Installation Instructions

Defrost Board Replacement Kit

These instructions are for replacement of the current ICM defrost board with the new UTEC defrost board.
WARNING: This type of equipment service is to be conducted only by qualified personnel .

The new UT defrost board is different from the current ICM board as indicated below:

1. The UT board is smaller.
2. The UT board has two mounting plastic stand offs and three supporting plastic feet.
3. The UT board has push-on quick connect terminals for thermostat connections.
4. Color coded wires and wire nuts are supplied with the board for field connection to thermostat.

Installation and Connections :

1. Disconnect all power to the unit.
2. Remove the control panel cover to access electrical components.
3. Remove factory wiring and thermostat wiring at the current defrost board.
4. Remove the board by snipping the four plastic stand offs and pull the board out. (Some split system boards have a screw terminal block and may require some manipulation to remove without having to disassemble any components).
5. Install the UT board in the same location, mounting the two plastic stand offs in two of the four existing holes. Board must be secured in place and positioned so that field terminals connecting to the thermostat are located within the low voltage barrier. No additional holes should be drilled. See Figure 1.
6. Replace all factory wiring to the new board . Refer to unit wiring diagram. (See note below).
7. Connect the six wires (supplied with the kit) to the appropriate quick connect terminals, observing proper color coding. See Figure 1.
8. Connect the stripped part of the six wires to the thermostat wires and secure with wire nuts (included).
9. Check that all connections are secure and tight.
10. Replace removed cover and restore power to unit.
11. Test board for intended functions.

Note: If old board has two "R" and "O" terminals, use the supplied terminal "wye" adapter as needed.

TESTING THE BOARD

Defrost Test Procedure

1. Terminals "R"-"C" must have 18-30v present between them in order for time delay and defrost sequences to be initiated.

2. With compressor running in heat mode, first jump the "T2"-"DFT" test pins. This will indicate to board that defrost T-stat is closed. Defrost T-stat closes at 32°, opens at 68°.

3. Next jump the "Test" pin to "C" on terminal strip. This will initiate defrost test in 5, 10 or 15 seconds (This is determined by 30, 60 or 90 minutes defrost pin settings). Factory setting will be 30 minutes.

4. When the reversing valve shifts to the defrost mode, quickly remove jumper from "Test"-"C". If the jumper is not removed within a 5 second period, the defrost test will terminate. Unit will continue to stay in defrost mode Until :
   A) Board recognizes that defrost sensor has reached 68° and opened or
   B) "T2"-"DFT" jumper is removed or
   C) 10 minutes have elapsed (board override)

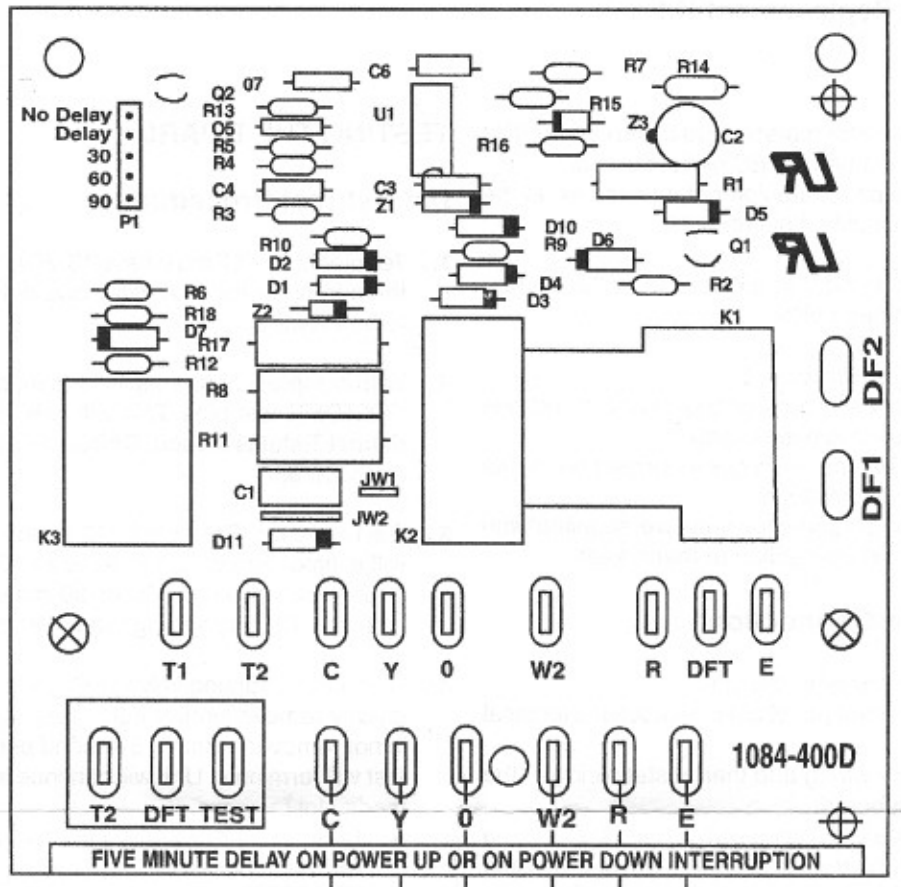
If the above steps will not initiate a defrost, replace the defrost board.

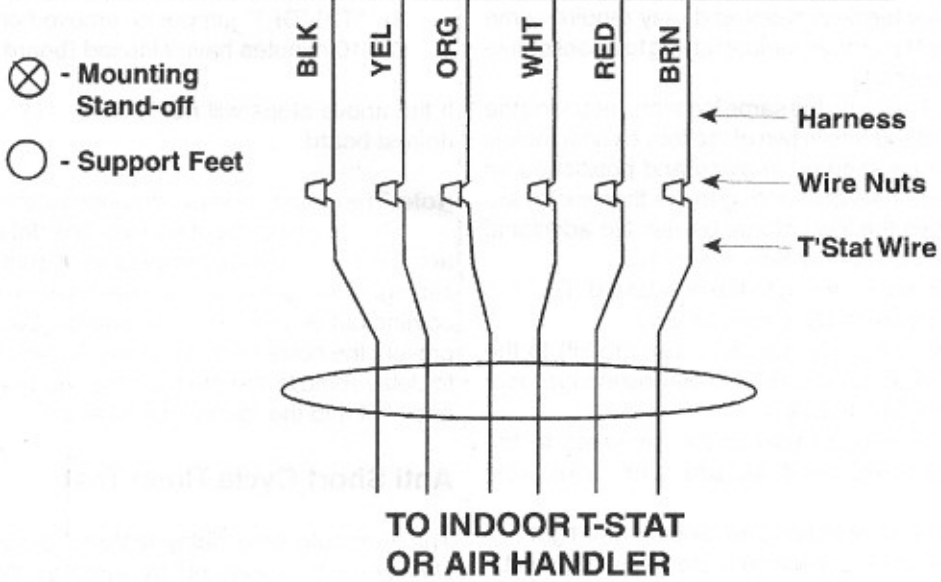
Note: The delay/no-delay pin concerns compressor operation when coming out of defrost. The default setting is no delay. Reciprocating compressors should always use this setting. Scroll compressors that have noise issues while coming out of defrost should use the 30 second delay to prevent the noise from occurring. To switch from no-delay to delay remove the pin from the "no-delay" pin location and shift it to the "delay" pin location.

Anti Short Cycle Timer Test

The 5 minute time delay feature can be bypassed or shortened to 1 second by jumping the "Test" to "C" terminal.

Note: If jumper is left on the "Test" to "common" pins permanently, the defrost cycle will become inoperable.


No Delay
Delay
30
60
90
P1
Q2
Q7
R13
Q5
R5
R4
C4
R3
C6
U1
C3
Z1
R7
R14
R15
Z3
C2
R16
R1
D5
D10
R9
D6
Q1
R2
D4
D3
R10
D2
D1
Z2
R6
R18
D7
R17
R12
R8
R11
C1
JW1
JW2
D11
K3
K2
K1
DF2
DF1
T1
T2
C
Y
0
W2
R
DFT
E
T2
DFT
TEST
C
Y
0
W2
R
E
1084-400D
FIVE MINUTE DELAY ON POWER UP OR ON POWER DOWN INTERRUPTION


BLK
YEL
ORG
WHT
RED
BRN
- Mounting Stand-off
- Support Feet
Harness
Wire Nuts
T'Stat Wire
TO INDOOR T-STAT
OR AIR HANDLER

Split System Heat Pump

INSTALLATION INSTRUCTIONS

Drip Hood Kit 1.5 - 5.0 ton HP

INTRODUCTION

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit. Improper installation, service, adjustment, or maintenance can cause explosion, fire, electrical shock, or other conditions which may result in personal injury or property damage.

The drip hood kit is designed for use in split system heat pump products. The kit consists of a sheet metal bracket and a screw for mounting. The kit is intended to prevent condensate from dripping onto the control board.

INSTALLATION SEQUENCE

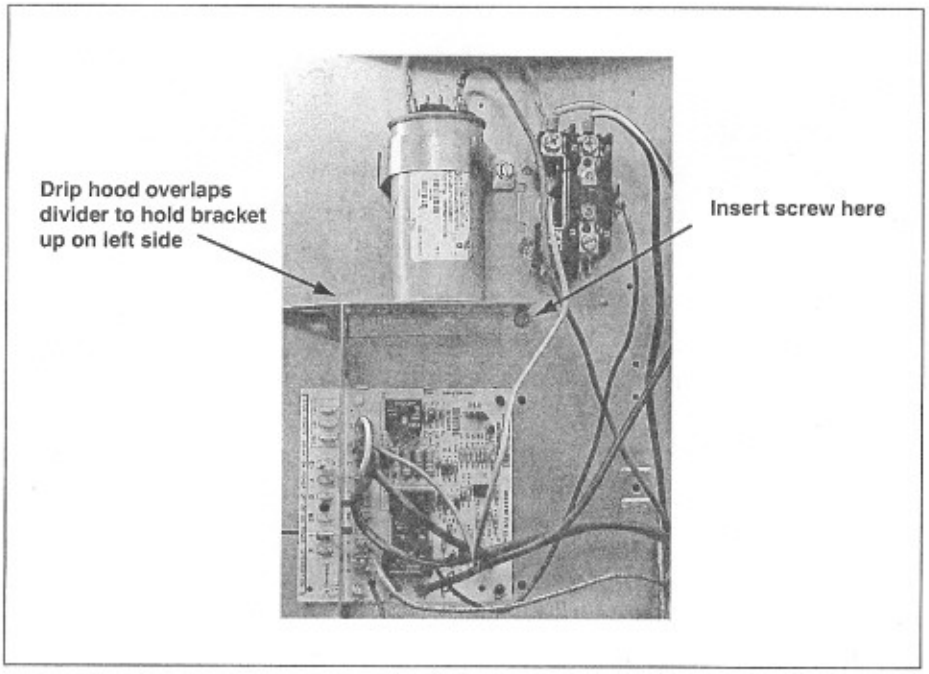
⚠ WARNING!

To avoid risk of electric shock, personal injury, or death, disconnect electrical power to the unit before performing any maintenance or service. The unit may have more than one electric power supply.

See the manufacturer's instructions for more installation information.

The installation sequence is as follows:

1. Read these installation instructions completely before proceeding.
2. Disconnect all power to the unit.
3. **Remove access panel from unit:** This will expose the electrical components for the condenser.
4. **Install drip hood:** Using the screw provided and the existing hole in the control panel attach the drip hood to the control panel. See figure below.
5. Install the access panel and apply power to the unit. The system is now ready for operation.



Driphood Installation Location

Printed in U.S.A. (03/05)