

SELECT INSTRUCTION

ATTENTION INSTALLERS

These instructions describe how to properly replace a single stage *G6/L1 control board (PN 624631) with a *G7 control board (PN 624690). These instructions only apply to *G7 single stage furnaces.

⚠ WARNING:

To avoid electric shock, personal injury, or death, turn off the electric power at the disconnect or the main service panel before making any electrical connections.

⚠ CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

When replacing the *G6/L1 control board (PN 624631) with a *G7 control board (PN 624690), install all wires from the door switch and 24V transformer on the same pin locations they were removed from. This means the wire that was attached to the L1 terminal on the 624631 control board will need to be attached to the L1 terminal on the 624690 board, the wire on the XFMR terminal of the *G6/L1 board should be placed on the XFMR terminal of the *G7 board, etc.

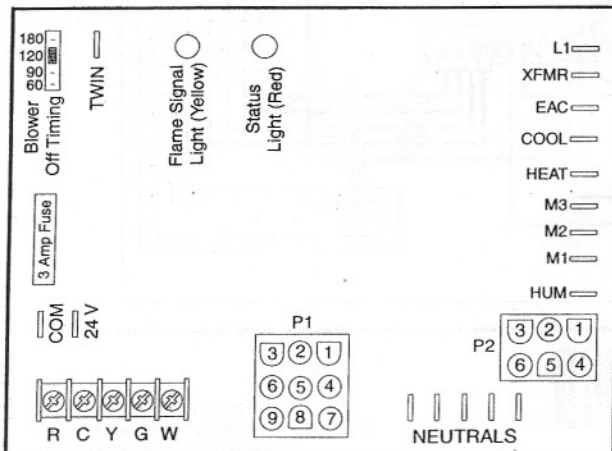
When connecting the wires from the thermostat, heat pump, AC unit, or air handler to the RCYGW terminals of the *G7 board, install all wires on the same terminals they were removed from.

When connecting the wires from the blower motor, please note which wire connects to the HEAT and COOL terminals on the *G7 control board. **NOTE:** If the motor does not have an orange wire, do not place any wire on the Medium Low terminal, this should be left empty.

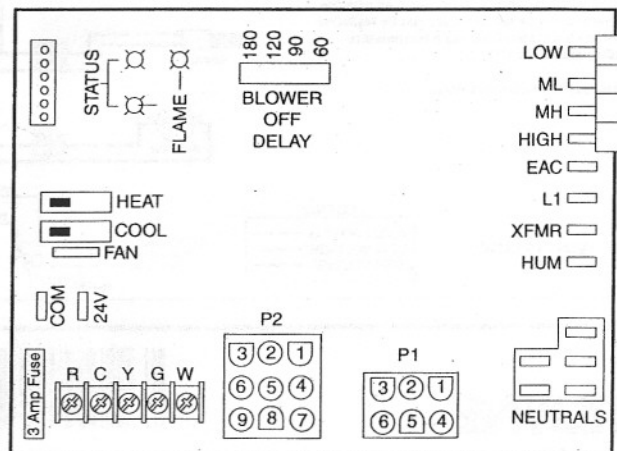
The 6 pin (P1) and the 9 pin (P2) wire plugs will connect directly to the 624690 control board, there is no need to change any wire position.

Place label with flash codes near the wiring diagram on the furnace door for future reference.

	*G6/L1 Terminal (624631 Board)	Wire Color	*G7 Terminal (624690 Board)
Air Cleaner	EAC	Black	EAC
	Neutral	White	Neutral
Blower Motor	COOL/M1/M2/HEAT	Black	HIGH
		Blue	MH
		Orange	ML
		Red	LOW
Door Switch	L1	Black	L1
	Neutral	White	Neutral
Humidifier	HUM	Black	HUM
	Neutral	White	Neutral
24V Transformer	XFMR	Black	XFMR
	Neutral	White	Neutral
	24V	Black with white stripe	24V
	COM	White with black stripe	COM
6 Pin Connector	P1	Multi	P1
9 Pin Connector	P2	Multi	P2



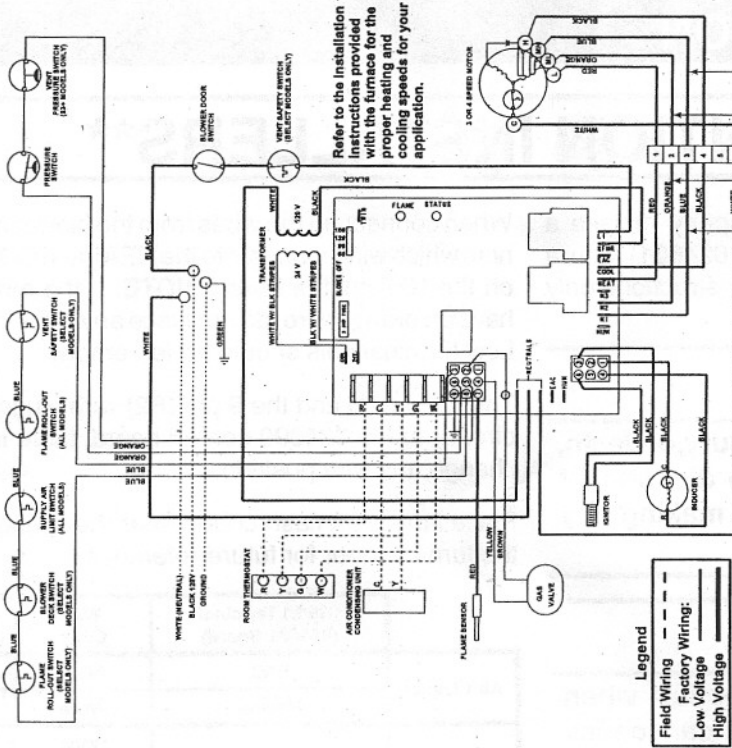
*G6/L1 Single Stage Control Board



*G7 Single Stage Control Board

WIRING DIAGRAM

For 80+ and 90+ Model Furnaces



Refer to the installation instructions provided with the furnace for the proper heating and cooling speeds for your application.

If any of the original wire as supplied with the furnace must be replaced, it must be replaced with wiring material having a temperature rating of at least 105° C.

FAULT CONDITION	STATUS	RED LIGHT	ON
Power On	1 FLASH	2 FLASHES	3 FLASHES
Limit Circuit Open or External Load On, "w"	4 FLASHES	5 FLASHES	Continuous
Pressure Switch is Open with Inducer On	Continuous	OFF	
Pressure Switch is Closed with Inducer Off	Continuous	OFF	
Ignition Failure (Check Ground)	Continuous	OFF	
115 VAC & Neutral Reversed or no Ground	Continuous	OFF	
False Flame or Gas Valve Relay Shorted	Continuous	OFF	
Power Off	Continuous	OFF	

FAULT CONDITION	YELLOW LIGHT	Continuous Flash	ON
Low Flame Sensor Signal	Continuous Flash	ON	
Flame Present	Continuous Flash	ON	

7-103550 (Replaces 7103250)



*G6/L1 Wiring Diagram

For 80+ and 90+ Single Stage Furnaces

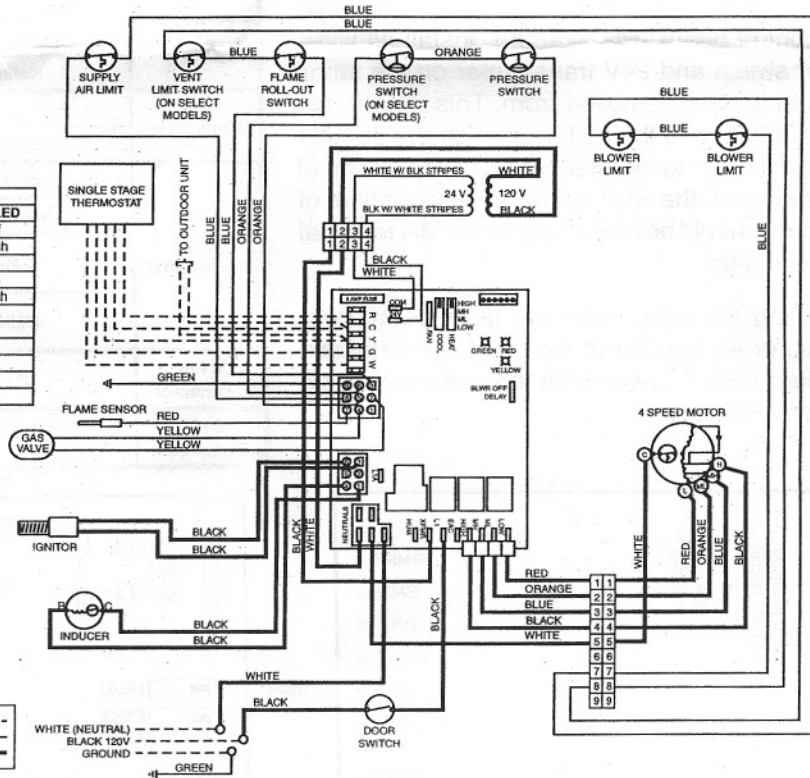
Refer to the installation instructions provided with the furnace for the proper heating and cooling speeds for your application.

FAULT CONDITIONS		
Diagnostic Description	Green LED	Red LED
Control Fault (No Power)	Off	Off
L1 / Neutral Polarity Fault	Flash	Flash
1 Hour Lockout	Alternating Flash	
Normal Operation	On	On
Pressure Switch Closed Fault	On	Flash
Pressure Switch Open Fault	Flash	On
Open Limit Switch Fault	Flash	Off

Diagnostic Description	Yellow LED
Low Flame Sensor Signal	Continuous Flash
Flame Present	On

If any of the original wire as supplied with the furnace must be replaced, it must be replaced with wiring material having a temperature rating of at least 105° C.

Use copper conductors only.



WD#710731-C

LEGEND:

FIELD WIRING	---
LOW VOLTAGE	---
HIGH VOLTAGE	---

*G7 Wiring Diagram



Diagnostic Description	Green LED	Red LED
Control Fault (No Power)	Off	Off
L1/Neutral Polarity Fault	Flash	Flash
1 Hour Lockout	Alternating Flash	
Normal Operation	On	On
Pressure Switch Closed Fault	On	Flash
Pressure Switch Open Fault	Flash	On
Open Limit Switch Fault	Flash	Off
Diagnostic Description	Yellow LED	
Low Flame Sensor Signal	Continuous Flash	
Flame Present	On	



Place label with flash codes near the wiring diagram on the furnace door for future reference.

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