

DESCALING PROCEDURE

Scale build up is a severe problem for the copper coils inside heat exchangers. If you have hard water in your area, it is best to implement water treatment, otherwise descaling is required every 6 – 12 months.

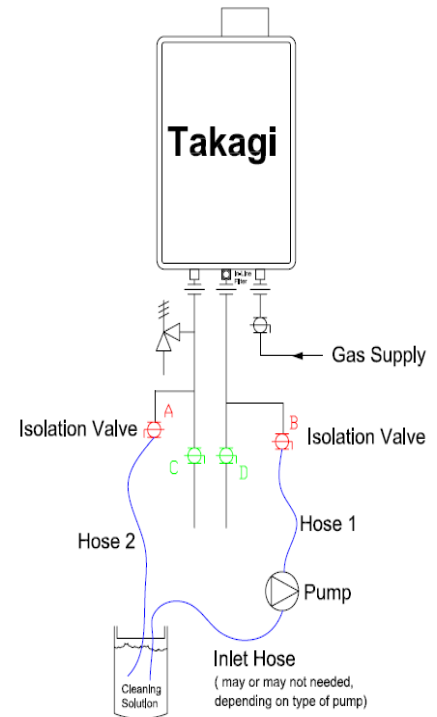
1) TOOLS - Pump (minimum 1 GPM), Water Hoses, 5 Gal. bucket

2) WATER CONTROL(BYPASS) VALVE POSITIONING - (Only for T-H3, T-H2, T-M32, T-D2, T-K3/PRO, T-M1, T-M199 and T-M50. All other models - Please skip #2 and proceed to #3) The water control(bypass) valve need to be properly positioned to ensure that the descaling solution circulates through the heat exchanger.

- a. Set the temperature of the heater to a minimum of 150 degrees.
- b. With power on, flow as much water as possible through the heater.
- c. After one minute of run time, disconnect the power to the heater while the heater is operating.

3) PREPARATION OF WATERLINES

- d. Disconnect the power.
- e. Isolate the heater by closing the incoming & outgoing water isolation valves "C" and "D"
- f. Relieve water pressure in the heater by opening a hot water tap.
- g. Drain the unit, and connect hoses to the drain ports of the isolation valves "A" and "B"
- h. Attach the pump and hoses per the shown diagram.



4) DESCALING (FEEDING THE DESCALE SOLUTION)

- i. Fill the bucket with the proper mix of descaling solution, (PLEASE NOTE THAT VINEGAR IS KNOWN TO BE INEFFECTIVE AT REMOVING SCALE.)
- j. Open valves "A" and "B"
- k. Circulate the descaling solution through the unit for 30 minutes (THE T-M50 MODEL MAY REQUIRE MORE THAN 30 MINUTES DEPENDING ON THE PUMP, PLEASE CONTACT TAKAGI TECHNICAL DEPARTMENT FOR ASSISTANCE.)

5) FINAL FLUSH After descaling, it is imperative to flush the chemical solution from the unit.

- l. Drain the descaling solution from the heater and flush fresh water through the heater by closing valve "B"
- m. Place the hose from valve "A" to an approved drain
- n. Open valve "D" and allow fresh water to flow through the heater for five minutes

***** It is highly suggested that a scale inhibitor, such as the Product Preserver® be installed before the cold water inlet after this procedure is done.**