

IMPORTANT PARTS-SERVICE COMMUNICATION

TO: All Service and Parts Managers

DATE: May 19, 2003

NO: CAG - 442

SUBJECT: RHA36A2* and RHF42A2* Heat Pump Change Over Noise

There have been field reports of RHA36A2*, and RHF42A2* heat pumps with excessive noise being generated by the scroll compressor while the system is going “into” or “out of” defrost.

Amana has evaluated this issue and has defined a process to minimize the change over noise.

To reduce change over noise for RHA36A2* units installed with a CCA42FCC and a BBA36; there must be a change in the outdoor orifice from a .053 to a .055 (Aeroquip pt# B1443824 – Chatleff pt# 11076302). The charge will remain the same as the data plate rating. Our engineering test results indicate that the noise issue is virtually eliminated after making these changes.

To reduce change over noise for RHF42A2* units, there must be a change in the total charge amount. Test results have determined that increasing the charge level to obtain a 15° subcooling will provide significant noise reduction during defrost change over. To change the total charge amount, refrigerant must be added while the unit is in cooling mode.

Along with these system changes, we are also creating specifications for a timer that may be added to the defrost system. This timer will shut the compressor off for approximately 20 seconds when the system is going into a defrost cycle, and 5 seconds when the unit is coming out of defrost. This would help eliminate the scroll noise that is occurring while a system’s operating pressure is rapidly changing during defrost.

When the specifications are determined for a timer engineering will release them. Once that is complete the timer will be available through service parts, and an updated service bulletin will be released announcing the service part number.