ST-028-06

Date: November 01, 2006

To: All York Distributors
    All York Branches
    All Field Service Supervisors

Subject: Heat Pumps 12, 13 and 14 Seer - S1-03101975102 Demand Defrost Control Board

Last heating season we had several calls on the part number S1-03101975102 Demand Defrost Control board used on the 12, 13 and 14 seer heat pumps. The scenario was a “Y” call in the heat pump heating mode the pressure switch safety circuit was closed but the unit would not run. In most all cases the Demand Defrost Curve Selection Jumper was in the “P” program position. Once the jumper was moved to the proper defrost curve for that unit the board would operate normal. **Note: Once the Defrost Curve Selection Jumper is moved from the program or “P” position to a numbered position all (24VAC) power must be removed and re-applied to the board for the selection to be activated.**

The attached instruction is being added to part number S1-03101975102 board, making it a S1-33101975102 board. In the near future part number S1-33101975102 will be shipped from Source1 with instruction that explain the defrost curve selection jumper must be moved to a number selection. The instructions will also contain a table with the proper curve selection for that unit the board is being replace on.

Please refer to figure 1 below for an example of the demand defrost curve selection jumper and table 1 below for the proper curve selection number for the different units using this board.

![Figure 1](image)

**Table 1**

<table>
<thead>
<tr>
<th>Defrost Curve Selection Jumper Position</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 Seer</td>
<td>All</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>14 Seer</td>
<td>2, 3, 4 Ton</td>
<td>25, 35 Ton</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Sincerely,

Mike Bass
Field Service Supervisor

Attachment
REPAIR PART KIT INSTALLATION INSTRUCTIONS
REPLACEMENT DEMAND DEFROST CONTROL BOARD – S1-33101975102
FOR USE WITH MODELS: 12, 13 & 14 SEER HEAT PUMPS

INSTALLATION
1. Power off unit totally - 240V & 24V.
2. Carefully record positions and colors of wiring removed.
3. Remove old defrost circuit board.
4. Install replacement circuit board - utilizing same placement, mounting & screws.
5. Refer to unit Installation Manual or Table 1 below - and set the Demand Defrost Curve Selection Jumper to the proper position. For the new jumper setting to take effect - all 24V power to the board must be removed and reapplied.
6. Complete the installation and power up the unit, re-applying both 240V & 24V.

FIGURE 1: Outdoor Unit Control Box

DEFROST CURVE SELECTION
When the control board is replaced, the jumper MUST be placed in a numbered position. Select the proper jumper position from Table 1. If the jumper is missing or in the P position, the replacement control will not energize the compressor.

When the jumper position is changed, the control will not act upon the jumper changes until the thermostat calls are de-energized or power (24 VAC) to the control is cycled.

TABLE 1: Defrost Initiate Curves

<table>
<thead>
<tr>
<th>Defrost Curve Selection</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumper Position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Seer</td>
<td>2, 3, 4 Ton</td>
<td>2.5, 3.5 Ton</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>All Other Models</td>
<td>All</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

FIGURE 2: Demand Defrost Control Module

The control will display the active defrost curve using the X/L terminal when the heat pump is operating in a defrost cycle that has been forced using the TEST inputs. For instance, the X/L output will be energized with two flashes when defrost curve 2 is active. The control only reads the jumper input when the Y and W thermostat inputs are de-energized.

Subject to change without notice. Printed in U.S.A. 035-21270-001-A-0906
Copyright © by York International Corp. 2006. All rights reserved.

Unitary
Product
Group
5005
York
Drive
Norman
OK
73069
Supersedes: Nothing