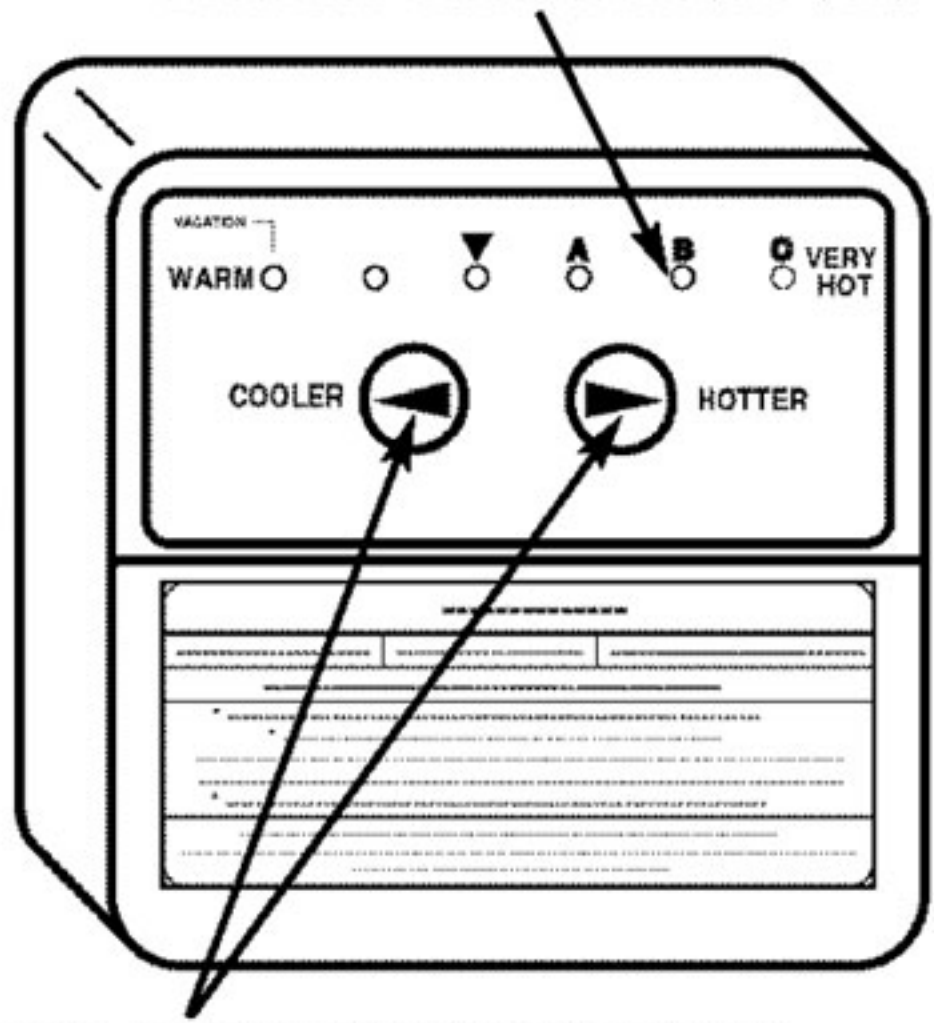
http://waterheatertimer.org/How-to-troubleshoot-gas-water-heater.html#intellivent

Intelli-Vent gas valve



Temperature Setting	Display ▼ A B C	Time to Produce 2nd & 3rd Degree Burns on Adult Skin
C - Flashing = approx. 160°F (71°C)	○ ○ ○ ○ ○ ●	About 1/2 seconds
C = approx. 150°F (66°C)	○ ○ ○ ○ ○ ●	About 1-1/2 seconds
B = approx. 140°F (60°C)	○ ○ ○ ○ ● ○	Less than 5 seconds
A = approx. 130°F (54°C)	○ ○ ○ ● ○ ○	About 30 seconds
▼ = approx. 120°F (49°C)	○ ○ ● ○ ○ ○	More than 5 minutes
WARM = approx. 80°F(27°C)	● ○ ○ ○ ○ ○	- - - - - - - - - - - - - - - -

OPERATING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

FLAMMABLE

BEFORE OPERATING: ENTIRE SYSTEM MUST BE FILLED WITH WATER AND AIR PURGED FROM ALL LINES.

A. This appliance does not have a pilot. It is equipped with an ignitiion device which automatically lights the burner. **Do not try to light the burner by hand.**

B. **BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

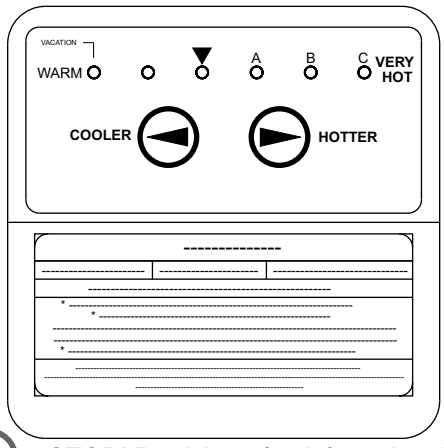
WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in the gas control buttons. Never use tools. If the control buttons will not push in, don't try to repair them, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately contact a qualified installer or service agency to replace a flooded water heater. Do not attempt to repair the unit. It must be replaced!

OPERATING INSTRUCTIONS



1. STOP! Read the safety information above on this label.
2. Set the ON/OFF switch on the control box to the "ON" position.
3. Set the thermostat to the lowest setting by first pressing the COOLER and HOTTER buttons together and holding for 1 second. Then press the COOLER button until the Warm indicator light appears.
4. Set the ON/OFF switch on the control box to the "OFF" position.
5. This appliance is equipped with a device which automatically lights the burner. **DO NOT TRY TO LIGHT THE BURNER BY HAND.**
6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
7. Turn on all electrical power to the appliance.
8. Set the ON/OFF switch on the control box to the "ON" postition.
9. Set the thermostat to the desired setting by first pressing the COOLER and HOTTER buttons together and holding for 1 second. Then press the HOTTER button
10. WATER TEMPERATURE ADJUSTMENT ▼ is approximately 120°F.

CAUTION: Hotter water increases the risk of scald injury. Consult the instruction manual before changing temperature.

11. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your technician or gas supplier.

WARNING: TURN OFF ALL ELECTRIC POWER BEFORE SERVICING.

TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to the lowest setting by first pressing the COOLER and HOTTER buttons together and holding for 1 second. Then press the COOLER button until the Warm indicator light appears.
2. Set the ON/OFF switch on the control box to the "OFF" postition.
3. Turn off all electrical power to the appliance if service is to be performed.

http://waterheatertimer.org/How-to-adjust-temperature-on-water-heater.html

Error codes

LED STATUS	PROBLEM	SOLUTION
▼ A B C ● ○ ○ ● ○ ○	An open earth ground circuit to the ignition system.	1. Check that the earth ground connection is properly connected. 2. Check that the ground conductor on the water heater is properly connected.
▼ A B C ● ○ ● ○ ● ○	Wiring error or a high resistance to earth ground.	1. Check for proper connection of line neutral and hot wires. 2. Check that the water heater is securely connected to earth ground.
▼ A B C ● ○ ● ○ ○ ○	Pressure switch remained closed longer than 5 seconds after the call for heat began.	1. Pressure switch wiring is incorrect. 2. Replace pressure switch.
▼ A B C ● ○ ● ○ ○ ●	Pressure switch remained opened longer than 5 seconds after the combustion blower was energized.	1. Pressure switch wiring is incorrect. 2. Pressure switch tubing not connected correctly. 3. Air intake or exhaust obstructed.
▼ A B C ● ○ ● ○ ● ●	Error in the hot surface ignitor circuit.	1. Check that all wiring is correct and secure. 2. Replace hot surface ignitor.
▼ A B C ● ○ ○ ● ● ○	System in lockout.	1. Gas supply is off or too low to operate. 2. Hot surface ignitor not positioned correctly. 3. Low voltage to the water heater. 4. Electric polarity to unit is incorrect - test and correct.
▼ A B C ● ○ ○ ○ ● ●	Problem in the gas valve driver circuit.	1. Turn power to the water heater off for 10 seconds and then back on. 2. Replace gas control valve.
▼ A B C ● ○ ● ● ● ○	Problem with the internal circuit.	1. Turn power to the water heater off for 10 seconds and then back on. 2. Replace gas control valve.
▼ A B C ● ● ● ● ● ●	Problem with the internal circuit.	1. Turn power to the water heater off for 10 seconds and then back on. 2. Replace gas control valve.
▼ A B C ● ○ ○ ○ ● ○	Flame signal sensed out of proper sequence.	1. Replace gas control valve.
▼ A B C ● ○ ○ ● ● ●	ECO activated.	1. Replace gas control valve.
▼ A B C ● ○ ● ● ○ ○	One of the temperature adjust buttons stuck closed.	1. Press and release each of the buttons once. 2. Replace gas control valve.
▼ A B C ● ○ ● ● ○ ●	Water temperature sensor is either open or short circuited.	1. Check that all wiring is correct and secure. 2. Replace gas control valve.