

Unitary Products Group 5005 York Drive Norman, OK 73069 1/877-874-7378 TECHNICAL SERVICE

YS-061-07

**Date**: October 24, 2007

**To:** All York Distributors

All York Branches

All Field Service Supervisors

Subject: OD ECM motor wiring

**Units:** B\*HX024-60

The outdoor motor used on the units listed is an X-13/ECM type. The X13 ECM is set to run at a programmed rpm based on constant torque. The ECM unit is comprised of a control head and direct current (DC) 3 phase motor. Being a 3 phase motor it does not require a run capacitor to operate. These outdoor motors are programmed to run either 900 or 1100 RPM.

The capacitor used on the unit is the standard dual capacitor (fan and herm) used on all the Champion units. The "fan" terminal was not supposed to be used. During production, some units were wired with the motor's brown common wire on the "fan" terminal. Wired this way the motor receives reduced voltage and runs at reduced speeds.

We had a limited number of units that were miss-wired and shipped to the field. Because the mis-wire was done by different personnel, at different times, we cannot pin down a serial number range.

If a motor running an extremely low speed (200 to 300 RPM) is experienced, check the capacitor wiring. This could be a result of a mis-wiring of the dark brown wire that connects the dual capacitor power to the outdoor motor control. There should be no connection to the fan terminal on these units. Operation at lower speeds would result in lower air flow through the outdoor coil. High head pressure and reduced cooling in the cool mode and frosting in the HP mode.

See pictures below for correct wiring:



If you encounter this wiring error, this letter will provide 1-hr labor to correct wiring. Please Reference this Service Letter number when submitting related warranty claims. Sorry for any inconvenience we have caused. Questions regarding this service letter should be addressed by your local distribution center.

Sincerely,

Ken BlakleyLen RenfroKen BlakleyLen RenfroField Service SupervisorField Service Supervisor

**Pat Gavula**Pat Gavula
Commercial Engineering