

REPAIR PART INSTALLATION MANUAL

HEAT PUMP COMMUNICATING CONTROL REPAIR KIT (S1-33102957000)

MODELS YZB, YZE, YZH, HL5, HC5, HL8, HC8

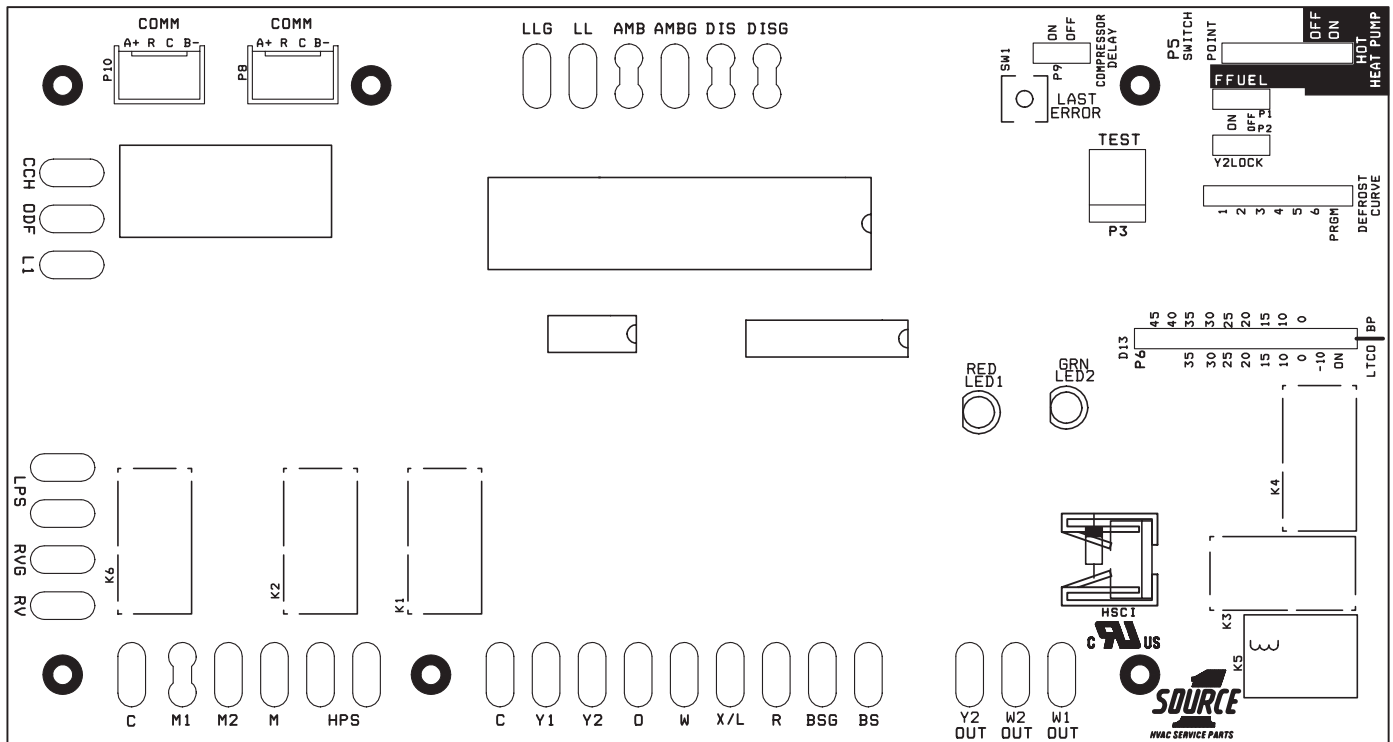


FIGURE 1: Demand Defrost Control Module

GENERAL INFORMATION

The YorkGuard VI Demand Defrost control as a replacement part for prior versions of the YorkGuard control.

CAUTION

Following the detailed instructions for modifications of both the indoor and outdoor units is critical.

NOTE: For direct replacement of YorkGuard VI, replace the control only.

Service replacement kit consists of:

- YorkGuard “VI” Defrost Control.

CONTROL CONFIGURATION FOR ALL APPLICATIONS

Most jumper settings should be set to match jumpers on board being removed.

Remove control from packaging and configure the control as follows:

1. Specify the desired Low Temperature Cut Out (LTCCO) using the jumper on the control.
2. Specify the desired Balance Point (BP) using the jumper on the control.

3. Specify appropriate defrost curve using the jumper on the control. See Table 1.

TABLE 1: Defrost Initiate Curves

Defrost Curve Selection Jumper Position	1	2	3	4
YZB/HC3B/HL3B	2 & 2.5 Ton	4 & 5 Ton	3 & 3.5 Ton	1.5 Ton
YZE/HC5B/HL5B	2 Ton	4 & 5 Ton	3 Ton	N/A
YZE03811	N/A	N/A	3 Ton	N/A

4. Verify that the Y2 LOCK jumper is set. This jumper is not applicable to a single stage compressor system.
5. Specify if the Heat Pump is installed with a fossil fuel furnace using the FFUEL jumper. The jumper should be ON for a fossil fuel furnace installation and OFF for an air handler installation.
6. Specify Switch Point jumper using the jumper on the control.
7. Verify that the HOT HEAT PUMP is set appropriately.
8. Specify compressor delay using jumper on the control. “ON” will shut-off compressor when entering and leaving defrost.

OUTDOOR UNIT MODIFICATIONS

1. Disconnect all high and 24V voltage power to the unit and the control circuit.
2. Mark and disconnect all thermostat, sensor and low voltage control connections from the YorkGuard IV control.
3. Remove the six #10 screws holding the control and remove the control.
4. Using five of the six screws removed in Step 3, mount the new board in place (omit the top middle screw).
5. Reconnect the wires removed in Step 2.

INDOOR UNIT MODIFICATIONS

NOTE: Indoor transformer should be rated for a minimum of 40VA. Replace transformer if necessary.

FOSSIL FUEL APPLICATION - The YorkGuard VI control does not require an add-on fossil fuel kit. Remove existing fossil fuel kit if present. An optional bonnet sensor may be used if desired. See "OPERATION INSTRUCTIONS - "DEMAND DEFROST CONTROL BOARD" on upgnet.com for details of functionality with and without bonnet sensor installed.

START-UP OPERATION

1. Reapply power to the unit and the control voltage circuit.
2. The LED on the defrost control will flash on and off when there is power to the control and it is working properly.
3. Verify unit operation.

For more information on control operation, refer to "OPERATION INSTRUCTIONS - "DEMAND DEFROST CONTROL BOARD" on upgnet.com.