CHECK LIGHT POWER ON	SYMPTOM Power On Is Unlit	 POSSIBLE CAUSE Disconnect switch is turned off (open). Turn it to ON (closed) position. Fuse(s) blown on disconnect switch. Check for cause of excessive current. Replace blown fuse(s). Control fuse on transformer is blown (check voltage on line & load side of fuse). If there is NO voltage on load side, but there is on the line side, replace the fuse.
CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
FAN ON	Fan On light is Unlit and no alarm lights are lit Fan Does Not Run Fan on Light Is Lit	 Remote panel switch turned off or is defective. Check for voltage at timer coil. If there is NO voltage, check the selector switch. Damper motor auxiliary switch misadjusted or defective. Check terminals at the damper motor. If there IS voltage and the motor is operating, but the auxiliary switch is not closing, adjust end switch setpoint. If end switch adjustment will not close, then replace the damper motor. Voltage through end switch, but fan is not moving, check control relay 17. Replace if necessary. One (1) to three (3) of the overload heater(s) are tripped. Check for voltage at the overload relay. If there is NO voltage, reset overloads, & check motor running amps. If on INITIAL START UP of a newly installed system, the overload heaters keep tripping, causing the fan to stop, check motor running amperage against motor name plate full load amperage i.e. low service voltage, excessive voltage drop or the fan is handling too much air due to less static pressure than design. Defective contactor (M1). Check for voltage at the contactor (coil). If there IS voltage, and the contactor does not pull in, the coil is defective. If the motor contactor pulls in, but does not run the motor, the contacts or overload heaters may be defective. Check voltage on motor leads at starter. If voltage is present and motor does not run, check motor wiring and connections on motor for open circuit. Check for possible open circuit in motor windings.
CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
HIGH TEMP	High Temperature Switch light is Unlit.	 Remote panel switch not turned to "WINTER" or "BURNER ON" position. High temperature limit switch is set too low. FACTORY SET AA-Series @ 130 deg. F., R-Series @ 150 deg. F. If there is NO voltage present at switch, adjust high limit switch. Unit discharging high temperature air. Check burner gas pressure and temp. control operation. Defective high limit switch. Replace switch.

CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
AIR FLOW	Air Flow Switch light is Unlit NOTE: All possible causes will supply NO Voltage (120) out of the normally open terminal on Air Flow Switch.	 Fan is running backwards. Reverse any two (2) motor leads at the contactor. (3 phase units only). Tubing to air flow switch is plugged by dirt or insects. Dirt or snow obstructing the air filters. Loose or worn fan belts. Access door(s) open. Discharge damper is frozen – binding. If frozen, this prevents the damper motor from completing full stroke. Belimo – manual release – move manually. Defective damper motor. Check terminals at the discharge damper motor. If there IS voltage and the motor is not operating, replace the damper motor. Make sure damper blades are moving with damper actuator. Air flow switch set too light. Adjust switch35 W.C. nominal @ high fire. Defective air flow switch – Replace.
CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
LOW GAS PRESSURE SWITCH	Low Gas Pressure Switch unlit. NOTE: New PSI SW has Auto Reset for Low	 Low gas pressure or gas supply is turned off. Low gas pressure switch is set too high. Check terminals at switch. If there is NO voltage, adjust low gas pressure switch or increase gas pressure. Investigate pressure drop through supply piping. SWITCH IS FACTORY SET @ 3" W.C.
CHECK LIGHT	Gas <u>SYMPTOM</u>	POSSIBLE CAUSE
HIGH GAS	High Gas Pressure Switch light is Unlit NOTE: This is a manual reset switch	 High gas pressure at burner. High gas pressure switch is set too low. If there is NO voltage at switch, adjust high gas pressure switch or set correct burner pressure according to tag. SWITCH FACTORY SET at 1.5" W.C. above total gas pressure. Defective high gas pressure switch.
CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
PILOT	PILOT light remains Unlit. If pilot lamp turns on for a short time then goes out, see burner lockout alarm light section.	 If this unit has a mild weather switch, the outdoor air temperature maybe above setpoint. This is <u>FACTORY SET</u> @ 65 deg. F. Flame relay contact screws are loose. Remove the flame relay cover and check the contact base terminal screws for tightness.

CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
POWER TO VALVES	Power To Valves light is Unlit	1. If pilot light is on and power to valves is unlit, check wiring and terminals on flame safeguard. If wiring is <i>not damaged</i> , replace flame safeguard.
CHECK LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
BURNER ON	Burner On light is Unlit	 Block valve auxiliary switch misadjusted. Check the normally open switch terminal at the actuator. If there is NO voltage, look through the actuator observation window. If the valve is open, adjust the actuator auxiliary N.O. switch to be closed. Defective actuator. Check for voltage between terminals at the coil of the actuator. If there IS voltage, and the valve is not open, replace the actuator. If there is voltage through the end switch, check CR15.
ALARM LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
LOW TEMP	<u>On</u>	 Unit discharging low temperature air. Burner has dropped out due to burner related malfunction (see burner alarm) or operation in summer mode with low outdoor temp. 40 deg. F. or less. Low temperature switch setting maybe too high. FACTORY SET @ 40 deg. F. Time @ 5 min. Check sensor connections on timer. Remove sensor from timer, use OHM meter to check continuity through sensor. If open circuit; check sensor in fan housing for damage. If low temp light lights, after the 5 min. as set on the timer, regardless of discharge temp. check sensor, if OK replace timer. If low temp light lights, immediately in summer or winter mode, replace defective low limit timer.

ALARM LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
BURNER LOCKOUT	* Burner lockout light is lit	 If on INITIAL START UP of a newly installed system, the gas line may have air trapped in it. Remove the test plug upstream of the safety shut off valve and bleed the gas line to remove the air. It may require resetting the flame safeguard several times. If pilot does light as proven by the flame light on the flame safeguard, but does not stay lit, adjust needle valve on pilot gas line. Close valve fully and open ½ turn and retry. If pilot will not stay lit, open to 1 turn open. Push burner reset button on flame safeguard or the burner reset button on the remote panel. If burner continues to lock out, check for spark during ignition process. No ignition spark. Crack access door (or view pilot through view-port) and look at the pilot side of the burner. You should be able to see the igniter sparking. (spark is present only when the pilot light is lit, this is only 10 sec.) Spark plug fouled. If the spark is not visible, remove the spark plug and clean it with a wire brush. Check the gap between ground electrode, it should be approximately 3/32". Ignition wire broken or grounded against unit. Defective ignition transformer or spark plug. Disconnect the ignition wire from the spark plug and thread it back through the hole on the control side of the unit. Hold the wire by the insulated cover and place the spark plug electrode approx. 1/16" from a bare surface of the unit. Start the ignitions sequence; it should spark. (REMEMBER TO RESET THE FLAME RELAY BEFORE DOING THIS) If no spark is observed, replace the ignition transformer. Low pilot flame. Increase pilot gas pressure by adjusting pilot regulator. Ultra-violet flame detector sight glass is obstructed. Check lens or sight tube for moisture, dirt, or insects. Clean or dry lens with a soft cloth.
ALARM LIGHT	<u>SYMPTOM</u>	POSSIBLE CAUSE
DIRTY FILTER	<u>Dirty Filter</u> <u>Light</u> is lit	1. If the dirty filter light is <i>lit</i> , the filters are dirty to the point to where the airflow is reduced. Change or clean filters.