OIL SEPARATOR INSTALLATION INSTRUCTIONS

Proper piping practices must be followed in all installations. This instruction is not intended to teach piping practices or be a substitute for these proven methods.

1. Pre-charge the oil separator with the same oil used in the operating system. This oil can be added through discharge outlet(s) connection. This should be done prior to brazing. This pre-charge amount is needed to activate the float mechanism (if equipped) and will ready it to return oil to the compressor or oil reservoir. **CAUTION: NOT PRE-CHARGING CAN CAUSE FLOAT DAMAGE AND WILL VOID THE FACTORY WARRANTY.**

2. Install the oil separator vertically between the compressor and condenser. The separator should be placed reasonably close to the compressor to insure the refrigerant gas will not condense in low ambient conditions. Use proper piping practices to prevent excessive vibration in the discharge line. If vibration eliminators or mufflers are used, they should be piped before the oil separator. Some models provide a mounting stud and if used the nut should be tightened to 15 ft-lbs. If the oil separator has mounting legs, insure that the legs are properly attached to the mounting surface by bolts or welds. **CAUTION: DO NOT SUPPORT THE OIL SEPARATOR BY THE DISCHARGE LINE ONLY. THIS MAY CAUSE FAILURE IN THE BRAZE AND WELD JOINTS.**

3. Attach the compressor discharge line to the inlet of the oil separator. Attach the outlet to a discharge line check valve and then to the condenser. The check valve will prevent liquid refrigerant migration during off cycles.

4. Connect the oil return, 3/8” male flare connection, to the compressor fill port or suction line, if using a single compressor, or the oil reservoir inlet connection if using a low pressure multiple compressor system. The use of an inline sight glass in this line can be helpful in determining that oil is flowing.

5. Silver braze the connections with a standard alloy used to join copper tubing to steel. Usually this is a 45% silver brazing alloy. Low temperature tin-lead solders are **not acceptable**. On oil separators where brazing may take place near a flanged gasket, care must be taken to prevent the gasket from temperatures over 300°F.

6. If the oil separator is located in a low ambient area, the oil separator should be insulated and a heat band added to prevent liquid from condensing within the oil separator.

7. For coalescing oil separators, the coalescing filter should be replaced when the pressure drop between the inlet and outlet exceeds 15 psig. To remove the filter element, first reduce the pressure to 0 psig and then remove the bolts on the top plate. Remove the internal nut holding the filter in place. Remove the filter and re-install the new filter. Tighten the internal locking nut to 3 turns past nut engagement of the filter. Replace the plate sealing gasket and re-install the plate. Tighten the bolts to 30 ft-lbs.

8. Part numbers starting with OS# are rated to 450 psi and are approved for R12, R22, R134a, R404a, R407c, R502, R507
   Part numbers starting with OSH# are rated to 675 psi and are approved for the above refrigerants and R410a. Both are rated between -20F and 300F.

9. For essential safety requirements (ESR) documentation, refer to ESR form provided.