



Water Temperature °F	Time for 1st Degree Burn (Less Severe Burns)	Time for Permanent Burns 2nd & 3rd Degree (Most Severe Burns)
110	(normal shower temp.)	
116	(pain threshold)	
116	35 minutes	45 minutes
122	1 minute	5 minutes
131	5 seconds	25 seconds
140	2 seconds	5 seconds
149	1 second	2 seconds
154	instantaneous	1 second

(U.S. Government Memorandum, C.P.S.C., Peter L. Armstrong, Sept. 15, 1978)

TEMPERATURES SHOWN ARE APPROXIMATES AND MAY VARY.

FIGURE 29.

NOTE: During low demand periods when hot water is not being used, a lower thermostat setting will reduce energy losses and may satisfy your normal hot water needs. If hot water use is expected to be more than normal, a higher thermostat setting may be required to meet the increased

demand. When leaving your home for extended periods (vacations, etc.) turn the temperature dial to its lowest setting. This will maintain the water at low temperatures with minimum energy losses and prevent the tank from freezing during cold weather.

Water Temperature Adjustment

The water temperature setting can be adjusted from 70°F to 160°F. Turn the Gas Control/Temperature Knob to the desired setting/temperature.

NOTE: The temperatures indicated are approximates. The actual temperature of the heated water may vary.

Operating Modes and Settings

- **Standard Mode** - The controller adjusts the water heater to maintain the temperature set by the user.
- **Vacation Setting** - The Vacation Setting (VAC) sets the controller at approximately 70°F. This setting is recommended when the water heater is not in use for a long period of time. This effectively turns the controller temperature setting down to a temperature that prevents the water in the water heater from freezing while still conserving energy.

Status Light Code

LED FLASH SEQUENCE	CONTROL STATUS
Short flash once every four second	IDLE (No call for heat, no fault conditions)
"Heartbeat", alternates bright/dim	Call for Heat (No fault conditions)
One Flash, three second pause	Low Flame Signal (control continues to operate)
Two Flash, three second pause	End Switch Failed Closed
Three Flash, three second pause	End Switch Failed Open or TCO Limit Lockout
Four Flash, three second pause	ECO Limit Lockout
Five Flash, three second pause	Flame Out of Sequence
Six-One Flash, three second pause	Soft Lockout* - Retry Limit - Failed TFI (Trial for Ignition)
Six-Two Flash, three second pause	Soft Lockout* - Recycle Limit - Flame Lost - END Switch Fails
Six-Three Flash, three second pause	Soft Lockout* - Recycle Limit - Flame Lost
Six-Four Flash, three second pause	Soft Lockout* - Flame out of Sequence Sensed
Seven Flash, three second pause	Flammable Vapor Sensor (FVS) Lockout
Eight-One Flash, three second pause	Flammable Vapor Sensor (FVS) Fault Detected
Eight-Two Flash, three second pause	Temperature Sensor Fault Detected
Eight-Three Flash, three second pause	Electronic Fault Detected
Eight-Four Flash, three second pause	Gas Control Valve/Thermostat Fault Detected

* Soft Lockout - 20 minute wait before returning to normal mode.