Troubleshooting Guide - Two Stage (N7/L7)

21.1)

Turn on the voltage and adjust thermostat to the highest setting. Does the red monitoring light come on?

- Yes → Does the blower come on?
  - Yes → Does the LED on the ignition module flash once?
    - Yes → Replace air switch.
    - No → Is there 120V between ground and the L1 terminal on the module?
      - Yes → Check terminals for continuity and repair.
      - No → Disconnect the power and check the blower wheel. Does it turn freely?
        - Yes → Replace motor.
        - No → Replace air switch.

- No → Is there 120V at the terminal block in the blower?
  - Yes → Check line voltage circuit. Repair fault.
  - No → Check terminals for continuity and repair.

- No → Cleaning hoses with the pressure tank?
  - Yes → Clean out hoses and probes.
  - No → Switch hoses to the pressure tank.

- No → Switch hoses to the upper probe?
  - Yes → Replace air switch.
  - No → Is the black tap on the air switch connected to the upper probe?
    - Yes → Repair or replace jumper check all wire terminals.
    - No → Check the probes and hoses to the air switch. Are they clear and unobstructed?

- No → Is the LED on the ignition module steady ON?
  - Yes → Replace ignition module.
  - No → Remove any obstructions. Repeat start up. If motor will not run, replace motor.

- No → Is the LED on the ignition module steady ON?
  - Yes → Replace ignition module.
  - No → Check that red wire is connected to TH from air switch terminal C. Repair connection.

- Yes → Replace ignition module.

- No → Is there 24V between both terminals of the TESS and ground?
  - Yes → The TESS has broken continuity. Check the first tube and reflector. Yes is there a hole?
  - No → Is there 24V between both terminals of the TESS and ground?
    - Yes → Replace heat exchange tube, reflector and TESS.
    - No → Is there 24V between both terminals of the ground and ground?
      - Yes → Repair or replace jumper check all wire terminals.
      - No → Replace air switch.

- No → Is the knob on the gas valve turned to the ON position?
  - Yes → Move black wire to NO terminal of the air switch. Restart the troubleshooting.
  - No → Move orange wire to NO terminal of the air switch.

- No → Air switch is stuck in the closed position. Replace air switch.
  - Yes → Replace air switch.

- No → After 15 seconds post purge is there 24V between V1 and V2 ignition module terminals?
  - Yes → Replace ignition module.
  - No → Are the blue wires secure in the terminal blocks?
    - Yes → Replace ignition module.
    - No → Are the black wires secure in the gas valve terminals?
      - Yes → Replace amber light.
      - No → Restart troubleshooting.
TROUBLESHOOTING GUIDE – TWO STAGE (CONTINUED)

Troubleshooting continued on the next page.