

**INSTALLATION INSTRUCTIONS**  
**88-1008/1208-34A**  
**BLOWER PKG 88-1008-/1208**  
**FOR MFD. HSG. ELECTRIC FURNACES SERIES**  
**INTERTHERM FEH2/FEHB/FEBA/FEBB/E1EH/E1EB, AND COLEMAN 3400/3400A/3500/EBxxA**

**INTRODUCTION:**

These conversion Blower packages are designed for converting Manufactured Housing Electric Furnaces for cooling. When using these blower packages, the furnace is ready for split system air conditioning.

Package consists of one carton that contains the 220 volt blower assembly with a control box wired for either 2 wire or 4 wire controls together with proper electrical harness and required adapter plates for Interttherm Series and Coleman Series furnaces. Model Nos. for blower packages are 88-1008/1208-34 for 4 wire and 88-1008/1208-32 for 2 wire.

**WARNING: DANGER OF PROPERTY DAMAGE, BODILY INJURY OR DEATH**

FOR SAFE OPERATION, IT IS THE RESPONSIBILITY OF THE INSTALLER TO ASSURE THAT THIS PACKAGE IS INSTALLED IN ACCORDANCE WITH THE FURNACES MANUFACTURER'S RECOMMENDATIONS, LOCAL CODES, GOOD TRADE PRACTICES AND THESE INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN DAMAGE OR INJURY FROM HAZARDS SUCH AS FIRE, SMOKE, SOOT, ELECTRIC SHOCK OR CARBON MONOXIDE.

**INSTALLATION:**

1. Turn the wall thermostat to its lowest setting. Allow the furnace to shut off completely. Turn off the electrical circuits to the furnace at the main circuit box. **CAUTION: FURNACE MAY BE CONNECTED TO MORE THAN ONE POWER SUPPLY. DO NOT USE FACTORY BREAKER AS A DISCONNECT.**
2. Remove the furnace door.
3. Pull out furnace safety disconnect from control panel cover where applicable.
4. Disconnect the multi point motor plug from furnace control panel.
5. Remove attaching screws that attach existing blower to furnace. Slide blower forward and remove from furnace.
6. Current Interttherm electric furnace do not have insulation liners in furnace and current Coleman electric furnaces do not have insulation liner or coil support shelf in furnace. The Interttherm FEH2 furnaces will require Insulation Kit (Mortex #99-9105-00) to prevent condensation when air conditioning is added. Interttherm E1EH will require Insulation Kit (Mortex 99-9101) to prevent condensation. Coleman 3400A/3500 and EB furnaces will require Coil Support/Insulation Kit (Mortex #99-9106-00) to complete installation and to prevent condensation when air conditioning is added. See installation instruction with these kits. All electric furnaces require drain traps (Mortex #99-9107).
7. Remove the new cooling blower from carton and check for damage after removing from carton. If any damage is visible, do not install; notify carrier. NOTE: Control box is in carton loose with only motor leads attaching it to blower.
8. It will be necessary to select proper motor speed before attaching blower control box (E) to control box base with (2) attaching screws provided. The control box as received will have low speed lead (red) from blower motor connected to heating terminal #5 on blower relay and high speed lead (black) connected to cooling terminal #2 on relay. Change these blower leads to the appropriate setting as indicated on the Blower Speed Selection Chart on the OPERATION INSTRUCTIONS on wiring diagram. Determine furnace capacity from the name plate on the furnace and connect cooling speed for the particular capacity of the condensing unit installed. Blue jumper lead is provided to install between heating terminal #5 and cooling terminal #2 on blower relay if and only if heating and cooling speed are the same. IT IS IMPORTANT THAT PROPER SPEED IS USED FOR THE PROPER HEATING AND COOLING OPERATION.
9. Install cooling blower in the same manner as heating blower that was removed. Three adapter plates are provided; one for Interttherm FEH2; another for Coleman 3400/3400A/3500; and another for Interttherm E1EH/B. When attaching adapter plate to blower assembly, always place side flange in adapter plate outside of blower housing sides and end flange on adapter plate inside of blower housing wrapper sheet. Interttherm FEH2 furnaces use Adapter Plate (Mortex #90-9245-00). Interttherm E1EH/B furnaces use adapter plate (Mortex #90-9240B) Coleman 3400/3400A furnace uses Adapter

Plate (Mortex #90-9243-00). Coleman 3500/EB furnace uses Adapter Plate (Mortex #90-9243-00) as well as Adapter Plate Angle (Mortex #90-9238-00). ARRANGEMENT OF CONTROL BOX BASE, ADAPTER PLATE AND WIRING DIAGRAM ON BLOWER HOUSING WILL DIFFER WITH MAKE AND MODEL FURNACE. SEE FIG. 1 BELOW FOR DETAILS.

10. Install the blower assembly into furnace and secure adapter plate to furnace with the two screws furnished. Because adhesive backed wiring diagram is shipped loose, it will be necessary to attach diagram to blower housing in a position to be visible when furnace door is removed. See Fig. 1 for proper location.
11. Connect the multi point plug [12 point on Inter. FEH2 Furnace Harness (Mortex #9209) or for ELEH/B use FEH2 Harness (Mortex #9209) and ELEH Harness (Mortex WP1EFP01) or 15 point on Cole. 3400/3400A/3500/EB (Mortex #9211).] Be sure and install the wire tie furnished to secure harness to one leg of motor mount. MAKE SURE ALL PINS MAKE PROPER CONNECTIONS AND DID NOT DISPLACE ONE OR ANOTHER.
12. REVIEW THE OPERATING INSTRUCTIONS AND WIRING DIAGRAM.
13. Referring to wiring diagrams on blower housing, on furnace, and on condensing unit, connect low voltage connections on blower control box, low voltage connections on furnace control panel as well as on condensing unit and thermostat. Blowers with a 4 wire controls requires a 4 wire Heat/Cool thermostat (Mortex #99-4065-00) to be connected per diagram. Blowers with 2 wire controls use existing heating only thermostat connected per diagram. On the Coleman 3400/3400A/3500 furnace it is necessary to disconnect the leads from the thermostat to red and white leads on furnace and reconnect to red and white leads on blower control box. Tape or protect unused wires.
14. Heating transformers on all current Coleman and Intertherm, Electric furnaces are not rated for air conditioning and must be replaced by a 40VA Transformer (Mortex #90-9076-00).
15. Fill in data on the Furnace Air Conditioning Accessory Label provided (use a ball point pen) listing all model numbers and certification authorities. Install this label in furnace vestibule. THE HUD REQUIREMENTS ARE NOT MET UNLESS THE DATA IS ENTERED AND THE LABEL IS ATTACHED TO FURNACE SHOWING CERTIFICATION AUTHORITY FOR THE APPROVALS OF BLOWER AND COILS.
16. Check all connections for tightness. Close furnace control panel door, and reinsert safety disconnect. Turn the thermostat to LOW or OFF position. On 4 wire installation set thermostat to either HEAT or COOL position. On 2 wire installation turn furnace system switch on blower control box to either HEAT or COOL position. Turn furnace system on furnace switch to ON or HEAT position and reenergize power to unit. Replace the furnace door.
17. A filter is recommended to prevent dirt, lint, and dust from plugging the evaporator coil. This is available as an optional Filter (Mortex #95-1741-00) for use with Mortex coils installed on Intertherm Furnaces. Filter that is furnished with Coleman 3400/3400A/3500/EB furnace is normally adequate.

**WARNING: THE USE OF COMPONENTS NOT TESTED IN COMBINATION WITH SPECIFIC MAKES AND MODEL FURNACES MAY MAKE THE EQUIPMENT IN VIOLATION OF STATE CODES, MAY CREATE A HAZARD AND MAY RUIN THE EQUIPMENT. IN ADDITION, THE NATIONAL MOBILE HOME CONSTRUCTION AND SAFETY STANDARDS ACT AND ITS REGULATIONS REQUIRE THE USE OF COMPONENTS TESTED OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY IN ALL MANUFACTURED HOMES CONSTRUCTED OR SOLD SUBJECT TO THAT ACT.**

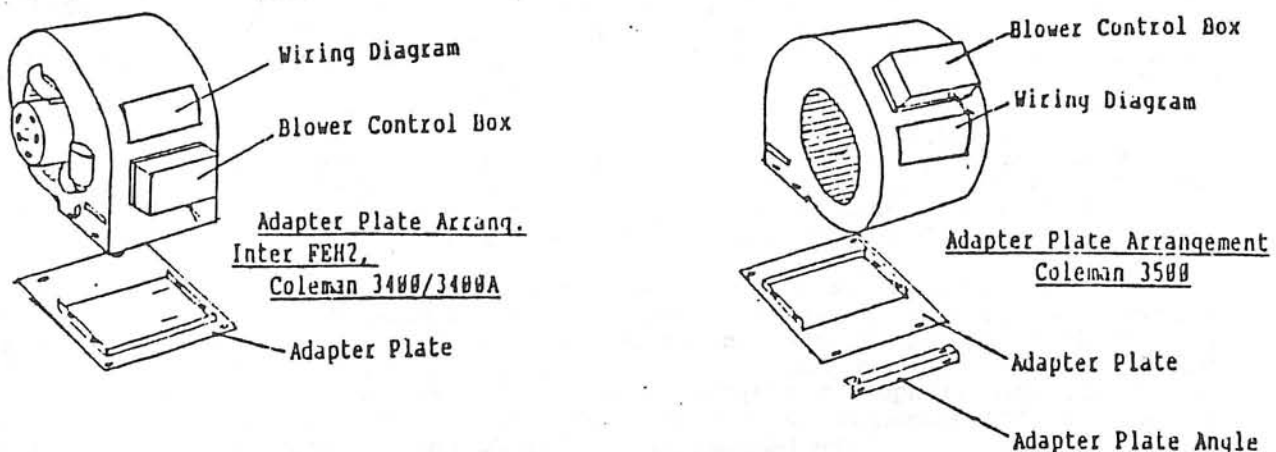


Figure 1

## OPERATION INSTRUCTIONS:

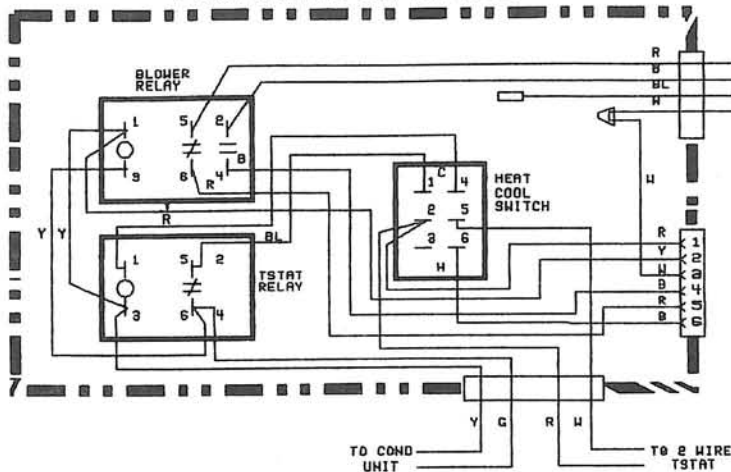
A. BLOWER IS SUPPLIED WITH HEATING TERMINAL #5 ON BLOWER RELAY CONNECTED TO LOW SPEED MOTOR LEAD (RED) AND COOLING TERMINAL #2 TO HIGH SPEED MOTOR LEAD (BLACK). CHANGE MOTOR LEADS TO PROVIDE PROPER BLOWER SPEED FOR FURNACE AND COIL CAPACITIES AS RECOMMENDED IN BLOWER SPEED SELECTION CHART. WHEN HEATING AND COOLING SPEEDS ARE THE SAME, CONNECT #5 AND #2 TERMINALS.

B. IT IS RECOMMENDED THAT A FILTER BE USED TO PREVENT LINT, AND DUST FROM PLUGGING THE COIL.

C. CHECK FOR CORRECT BLOWER OPERATION ON BOTH HEATING AND COOLING.

88-1008/1200-32A

2 WIRE CONTROL BOX (89-2103)



## BLOWER SPEED SELECTION CHART

FURNACE KW RATING	HEATING SPEED	COIL CAPACITY COOLING SPEED		
		24,000	30/36,000	42/48,000
88-1008				
10-12	LO	LO	MED	HI
15-18	MED	LO	MED	HI
20-23	MED	LO	MED	HI
88-1200				
10-12	LO	LO	MED	HI
15-18	MED	LO	MED	HI
20-23	MED	LO	MED	HI

BLOWER PACKAGE  
ELECTRIC FURNACE

COLE 9400  
9500 EB  
FURN HARN  
(89-9211)

INTER FEH2  
FURN HARN  
(98-9209)

INTER E1EH/B  
FURN HARN  
(WPIEFP01)

MORTEX

98-9217B

## OPERATION INSTRUCTIONS:

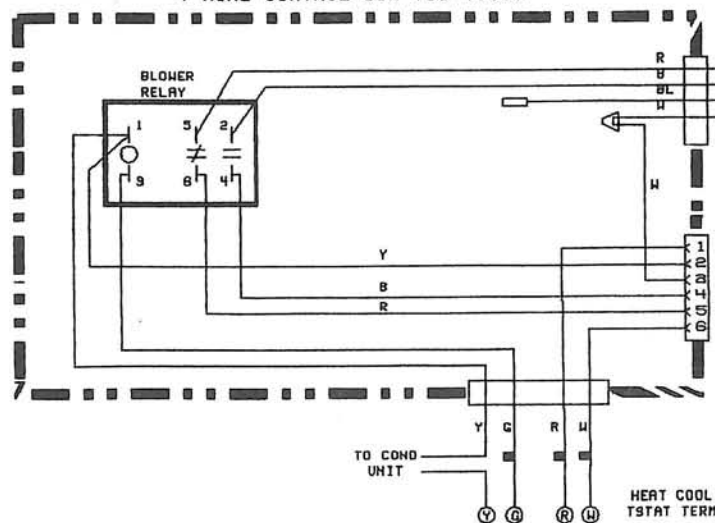
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B. IT IS RECOMMENDED THAT A FILTER BE USED TO PREVENT LINT, AND DUST FROM PLUGGING THE COIL.

C. CHECK FOR CORRECT BLOWER OPERATION ON BOTH HEATING AND COOLING.

88-1008/1200-34A

4 WIRE CONTROL BOX (89-4103)



## BLOWER SPEED SELECTION CHART

FURNACE KW RATING	HEATING SPEED	COIL CAPACITY COOLING SPEED		
		24,000	30/36,000	42/48,000
88-1008				
10-12	LO	LO	MED	HI
15-18	MED	LO	MED	HI
20-23	MED	LO	MED	HI
88-1200				
10-12	LO	LO	MED	HI
15-18	MED	LO	MED	HI
20-23	MED	LO	MED	HI

BLOWER PACKAGE  
ELECTRIC FURNACE

COLE 9400  
9500 EB  
FURN HARN  
(89-9211)

INTER FEH2  
FURN HARN  
(98-9209)

INTER E1EH/B  
FURN HARN  
(WPIEFP01)

MORTEX

98-9218B