VORKINTERNATIONAL CORPORATION

SERVICE INFORMATION

Unitary Products Group

DATE: January 5, 2005

YS-001-05 Expires 12/31/05

TO: All York Distribution Service Managers All York Regional Managers All York Branch Service Managers All Field Service Supervisors

SUBJECT: Simplicity control boards failure on 6.5 – 12.5 ton Packaged units

UNITS: DM,DF,DH,DR,DJ078-150

We have received a limited number of reports regarding specific failure mode with the Simplicity control boards used in the above listed units. The reports involved units built from 2003 to December of 2004.

The module failure results in a dead module with loss of cooling, including fan operation. However, firing of the burners will occur on a heat call. You will not have fan operation, causing the unit to cycle on the limit until it locks out. The failure is readily recognizable by looking at the board. Two resistors (R1 & R12) that meet at a 90 degree angle just above the "R" terminal for the thermostat wiring will overheat, discolor, and burn.

These resistors help regulate the 5 VDC power supply section of the module and when they fail, the board cannot operate. All functions are dead.

This mode of failure has brought to light a problem with the Simplicity and the heating section. The ICM is not interconnected with the Simplicity board. The W1, W2 feed go directly through the Simplicity board to the ICM. In this mode of failure, the ICM will still fire the burners but without blower operation. However, the high limit provides a failsafe that limits burner firing until a lockout occurs. The design is under review by the YORK controls group

This problem only affects the Texas Instruments Simplicity board, 031-01934-000. The Utec version of this board, 031-01934-002, does not have these resistors. The resistors are intended to protect the voltage regulator, but appear to instead amplify another problem.

Texas Instruments and the York Control Group have been unable to determine the root cause of the failure. TI thinks it is related to "noise" or a ground issue. So far the problem has not been duplicated in the lab. Without being able to duplicate the cause of the failure, a solution cannot be found. We do know that because of the design differences in the Utec and the TI boards, the Utec board will solve the problem.

Source 1 has quarantined all of the TI boards and is only shipping the Utec as a Source 1 replacement. The balance of Norman products using the TI board will be switched over to the Utec as soon as the Utec boards become available for production. All production should be changed over by the end of 2004.

The issue is very low volume occurrence and as such, is only a fix on fail. The 6.5 through 12.5 ton packaged products are the only ones using this specific TI board. All other Simplicity units have Utec boards installed in production.

York will allow 1 hour at standard warranty labor rates to replace a TI Simplicity board that fails in this manner. Coverage is for the board and labor. File a standard warranty claim and reference this service letter.

Texas Instruments: Utec

031-01934-000 031-01934-002

We sincerely apologize for any problems this may have caused.

Len Renfro Len Renfro Field Service Supervisor *Ron Rayburn* Ron Rayburn Director, Controls Engineering



