13. TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	SOLUTIONS
Burner will not stay lit when lighting...	◆ There is air in the gas line. ◆ The orifice is clogged. ◆ The thermocouple is defective. ◆ The safety valve is defective. ◆ The air filters are dirty and clogged.	◆ Bleed the air out or continue to ignite the brooder until all the air is purged. ◆ Remove and clean the orifice as necessary. ◆ Replace the thermocouple. ◆ Replace the gas valve. ◆ Remove and clean the air filters.
Brooder shuts off on low flame (i.e. minimum gas pressure)...	◆ The primary orifice is clogged. ◆ The gas supply pressure is insufficient. ◆ The thermocouple is inserted too far into the brooder. ◆ The thermocouple is defective. ◆ The brooder angle is too steep. ◆ The safety valve is defective. ◆ The air filters are dirty and clogged.	◆ Remove and clean the orifice as necessary. ◆ Check the manifold gas pressure and adjust as necessary. ◆ Replace the thermocouple. ◆ Adjust the thermocouple depth to 0.5" ◆ Adjust the brooder angle to 1 ½ to 3 degrees. ◆ Replace the gas valve. ◆ Remove and clean the air filters.
Brooder is not glowing red...	◆ The supply gas pressure is too low. ◆ The gas piping size is incorrect. ◆ The orifice is clogged. ◆ The orifice size is incorrect.	◆ Check the manifold gas pressure and adjust as necessary. ◆ If you are not sure of the performance, use the NFPA 54 gas pipe sizing table in this manual. ◆ Remove and clean the orifice as necessary. ◆ See the instructions for correct orifice size and replace if necessary.
Brooder will not attain the desired temperature...	◆ There is insufficient heat in the building for heat loss (i.e., not enough brooders). ◆ The thermostat sensing bulb is incorrectly placed. ◆ The thermostat is out of calibration.	◆ Conduct a heat loss and add brooders or other source of heat as necessary. ◆ Reposition the sensing bulb as necessary for proper operation. NOTE: The sensing bulb should be shielded from direct radiation to prevent short cycling of the brooder. ◆ Recalibrate (if possible) or replace.
Flames flaring up, outside of emitter surface...	◆ The gas pressure is too high. ◆ The brooder is dirty ◆ The orifice size is incorrect. ◆ The type of gas supplied to the brooder is incorrect. ◆ There is insufficient combustion air. ◆ The air filters are dirty and clogged.	◆ Check the manifold gas pressure and adjust if necessary. ◆ Clean brooder. ◆ See instructions for correct orifice size and replace if necessary. ◆ Check the nameplate to identify the correct type of gas the brooder is equipped to operate using. ◆ Clean the inside of the burner with a wire brush and blow out with compressed air. ◆ Remove and clean the air filters