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INSTALLATION INSTRUCTIONS

3/4 H.P. REFRIGERATION SYSTEM (CONVERT FROM R-502 TO R-404A REFRIGERANT)

These Instructions are intended to convert the 3/4 H.P. refrigeration system from CFC R-502 to HFC R-404A refrigerant. Read and understand these instructions thoroughly before performing this conversion. Retain these instructions as part of your equipment manual.

FLUSHING REFRIGERATION SYSTEM

When converting R-502 refrigerants (compressors utilize mineral oil) to R-404A refrigerants (compressors utilize polyol ester oil), it is important that the R-404A 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.

Refrigerant Reclaim Flush

1. Shut the Unit down to stop the refrigeration system.
2. Hook up a reclaim/recycle unit to the access valves on the refrigeration system. Hook up suction side of the reclaim/recycle unit system to the access valve on the compressor.
3. Pump/circulate the existing refrigerant around/through the refrigeration system to flush any oil and contaminants that may be left in the evaporator and condenser.
4. Remove old compressor and drier from the refrigeration system.

Nitrogen Purge

1. Disconnect electrical power to the Unit.
2. Hook up a reclaim/recycle unit to the access valves on the refrigeration system. Hook up suction side of the reclaim/recycle unit system to the access valve on the compressor.
3. Reclaim/recycle refrigerant.
4. Remove old compressor.
5. Hook up dry nitrogen at a minimum of 60-psig to the high-side service valve.
6. Turn on nitrogen and purge the condenser and evaporator.
7. Cover suction outlet tube with a shop towel as mist of oil should come out of the suction outlet. Purge until system is clean.
8. Remove old drier.

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 accumulator, driers, 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 compressor, filter drier, suction drier. and all electrical components.
2. Leak check the refrigeration system.
3. Evacuate the refrigeration system to at least 200-microns.
4. Charge the system with R-404A refrigerant. Charge the system 90% by weight of the original equipment serial plate charge.

IMPORTANT: It is *very* important that the Service Person *thoroughly clean* the condenser coil before putting the Unit back in operation. A plugged condenser coil limits air flow through the coil causing the system and compressor to overheat which will lead to compressor failure.

5. Clean up and properly dispose of the lubricant. Recycle removed refrigerant.
6. Properly label the compressor with the refrigerant type and the amount of refrigerant used to charge the system.