

Installation Instructions

Indoor Air Handlers with Control Board (B3, PAH) - 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 control board, 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 Control Board) B3, PAH

1. Parts packages "B3/PAH" 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. Attach the variable speed circuit board and bracket to the rail of the blower assembly with the 2 screws provided.
6. Install variable speed blower.
7. Plug the 6 pin low voltage wiring harness supplied with parts package to the connector on the air handler control board located behind the terminal strip. Note: The plug will only attach in one direction.
8. Route low voltage wires through the hole in the blower deck.
9. Connect the low voltage wires to the variable speed blower board as shown in the wiring diagram. See **Figure 2**.
10. 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.

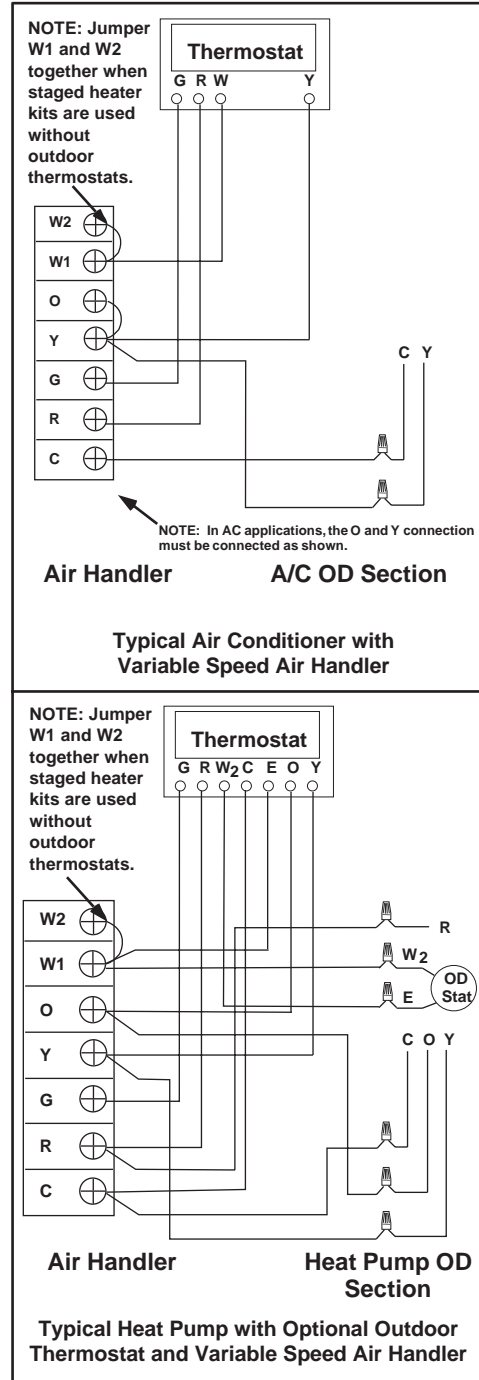


Figure 1. Typical Air Conditioning and Heat Pump System Connections

11. Route black and white wire through the hole in the blower deck. Install the new strain relief bushing supplied in common parts package.
12. Connect the black and white wire to the air handler control board as shown in the wiring diagram. See **Figure 2**.
13. Connect the thermostat wiring as shown in **Figure 1**.
14. Attach wiring diagram (7102720) supplied with parts package to the front of the blower housing.

Motor Settings

B-Cabinet

CFM	Switch 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

NOTE: 1 = ON, 0 = OFF

Minimum Electric Heat Air-Flow (all models)

Nom. KW	Switch Number	
	CFM	5/6
0-5	700	0 0
6-10	800	1 0
11-15	950	0 1
16-20	1100	1 1

Delay Settings (all models)

Delay Desc.	Switch Number	
	7	8
Delay A	0	0
Delay B	0	1
No Delay	1	0
De-Hum	1	1

C-Cabinet

CFM	Switch 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

WIRING DIAGRAM

Variable Speed Air Handler

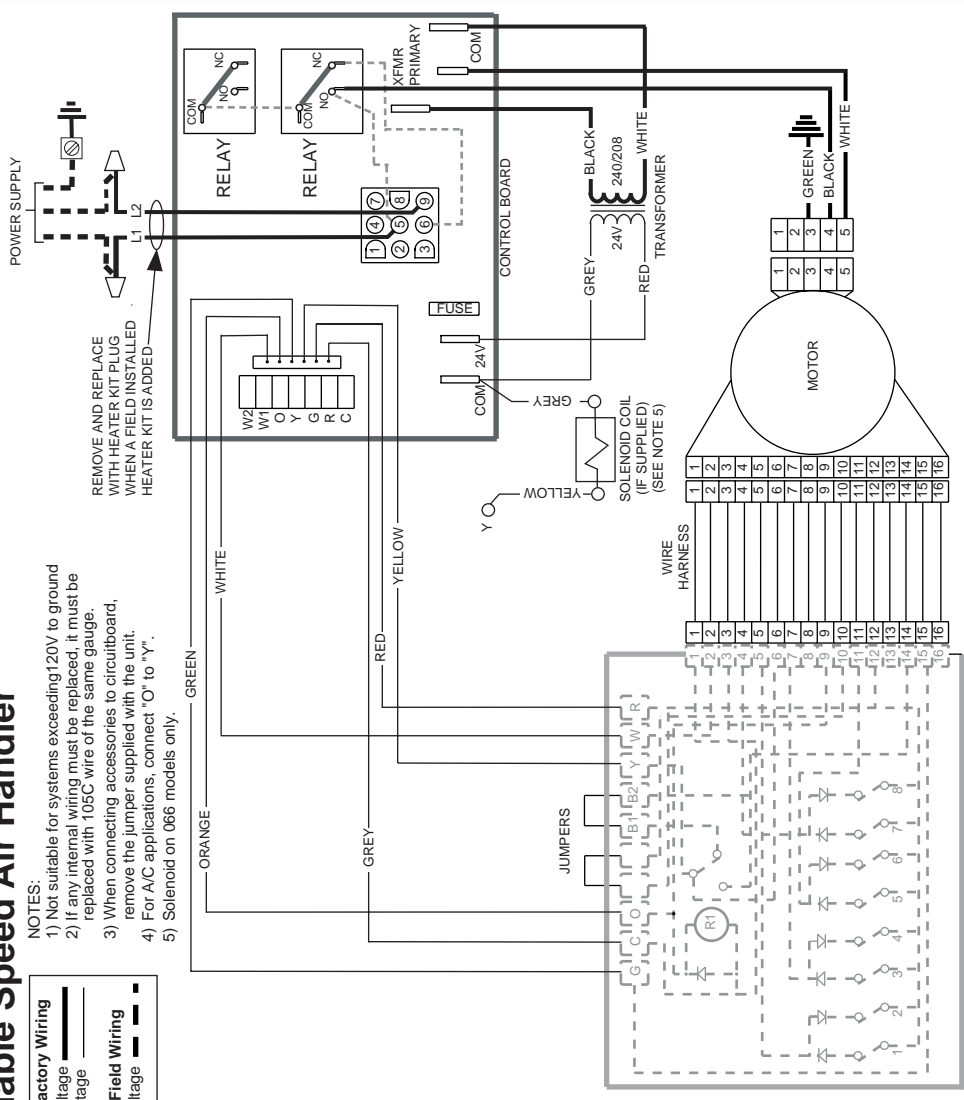


Figure 2. Variable Speed Air Handler with Control Board Wiring Diagram

INSTALLER: PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER.