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R410A Service Bulletin

1.0 Replacing R22 systems

R-410 refrigerant oil is not compatible with R22 oil. When replacing R22 systems with R410A outdoor units First Co. recommends the following:

- Replace indoor evaporator coil.
- Coil must include an R-410A TXV.
- New line sets.
- If old line sets are to be used they must be cleaned with a flushing agent before new unit is installed.
- In addition to flushing the line set, a suction line filter drier suitable for R410A refrigerant is recommended.

2.0 filter/Driers

The proper selection of a filter drier is very important. The filter drier must be rated for the higher working pressures. Bristol Compressors recommends using filter with no more than 25% activated alumina. Some filter driers may not be suitable for R410A and POE lubricant. Therefore, check the filter drier to ensure that all components are compatible.

S.B.4/17
Page 1 of 2

3.0 R410A Facts

- R410A is a non-ozone depleting hydrofluorocarbon (HFC) refrigerant. It is a near-azeotropic blend of two refrigerants with the following composition:

R32 50% & R125 50%

- The compressor housing thickness has been increased to compensate for the higher operating pressures.
- Hatcol or Mobil 32BC polyolester lubricant (POE) is highly hygroscopic (i.e., it readily absorbs water). POE lubricants can absorb 15 times as much water as mineral oil or alkylbenzene lubricant.
- When installing a compressor, it is very important not to leave the compressor exposed to the atmosphere for more than 15 minutes. Tubing should be ready to accept the compressor before the compressor plugs are removed.
- R410A systems operate at 50% - 60% higher pressure than R22 systems. R22 service equipment should not be used with R410A refrigerant.