

CONDITION	CAUSE	REMEDY
<b>The burner will not ignite.</b>	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Defective thermocouple.	Replace with new thermocouple.
	Defective gas control valve.	Replace with new gas control valve.
	Gas control valve set too low.	Turn temperature dial to desired temperature.
Heater installed in a confined area.	Provide fresh air ventilation.	
<b>The burner flame floats and lifts off ports.</b>	High gas pressure.	Check with gas utility company.
	Orifice too large.	Replace with correct orifice.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Cold drafts (downdraft).	Locate source and correct.
<b>The burner flame is yellow and lazy.</b>	Insufficient secondary air.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Main burner line clogged.	Clean. Check for source of trouble and correct.
	Heater installed in a confined area.	Provide fresh air ventilation.
<b>The burner flame is too high.</b>	Insufficient secondary air.	Provide fresh air ventilation.
	Orifice too large.	Replace with correct orifice.
	Defective gas control valve.	Replace with new gas control valve.
<b>The flame burns at the orifice.</b>	Low gas pressure.	Check with gas utility company.
	Defective gas control valve.	Replace with new gas control valve.
<b>The pilot will not light or remain lit.</b>	No gas.	Check with gas utility company.
	Dirt in gas line.	Notify utility. Install drip leg in gas line.
	Pilot line clogged.	Clean. Check for source of trouble and correct.
	Loose thermocouple connection.	Tighten with fingers then take 1/4 turn with wrench.
	Defective thermocouple.	Replace with new thermocouple.
	Cold drafts (downdraft).	Check source and correct.
	Combustion air intake holes blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Flame arrestor openings blocked.	With a vacuum cleaner, remove dirt, dust, and lint.
	Gas control valve high limit switch has tripped.	Replace with new gas control valve.
	Resettable thermal switch on inner access door has tripped.	Reset thermal switch on inner access door and relight burner.
	Flammable vapours incident.	Contact a qualified service technician or the manufacturer for further instructions.
Defective igniter.	Replace igniter assembly.	
<b>The access door temperature high limit switch is tripping.</b>	Not enough draft from the chimney.	Check for any obstruction in the chimney. Ensure that the chimney is sized and installed according to proper installation codes.
	Not enough fresh air for the combustion.	Supply make-up air. Refer to the proper installation codes.
	Ambiant air temperature is too high.	Reduce ambient air temperature.
	Excessive dirt, dust, or other debris accumulation on the flame arrestor.	Clean the flame arrestor in the combustion chamber using a stiff brush, compressed air and/or a vacuum cleaner.
<b>High operating costs.</b>	Gas control valve set too high.	Turn temperature dial to desired temperature.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Leaking faucets.	Repair faucets.
	Gas leaks.	Check with gas utility company. Repair at once.
	Wasted hot water.	Advise consumer.

CONDITION	CAUSE	REMEDY
<b>High operating costs (Continued)</b>	Long runs or exposed piping.	Insulate piping.
	Hot water piping on outside wall.	Insulate piping.
<b>Insufficient hot water.</b>	Low gas pressure.	Check with gas utility company.
	Wrong piping connections.	Correct piping, dip tube must be in cold inlet.
	Sediment or lime in tank.	Drain. Check to see if water treatment is necessary.
	Water heater is undersized.	Install the size of water heater that meets the demand.
	Gas control valve set too low.	Turn temperature knob to desired temperature.
	Leaking faucets.	Repair faucets.
	Wasted hot water.	Advise consumer.
	Long runs or exposed piping. Hot water piping on outside wall.	Insulate piping. Insulate piping.
<b>Slow hot water recovery.</b>	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Gas control valve set too low.	Turn temperature dial to desired temperature.
	Improper calibration.	Replace gas control valve.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Water heater is undersized.	Install size of water heater that meets demand.
	Wrong piping connection. Wasted hot water.	Correct piping, dip tube must be in cold inlet. Advise consumer.
<b>Leaking water.</b>	Poorly sealed, hot or cold water connections, gas control valve threads, relief valve, or drain valve.	Tighten threaded connections.
	Leakage from plumbing system or other appliances.	Inspect plumbing system and other appliances.
	Condensation.	Refer to the installation manual.
<b>Water drips from the relief valve.</b>	Heater stacking.	Lower gas control valve setting.
	Excessive water pressure.	Install a pressure-reducing valve.
	Thermal expansion in a closed water system.	Install an expansion tank.
	Improperly seated valve.	Check if relief valve works properly and replace, if necessary.
<b>The gas control valve fails to shut off.</b>	Defective gas control valve.	Replace with new gas control valve.
	Improper calibration.	Replace gas control valve.
<b>Condensation.</b>	Water heater filled for the first time.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Heavy draws of hot water with very cold refill water.	Let water heater warm up. Problem should go away. If it persists, check all plumbing connections for leaks.
	Water heater is undersized.	Install size of water heater that meets demand.
<b>Combustion odours.</b>	Insufficient secondary air.	Provide fresh air ventilation.
	Heater installed in a confined area.	Provide fresh air ventilation.
	Flue clogged.	Clean. Check for source of trouble and correct.
<b>Smoking and carbon formation (sooting).</b>	Insufficient secondary air.	Provide fresh air ventilation.
	Low gas pressure.	Check with gas utility company.
	Burner flame yellow, lazy.	Refer to <b>The burner flame is yellow and lazy</b> section in the installation manual.
	Flue clogged.	Clean. Check for source of trouble and correct.
	Defective gas control valve.	Replace with new gas control valve.
<b>The pilot flame is too small.</b>	Heater installed in a confined area.	Provide fresh air ventilation.
	Low gas pressure.	Check with utility.
<b>Smelly water.</b>	Pilot line or orifice clogged.	Clean. Check for source of trouble and correct.
	High sulfate or mineral content in water.	Change magnesium anode to an aluminum anode and bleach tank.