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INSTALLATION INSTRUCTIONS

COMPRESSOR KITS (TO CONVERT FROM CFC R-502 TO HFC R-404A REFRIGERANT)

ON

AURORA 10,000 AND 10,000 PLUS COOLING UNITS

Bristol has discontinued manufacturing the compressor supplied on all R-502 above mentioned Aurora models. Listed below are the compressor kits part numbers that will replace the Bristol compressors. These kits will consist of all major components and instructions necessary to convert your Aurora 10,000 and 10,000 Plus Cooling Units to R-404A refrigerant. Read and understand these instructions thoroughly before installing these kits. Retain these instructions as part of your equipment manual.

PART NO.	DESCRIPTION
569200404	Compressor Kit, 60 Hz Integral
569200403	Compressor Kit, 60 Hz Remote
569200402	Compressor Kit, 50 Hz Integral
569200401	Compressor Kit, 50 Hz Remote

FLUSHING REFRIGERATION SYSTEM

When converting CFC R-502 refrigerants (compressors utilize mineral oil) to HFC R-404A refrigerants (compressors utilize polyol ester oil), it is important that the HFC refrigeration system contain no more than 5% residual mineral oil. More than 5% may contribute to premature compressor failure and or system capacity shortfall. To ensure an adequate system flush, use one of the following procedures:



WARNING: To avoid possible fatal electrical shock or serious injury to the Installer, make sure the Cooling Unit is disconnected from the power source before attempting to install this compressor kit.

Refrigerant Reclaim Flush

1. Disconnect electrical power from the Cooling Unit.
2. Connect the suction side of the refrigerant reclaim unit to the low-side service valve on the compressor and the high-side service valve located at the receiver outlet.
3. Start the reclaim unit and pump/circulate the existing refrigerant around/through the system flushing the oil and contaminants from the system (i.e. evaporator and the condenser). Make certain that the suction valve is open throughout the flushing process and individually open each pulse valve using the DIAGNOSTICS mode. Flush the system for 3-minutes on the ice bank evaporator and 3-minutes on the Hydro-Boost evaporator. Reclaim/recycle the R-502 refrigerant.
4. Remove the old compressor, receiver, and drier from the refrigeration system.

Nitrogen Purge

1. Disconnect electrical power from the Cooling Unit.
2. Reclaim/recycle the R-502 refrigerant.
3. Remove the old compressor.
4. Connect the nitrogen to the end of the discharge line.
5. Using the DIAGNOSTICS mode, open the suction line valve and the pulse valve on the ice bank evaporator. Cover the suction outlet tube with a shop towel to capture the oil during the purge process. Turn on the nitrogen at a minimum of 60-psig and purge/flush the refrigeration system for 3-minutes minimum and/or oil stops flushing out of the suction line (i.e. condenser and the evaporator). Using the DIAGNOSTIC mode, open the suction line valve and the pulse valve on the Hydro-Boost. Cover the suction outlet tube with a shop towel to capture the oil during the purge process. Turn on the nitrogen and purge/flush the refrigeration system for 3-minutes minimum and/or oil stops flushing out of the suction line.
6. Remove the receiver and the refrigerant drier.

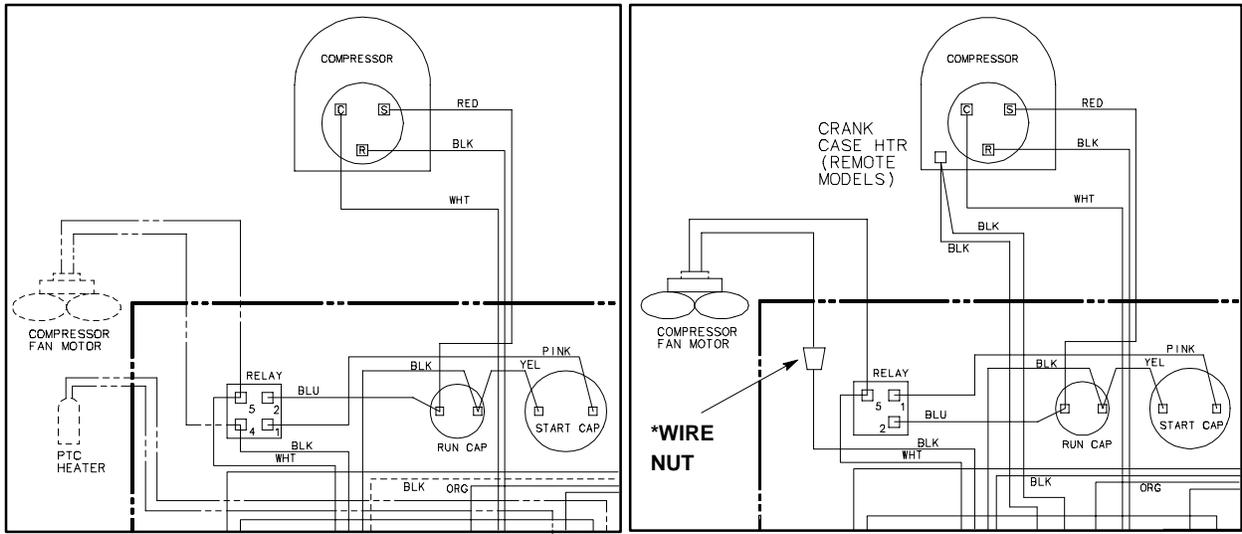
AURORA10,000 AND 10,000 PLUS COMPONENTS REPLACEMENT

IMPORTANT: The Service Person is advised that the R-404A compressor contains POE (polyol ester oil) which is very hygroscopic (absorbs moisture from the air very quickly). Once the drier, receiver, and the compressor tubing plugs have been removed, brazing *must* follow immediately. *All parts are to be installed within a 10-minute time frame.*

The Service Contractor *must* provide the copper tubing to be used for this conversion.

1. Install new Receiver: Aurora with integral condenser (Receiver P/N 325621011) or Aurora with remote condenser (Receiver P/N 300503000).
2. Install New compressor Kit: *NOTE MOUNTING INSTRUCTIONS ON THE NEW COPELAND COMPRESSOR RELAY. BE AWARE THAT TERMINALS 1 AND 2 ON THE NEW RELAY ARE IN DIFFERENT POSITIONS FROM WHAT THEY WERE ON THE OLD RELAY. MAKE SURE NEW COPELAND COMPRESSOR RELAY IS WIRED AS SHOWN IN COPELAND WIRING DIAGRAM. REMOTE UNITS REQUIRE CRANK CASE HEATER. WIRE PER WIRING DIAGRAM ATTACHED TO THE UNIT. INTEGRAL UNITS DO NOT REQUIRE CRANK CASE HEATER.*
3. Install new refrigerant drier which is provided in the Compressor Kit.
4. Leak test and evacuate the refrigeration system to a minimum of 200-microns.
5. Charge the refrigeration system with R-404A refrigerant. Charge the system 90 % by weight of the original R-502 serial plate charge.
6. Label the Unit compressor with the date, refrigerant type, and amount of R-404A system charge.
7. Clean condenser coil and air filter if so equipped.
8. Check all functions on the Unit for proper operation.

* WIRES FORMELY CONNECTED TO NO. 4 TERMINAL ON OLD RELAY MUST BE CONNECTED TOGETHER WITH A WIRE NUT



BRISTOL COMPRESSOR

COPELAND COMPRESSOR