

HOTOMATIC GAS WATER HEATER – LP GAS TROUBLE SHOOTING CHART

TROUBLE/CAUSE	REMEDY
I. PILOT WILL NOT LIGHT:	
1. Supply of gas to thermostat is turned off.	A. Turn LP Gas Valve on. B. Turn on any other valve in gas line. C. Turn thermostat valve to "Pilot".
2. Gas Supply Line was filled with air when first installed or gas was disconnected then reconnected allowing line to fill with air.	A. Disconnect pilot tubing at back of pilot. Turn gas on until air is expelled and gas will ignite at pilot tube. Extinguish flame and reconnect pilot tubing. Light gas at pilot head by pushing down on thermostat red button plunger.
3. Pilot Orifice clogged.	A. Unscrew pilot tubing at back of pilot burner. Unscrew hex pilot orifice fitting. Soak fitting in cleaning fluid. Blow dry to unstop the two pilot orifices. Replace orifice fitting and reconnect tubing, light pilot. Replace pilot orifice fitting, if necessary.
II. PILOT WILL LIGHT BUT GOES OUT WHEN PILOT RED BUTTON PLUNGER IS RELEASED:	
1. Pilot flame is too small.	A. Pilot Orifice is clogged. Clean, See I #3 A.
2. Gas pressure regulator is not supplying correct pressure. <i>Note: Pilot head has two flames. One lights the burner, the other heats the thermocouple. Both flames should be strong. The flame hitting the thermocouple must impinge on the thermocouple even when the main burner is on.</i>	A. Get LP Gas dealer to adjust regulator to correct pressure. <i>Note: A pressure gauge can be connected to the 1/8" pressure tap located on the bottom of the thermostat. Remove the plug and install a 1/8" nipple and gauge. Fill heater with water, turn on main burner, adjust regulator until 13.82" water column pressure (8 oz./sq. in.) is read on gauge, while the main burner is on.</i>
3. Gas Line from LP tank to heater is too small.	A. Install 1/2" minimum ID LP Gas hose or equivalent.
4. Thermocouple is defective.	A. Replace Thermocouple.
III. PILOT LIGHTS BUT GOES OUT AT SOME TIME DURING OPERATION:	
1. Wind blows pilot out.	A. Locate heater in place where wind will not blow out pilot.
2. Pilot flame is too small.	A. Clean Pilot Orifice. See I #3 A. B. Adjust gas pressure. See II #2 A. C. Install proper size gas line. See II #3 A. <i>Note: Too small gas supply line will cause pilot flame to reduce when main burner comes on.</i>
IV. WATER IS NOT HOT ENOUGH:	
1. Main burner is not supplied gas with proper pressure.	A. Adjust gas pressure. See II #2 A. B. Install proper gas line. See II #3 A.
2. The water flow rate through heater coils is too fast. <i>Note: #2 Hotomatic will heat 1.5 GPM (60° rise) or .75 GPM (120° rise). #3 Hotomatic will heat 2.5 GPM (60° rise) or 1.25 GPM (120° rise). #4 Hotomatic will heat 3.75 GPM (60° rise) or 1.87 GPM (120° rise).</i> <i>The slower water is drawn through the heater, the higher the temperature rise.</i>	A. Reduce orifice size in wand to draw less GPM through heater.
3. Coils are coated inside with minerals such as Calcium and Magnesium.	A. Look in Top Coil Header through Hot Outlet to see mineral accumulation. Clean coils with Hydrochloric Acid or other cleaning solution. Check with auto radiator or plumbing shop.