

# INSTALLATION INSTRUCTIONS

## Indoor Air Handlers with Blower Relay (GB3) - Variable Speed Conversion Kit

### DESCRIPTION

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit. When performing brazing operations have a fire extinguisher readily available and use a quenching cloth and brazing shield.

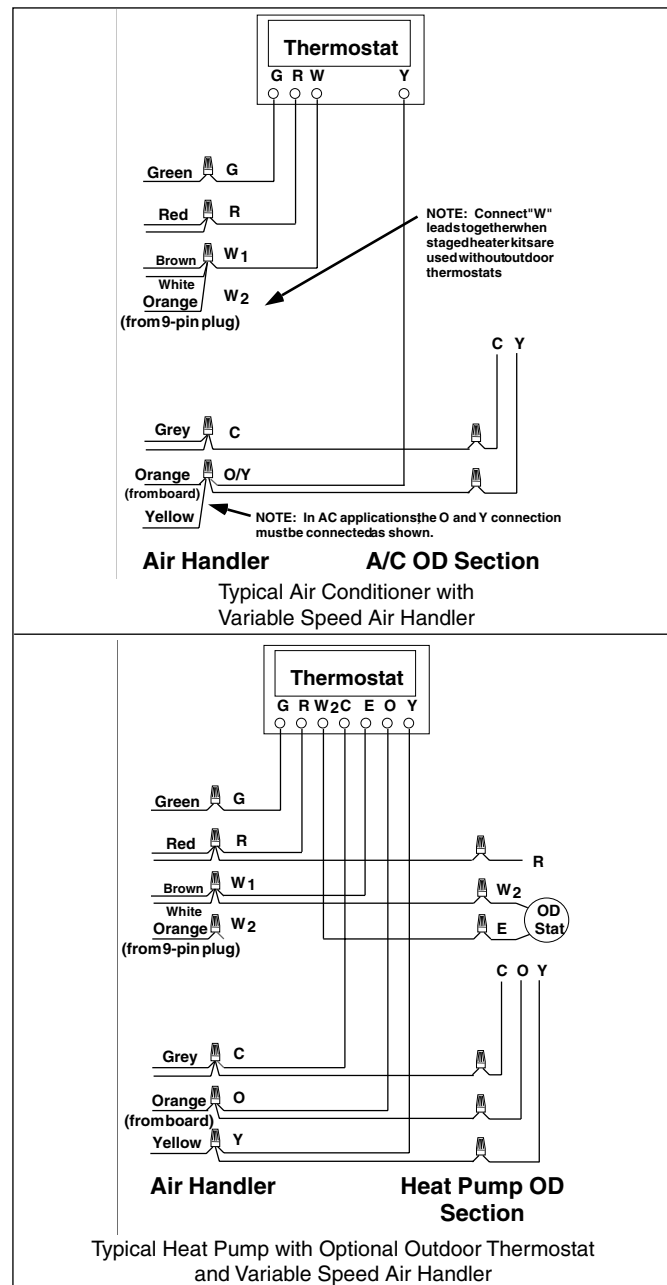
Improper installation, service, adjustment, or maintenance can cause fire, electrical shock or other conditions which may result in personal injury or property damage. Unless otherwise noted in these instructions, only factory authorized kits or accessories may be used when modifying this product.

### INTRODUCTION

These instructions are for the installation of a Variable Speed Conversion Kit in an air handler with blower relay, manufactured after August 1999. Refer to the Air Handler Installation Instructions for details necessary for the proper set-up of the unit. A copy is included with this kit.

### INSTALLATION (Air Handlers with Blower Relay) GB3

1. Parts packages "GB3" and "common parts" will be required to complete this conversion.
2. Remove and discard strain-relief bushing from the blower deck.
3. Disconnect and pull blower motor wires back through the blower deck.
4. Remove blower.
5. Remove green wire from spade terminal of the blower relay and discard.
6. Attach the variable speed circuit board and bracket to the rail of the blower assembly with the 2 screws provided.
7. Install variable speed blower.
8. Connect the 6 low voltage wires from the low voltage wire harness supplied with the kit to the variable speed blower board as shown in the wiring diagram. See Figure 2.
9. Cut the white 6-pin plug from the low voltage wire harness that was just connected to the variable speed blower board.
10. Route wires through hole in blower deck.  
Note: If the unit has or will have a heater kit installed, move to step 13.
11. Connect the 3-wire (black, white and green) plug supplied with parts package to the mating connection on the motor.  
Note: Make sure ground wire is attached to the blower housing assembly with screw provided in parts package.
12. This step required for units without heater kits. Separate the black and white wires coming directly from the motor. Cut the terminals off and strip the ends of the black and white wires. Connect them to the power leads as shown in the wiring diagram. Secure with wire nuts. See Figure 2.



**Figure 1. Typical Air Conditioning and Heat Pump System Connections**

13. On air handler units that have or will have an electric heater kit installed, separate the black and white wires coming directly from the blower motor. Attach the white motor wire to the open terminal on the circuit breaker or terminal strip on the same pole as the red wires. Connect the black wire to the open terminal on the circuit breaker or terminal strip on the same pole as the black wires.
14. Route the low voltage wires from the harness through the bushing located in the top of the electrical panel along with the existing thermostat leads.
15. Connect the thermostat wiring as shown in Figure 1.
16. Attach wiring diagram (710288) supplied with parts package to the front of the blower housing.

## Motor Settings

### B-Cabinet

CFM	Switc Number			
	1	2	3	4
720	0	0	0	1
800	0	0	0	0
860	1	0	0	1
885	0	0	1	0
960	1	0	0	0
1060	1	0	1	0
1125	0	1	0	1
1185	1	1	0	1
1250	0	1	0	0
1315	1	1	0	0
1375	0	1	1	0
1450	1	1	1	0

### C-Cabinet

CFM	Switc Number			
	1	2	3	4
1075	0	0	0	1
1140	1	0	0	1
1225	0	0	0	0
1300	1	0	0	0
1380	0	0	1	0
1465	1	0	1	0
1555	0	1	0	1
1665	1	1	0	1
1775	0	1	0	0
1900	1	1	0	0
2000	0	1	1	0
2150	1	1	1	0

NOTE: 1 = ON, 0 = OFF

## WIRING DIAGRAM

### Variable Speed Air Handler (Converted from Standard Air Handler)

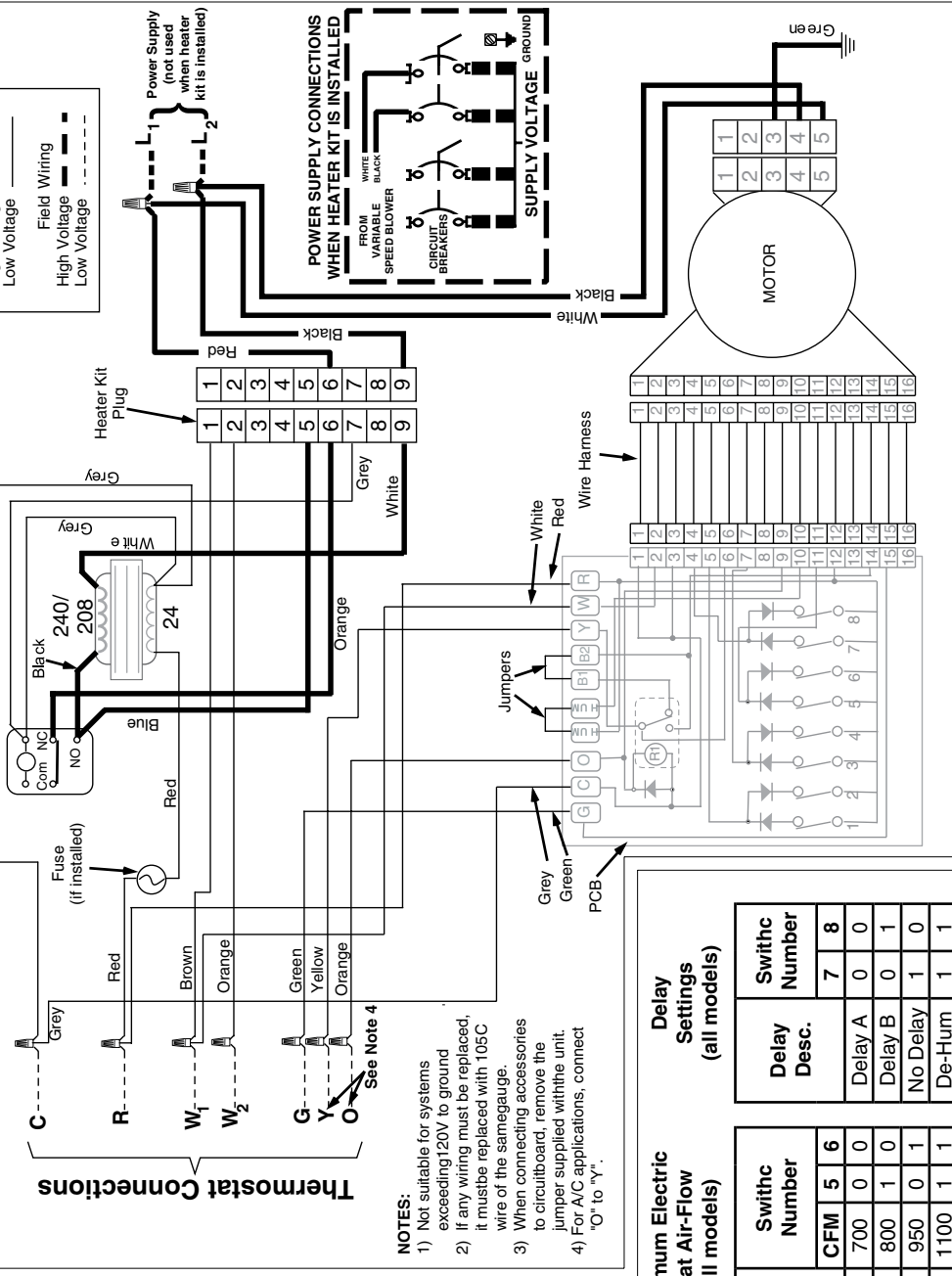


Figure 2. Variable Speed Air Handler Wiring Diagram.

**INSTALLER: PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER.**

