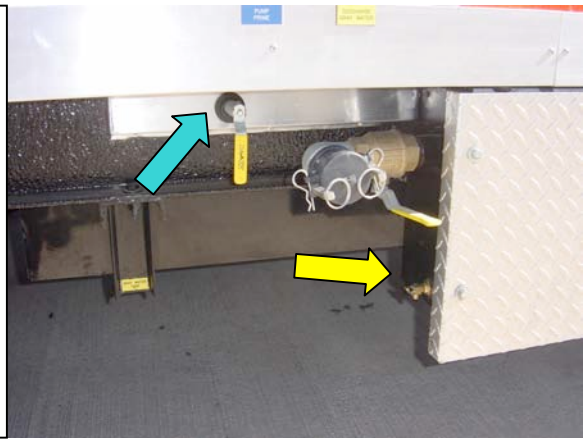
Reinstall quick coupled caps on all exterior decon ports (if equipped) and close valves.

26.

Open all outside drain down valves (opposite of shown).

27.

Close pump prime valve (blue arrow). Close pump drain down valve (yellow arrow).



28.

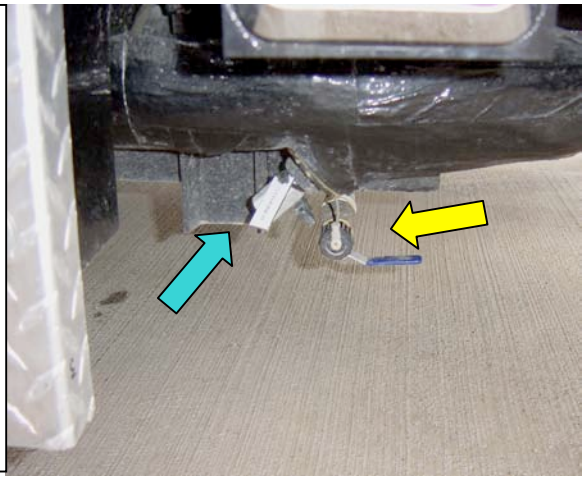
Open all inside (and outside if equipped) shower boom control valves.

26.

Close all outside drain down valves and re-cap them.

27.

Close gray water pump strainer (blue arrow) and gray water tank drain (yellow arrow) valves.



The entire plumbing circuit should now be ready for the final winterizing step – antifreeze induction.