



Tradesman

Heating & Air Conditioning

CARRIER DIAGNOSTIC CODES

LED CODE	DESCRIPTION
	If status code recall is needed, do not remove power or blower door. Briefly remove and then reconnect one main limit wire to display stored status code.
CONTINUOUS OFF	Check for 115VAC at L1 and L2, and 24VAC at SEC-1 and SEC-2
CONTINUOUS ON	Control has 24VAC power
RAPID FLASHING	Line voltage (115VAC) polarity reversed. If twinned, refer to twinning kit instructions.
<i>EACH OF THE FOLLOWING STATUS CODES IS A TWO DIGIT NUMBER WITH THE FIRST DIGIT DETERMINED BY NUMBER OF FLASHES OF THE YELLOW LED AND THE SECOND DIGIT DETERMINED BY NUMBER OF FLASHES OF THE GREEN LED.</i>	
11	NO PREVIOUS CODE - Stored status codes are erased when power (115VAC or 24VAC) to control is interrupted or 48 hours after each fault is cleared.
12	BLOWER ON AFTER POWER UP (115VAC or 24VAC) – Blower runs for 90 seconds, if unit is powered up during a call for heat (R-W closed)
13	LIMIT OR FLAME ROLL-OUT SWITCH LOCKOUT – Control will auto reset after 3 hours. Reset switch or replace fuse link. Refer to #33.
14	IGNITION LOCKOUT - Control will auto-reset after three hours. Refer to #34.
21	GAS HEATING LOCKOUT – Control will NOT auto reset. Check for: *Mis-wired gas valve *Defective control (Valve relay)
22	ABNORMAL FLAME-PROVING SIGNAL – Flame is proved while gas valve is de-energized. Inducer will run until fault is cleared. Check for: *Leaky gas valve *Stuck open gas valve
23	PRESSURE SWITCH DID NOT OPEN - Check for: * Obstructed pressure switch *Pressure switch stuck
24	SECONDARY VOLTAGE FUSE IS OPEN Check for: *Short circuit in secondary voltage (24VAC) wiring.
31	PRESSURE, DRAFT SAFEGUARD, AUX-LIMIT SWITCH (when used*) OR BLOCKED VENT SWITCH (when used) DID NOT CLOSE OR REOPENED (DOWNFLOW ONLY) – If open longer than five minutes, inducer shuts off for 15 minutes before retry. Check for: - Proper vent sizing - Defective inducer motor - Low inducer voltage (115VAC) - Defective blower motor or capacitor - Restricted vent - Excessive wind - Defective pressure switch - Inadequate combustion air supply - Disconnected or obstructed pressure tubing If it opens after trial for ignition period, blower will come on for 90 second recycle delay,

<p>33</p>	<p>LIMIT OR FLAME ROLL-OUT SWITCH IS OPEN - If open longer than 3 minutes, code changes to lockout #13. Flame roll-out switch requires manual reset. Check for: - Defective blower motor or capacitor – Dirty filter or restricted duct system - Loose blower wheel - Defective switch or connections - Inadequate combustion air supply (Flame roll-out switch or fuse link open) - Open Flame Roll-out Switch or fuse link. Manual reset or replace</p>
<p>34</p>	<p>IGNITION PROVING FAILURE - Control will try three more times before lockout #14 occurs. If flame signal lost during blower on-delay period, blower will come on for 90 second recycle delay. Check for: - Control ground continuity - Flame sensor must not be grounded - Oxide buildup on flame sensor (clean with fine steel wool) - Proper flame sense microamps (.5 microamps D.C. min., 4.0 - 6.0 nominal). - Gas valve defective or gas valve turned off - Manual valve shut-off - Defective Hot Surface Ignitor - Low inlet gas pressure - Inadequate flame carryover or rough ignition - Green wire MUST be connected to furnace sheet metal</p>
<p>COMPONENT TEST</p>	
	<p>To initiate the component test sequence, shut OFF the room thermostat or disconnect the "R" thermostat lead. Briefly short the TEST terminal to the "COM24V" terminal. Status LED will flash code and then turn ON the inducer motor. The inducer motor will run for the entire component test. The hot surface ignitor, blower motor-heat speed and blower motor-cool speed will be turned ON for 10-15 seconds each. Gas Valve and humidifier will not be turned on.</p>