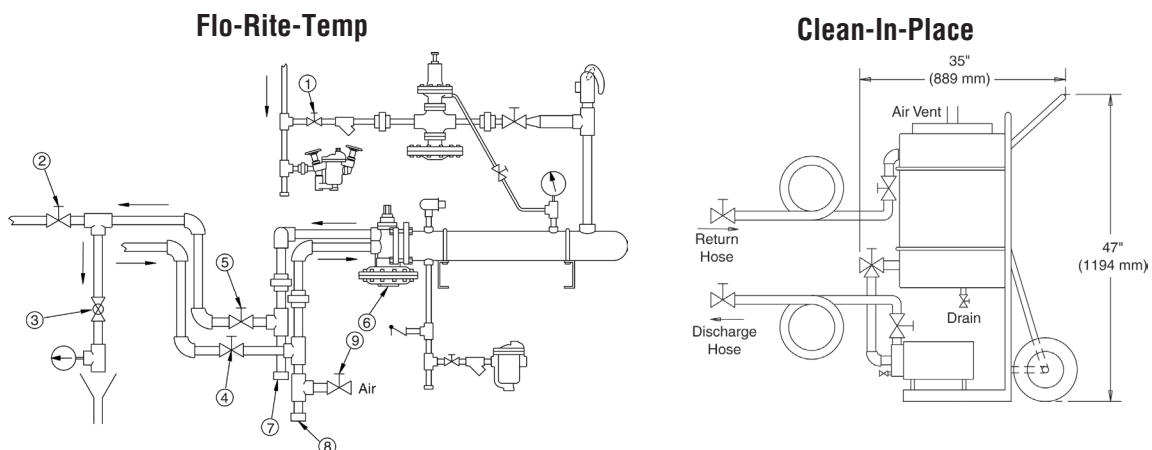


# Clean-In-Place Operating Instructions

When there is a noticeable drop in the Flo-Rite-Temp's — hot water capacity, temperature, or an increased water pressure drop across the unit — tube bundle scale removal should be considered using the commercially available product called RITE-Qwik\*.

Tube bundle scale removal can be accomplished as follows:

- Step 1** Shut off steam supply valve #1 to the Flo-Rite-Temp.
- Step 2** While the water pressure is still ON and the steam is OFF, run the Flo-Rite-Temp for (10) ten minutes or until the outside of the unit is cool to the touch.
- Step 3** Shut the water inlet valve #4 OFF and water outlet valve #5 OFF; open cleaning connection outlet #7. Connect air hose with regulator to valve #9. Turn air on slowly to approximately 5 psi. Increase to maximum of 25 psi. Leave air pressure on until water stops coming out of connection #7. Turn air (valve #9) off. Open cleaning connection inlet #8 and remove the pop-off valve or inlet pipe plug #6 from the lower diaphragm cover of the control valve. Let the remaining water drain by gravity from the Flo-Rite-Temp.
- Step 4** After all the water has been drained, reinstall the pop-off valve or pipe plug #6 into the lower diaphragm cover of the control valve.
- Step 5** With hose valve closed connect return hose A of the Clean-in-Place to the outlet cleaning connection #7 of the Flo-Rite-Temp.
- Step 6** With hose valve closed connect discharge hose B of the Clean-in-Place to the inlet cleaning connection #8 of the Flo-Rite-Temp.
- Step 7** Start pump. Open ball valve of discharge hose B of the Clean-in-Place.
- Step 8** Slowly open the ball valve on return hose A and watch for foaming in the tank.
- Step 9** Clean-in-Place is now circulating cleaning solution through the Flo-Rite-Temp. Periodically check the solution to see if it has changed color or quit fizzing. If the cleaning solution has stopped fizzing and has not changed color, the Flo-Rite-Temp is clean. You may save the remaining unspent solution for your next job. If the solution quits fizzing and the color has changed, add new cleaning solution. Continue circulating in the same manner as above. Do not exceed a maximum circulation time of (3) three hours.
- Step 10** Shut-off pump. Close discharge hose valve B on Clean-in-Place. Open air (valve #9). Turn air on slowly to approximately 5 psi. Increase as Clean-in-Place fluid returns to tank. (Maximum air pressure 25 psi.)
- Step 11** Leave air blow for approximately 3-5 minutes. This should return most of the fluid to the tank. Close both hose valves.
- Step 12** Disconnect return hose A from the Flo-Rite-Temp outlet cleaning connection #7 and discharge hose B from the inlet cleaning connection #8. Also remove the pop-off valve or pipe plug #6 from the lower diaphragm cover of the control valve. Let the cleaning solution drain by gravity from the Flo-Rite-Temp.
- Step 13** Close valve #2 going into the system and open valve #3 going to the drain.
- Step 14** Open the water outlet valve #5 then open SLOWLY inlet water valve #4. Let the water run for (1) one minute before installing the pop-off valve or pipe plug #6 into the lower diaphragm cover of the control valve.
- Step 15** After the pop-off valve or pipe plug #6 is installed, run water into the drain for (5) five minutes to flush out all of the cleaning solution. Throttle the outlet valve #3 open and closed to purge the air from under the diaphragm.
- Step 16** After flushing the unit, close valve #3 and open the steam supply valve #1 SLOWLY and let the Flo-Rite-Temp heat up.
- Step 17** Set the Flo-Rite-Temp as needed. (This step may not be necessary).
- Step 18** Open valve #2 to the system and monitor the system until the temperature is back to normal.
- Step 19** After use, flush the pump with water to remove the chemical to prevent seal deterioration.



\* RITE-QWIK is a non hazardous chemical cleaner which has been proven effective for removing deposits without harming the FLO-RITE-TEMP internally.