

TECHNICAL SERVICE DEPARTMENT Technical Service Bulletin 1-800-432-8373



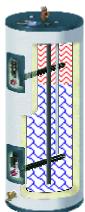
Non Simultaneous Operation - Double Element Water Heaters



1. Upper thermostat is the controlling thermostat. When tank is filled with cold water, or tank runs out of hot water, the upper thermostat will demand heat and turn on the upper heating element. Cold water enters the bottom of the tank through the dip tube.



2. The water in the top of the tank is heated. Since heat rises, only the water at or above the heating element gets hot. When you run out of hot water, the upper thermostat and element attempt to keep up with the demand.



3. When the water in the top of the tank reaches thermostat setting, it will automatically turn off and transfer power to the lower thermostat. The lower thermostat, demanding heat from the cold water, turn the lower heating element on. Only one thermostat has power and only one heating element can heat at a time.



4. The water in the bottom area (roughly the bottom 2/3 of the tank) is heated as the lower heating element and thermostat operate.



5. When all of the water in the bottom of the tank is heated to the thermostat settings, the bottom heating element is turned off. All thermostats are satisfied and the tank is in 'stand-by' mode.



6. As hot water is drawn from the tank, it is replaced by cold water from the dip tube. The cold water enters the bottom of the tank and the lower thermostat senses a heat change. The lower heating element will heat the incoming cold water. If you use all the hot water in the tank, the upper thermostat will demand heat and withdraw power from the

bottom of the tank.

Non-simultaneous means that only one of the heating elements may heat at a time. NEVER turn on power to the water heater unless it is full of water and has been purged from a hot water faucet. Rheem recommends setting your thermostat not to exceed 120 degree F.