

## OPERATIONAL TESTS

The following test procedure will allow checking of individual functions which may be at fault. Each test sequence is preceded with bypassing the start-up cycle. Operational tests prescribed below are begun at the lowest setting in normal operation.

### CONVECTION FAN

- 1 Set switch to OFF, power knob to minimum
- 2 Connect a jumper wire across the LT - LT is the low limit switch. Causes the stove to think there is a fire in it in order to conduct the test.
- 3 Plug stove in, convection fan and combustion motor start
- 4 Turn switch to ON

5 Measure voltage going to convection fan  
MINIMUM 60 VAC +/- 10%

Measure voltage between the two leads to the convection fan (posts 2 & 5.)

6 Turn power knob to maximum

7 Measure voltage going to convection fan  
MAXIMUM 95 VAC +/- 10%

If voltage is OK, but fan does not operate:

Check fan direct to power. If it will not run on 110 VAC, the fan is defective.

Check wiring to fan for any breaks or pinching.

If voltage is greater than maximum (110 V AC):

Main Circuit Board is defective

If voltage is less than minimum or zero:

Measure DC voltage going from LT switch to board

It must be minimum 1 V DC

If voltage is 1 V DC or greater then the main board is defective

If voltage is below 1 V DC, then there is a wiring or connection problem on the LT circuit.

### COMBUSTION MOTOR

- 1 Set switch to OFF, power knob to minimum
- 2 Connect a jumper wire across the LT
- 3 Plug stove in, convection fan and combustion motor start
- 4 Turn switch to ON, wait 45 seconds

5 Measure voltage going to combustion motor  
MINIMUM 40 VAC +/- 10%

Measure voltage between the two leads to the combustion motor (posts 3 & 5.)

6 Turn power knob to maximum

7 Wait 45 seconds (for motor to fully change settings.)

8 Measure voltage going to combustion motor  
MAXIMUM 52 VAC +/- 10%

9 Open the door, allow air sensor to shut off fuel and speed up combustion motor.

If the fuel continues and combustion motor does not change then the air sensor is defective.

10 Measure voltage to motor with door open and combustion motor at full speed.  
VOLTAGE 100 VAC +/- 10%

If voltage is always 0 VAC, then the circuit board or wiring to the motor is defective.

11 Close door, motor returns to power knob setting.

If motor does not return to low setting (40 V), circuit board or air sensor is defective.

If voltage is always too high (90 VAC and higher) and motor will not turn, then the motor may be defective.