

## Recirculation system tips

### Hard Water Conditions

Use a water conditioner.

Hard water can cause scale build-up and eventually reduce the life of the pump and other system components.

#### Do:

- Do Install an air vent mounted in a vertical position (if provided).
- Do Use 1/2"(5/8") recirculation line tubing.
- Do Check to be sure there are no crimps or sharp bends in the recirculation line that would restrict the flow.
- Do Be sure the check valve is installed in the proper direction of the flow.
- Do Be sure all air is purged from the system prior to starting the pump.
- Do Use a water conditioner if you have hard water.
- Do Be sure the gate valves are open before turning on the pump.
- Do Install the pump pumping in upward direction only.

#### Do Not

- Do Not Use grease or oil to lubricate the pump (it is self-lubricating).
- Do Not Over tighten the screw ring.
- Do Not Install the pump with the motor above the pump housing.
- Do Not Install the pump pumping away from the water heater nor pumping downward.
- Do Not Start the pump before the system is full of water and purged of air.
- Do Not Allow the water heater temperature above 140°F (60°C). (only in the US)
- Do Not Install the pump in the supply line to faucet/taps.
- Do Not Use any pipe size other than 1/2"(5/8") for E1, E3, and E10 models.
- Do Not Position the pump at the top of the water heater.

**Note: Keep The Hot Water Temperature Below 140°F (60°C): Higher temperatures can cause calcium and magnesium elements to come out of solution and create solids which could not only cause damage to the pump but also reduce water heater efficiency and premature failure of the water heater.**

