

# Installation Instructions

## Indoor Air Handlers - 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. 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

1. Disconnect and pull blower motor wires back through the blower deck.
2. Remove blower.
3. Attach the variable speed circuit board and bracket to the rail of the blower assembly with the 2 screws provided.
4. Install variable speed blower.
5. Plug the 8 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.
6. Route low voltage wires through the hole in the blower deck.
7. Connect the low voltage wires to the variable speed blower board as shown in the wiring diagram. See **Figure 2**.
8. 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.
9. Route black and white wire through the hole in the blower deck.

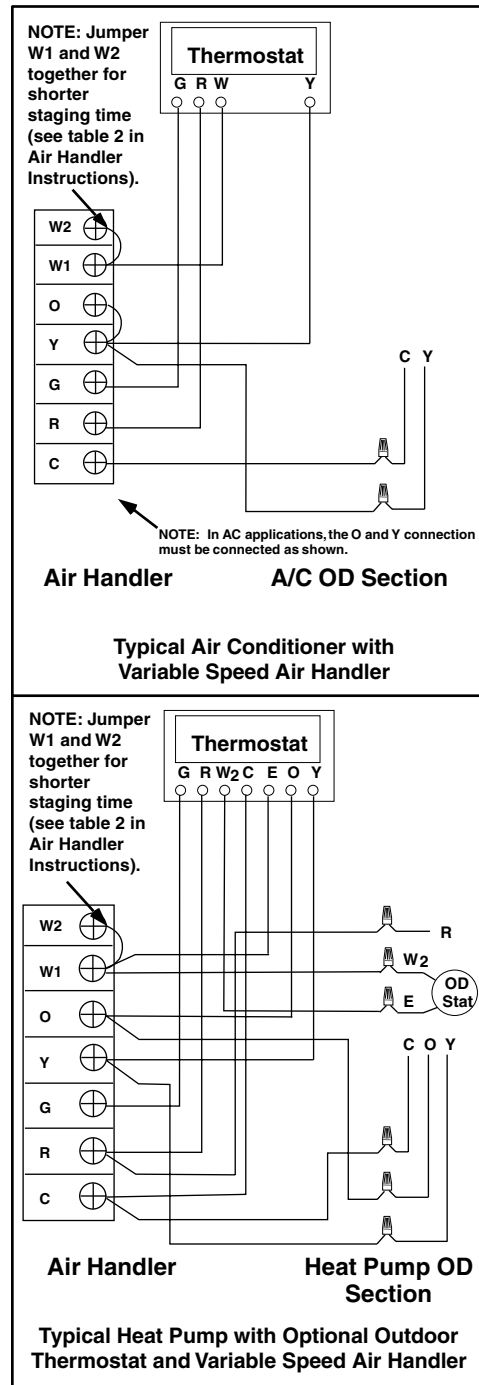


Figure 1. Typical Air Conditioning and Heat Pump System Connections

10. Connect the black and white wire to the air handler control board as shown in the wiring diagram. See **Figure 2**.
11. Connect the thermostat wiring as shown in **Figure 1**.
12. Attach wiring diagram (7105440) supplied with parts package to the front of the blower housing.

# Motor Settings

## 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

**NOTE:** 1 = ON  
0 = OFF

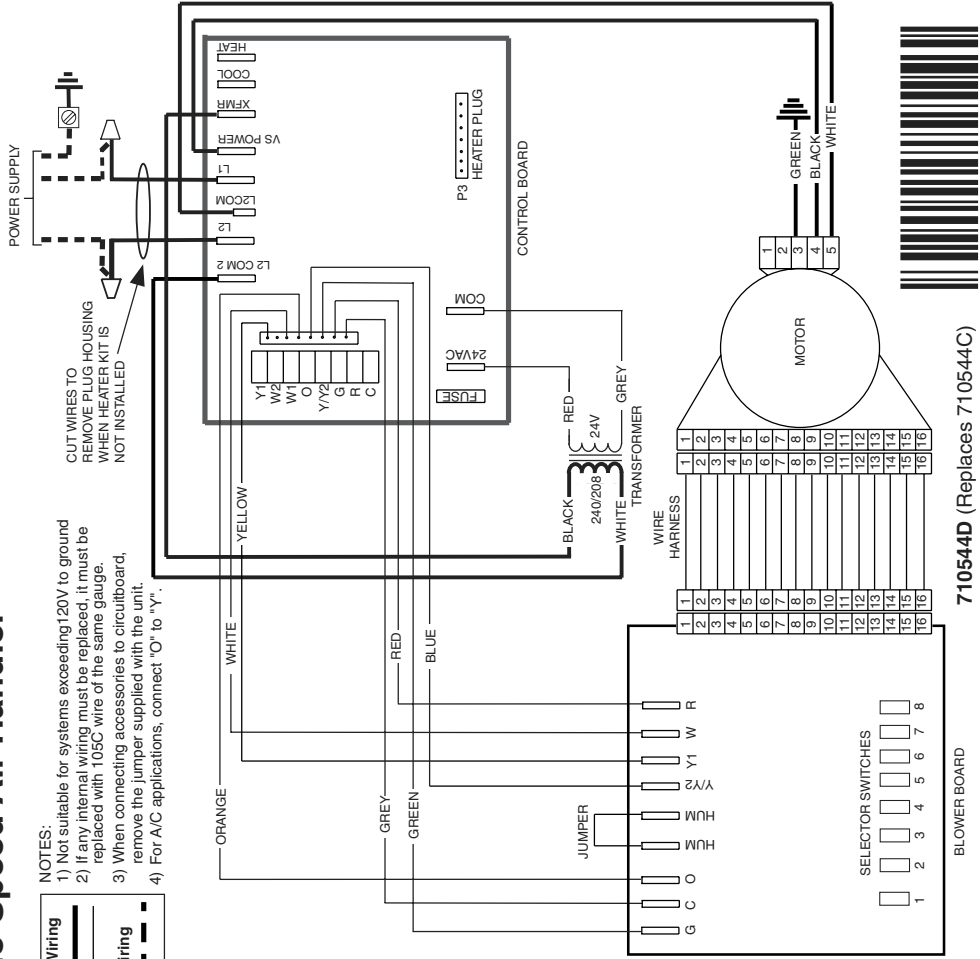
# WIRING DIAGRAM

## Variable Speed Air Handler

**Factory Wiring**  
High Voltage ———  
Low Voltage - - - - -

**Field Wiring**  
High Voltage - - - - -  
Low Voltage ———

- NOTES:**
- 1) Not suitable for systems exceeding 120V to ground
  - 2) If any internal wiring must be replaced, it must be replaced with 105C wire of the same gauge.
  - 3) When connecting accessories to circuitboard, remove the jumper supplied with the unit.
  - 4) For A/C applications, connect "O" to "Y".



A-Cabinet	CFM			Switch Number	
	B-Cabinet	C-Cabinet	4		
540	720	1075	0	0	1
600	800	1225	0	0	0
660	880	1380	0	0	1
715	850	1135	1	0	1
790	945	1295	1	0	0
870	1040	1460	1	0	1
915	1085	1525	0	1	0
955	1140	1625	1	1	0
1015	1205	1740	0	1	0
1060	1325	1960	0	1	1
1075	1265	1860	1	1	0
1165	1390	2090	1	1	1

### Minimum Electric Heat Air-Flow

Nom. KW	CFM		Switch Number
	A-Cabinet	B-Cabinet   C-Cabinet	
0-5	700	-	5
0-9	-	700	0
6-9	800	-	1
6-10	-	800	1
10-14	950	-	0
10-14	-	950	1
11-15	-	950	0
15	1100	-	1
15-20	-	1100	0
16-20	-	1100	1
21-30	-	1500	1

(Modular blower supports 20kW heat max.)

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

Specifications & illustrations subject to change without notice or incurring obligations (05/15).  
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708544A (Replaces 7085440)



Figure 2. Variable Speed Air Handler Wiring Diagram