

"Excellence...Inside and Out"

140 Mendel Drive Atlanta, Ga 30036 Ph: 404 699-1521 Ph 800 743-6009

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IMPORTANT!!!!!!

PLEASE READ BEFORE INSTALLING COMPRESSOR

CARRIER INSTALLATION AND START UP PROCEDURES

The following recommended start-up procedure for Carlyle 06D, 06E compressors will help eliminate initial compressor failures caused by flooded start, floodback and running out of oil.

COMPRESSOR PRE-START UP

- 1. Check all voltages of the compressor --- do they agree with power available.
- 2. Leak test, evacuate and dehydrate
- 3. If your system has an OIL SAFETY SWITCH, Please check for proper operation before start up.
- **4.** All service valves should be closed (front seated) when adding the initial liquid refrigerant to the high side of the system. This is to avoid refrigerant from migrating to the compressor and into the oil and producing a flooded start.
- 5. Check the oil level in all the compressors. The oil level in the 06E compressors should be between 1/8 and 3/8 up the sight glass. 06D compressors the oil level should be from ¼ to ½ up the sight glass. For proper operation incorporating this method, compressors & equalization lines MUST be level.

IT IS ESPECIALLY IMPORTANT ON THE 06E COMPRESSORS THAT EXCESSIVE OIL CHARGES NOT BE ADDED TO THE SYSTEM.

- **6.** After the Oil levels have been checked and the system is charged with refrigerant the final step should be opening the compressor service valves just before starting.
 - b. Open (backseat) discharge service valve and oil equalization line (on parallel systems).
 - c. Open Suction service valve ½ to 1 turn or only enough to allow the compressor to run without shutting down on the low pressure switch.

This will prevent damage to the compressor if floodback of liquid refrigerant occurs.

- 7. On water cooled systems--- open water supply valve and allow water to reach the condenser.
- **8.** On air cooled systems --- turn condenser fan on.
- **9.** Make sure all evaporator connections are opened and the fans are started.
- 10. On parallel systems, START ONE COMPRESSOR UP AT A TIME.





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COMPRESSOR START UP

- 1. Set circuit breakers and control circuit switches in the ON position.
- 2. On compressor startup—LISTEN FOR ANY UNUSUAL SOUNDS.

Upon hearing any unusual sounds, **SHUT COMPRESSOR DOWN**

- Possible causes are:

 1. Liquid Slugging
 - 2. Low Oil
 - 3. Excessive Vibration
- **3.** Completely open suction service valve after compressor has run for 10 15 minutes. Be sure to check oil levels frequently and that the level is within acceptable levels.

EXCESSIVE oil to 06E compressors can cause blown gasket problems and broken valve reeds.

- **4.** Liquid Refrigerant should **NEVER** be allowed to flood back to the compressor.
- 5. If liquid floodback is occurring, adjust the expansion valve or any other adjustments that are necessary to eliminate this condition. A 20 degree Super heat at the compressor is recommended.

IMPORTANT INFORMATION FOR MULTI UNIT SYSTEMS

It is important on both 06D & 06E compressors in parallel systems which use a crankcase oil equalization line that the line is **NOT** completely filled with oil and must be level. If the oil level is allowed to rise too high in the equalization line, it will prevent adequate gas equalization between compressors and therefore prevent proper oil equalization in the system. If oil foams in the sight glass during operation (after running 15 minutes), there is too much oil in the compressor. While the use of the crankcase oil equalization line has been an acceptable practice, many multiple 06D & 06E compressor systems now use oil float systems (floats, oil separator and oil reservoir).

MULTIPLE 06E APPLICATION: units using 3 or more "06E" compressors require that a common motor barrel equalization line be installed between compressors. It is highly recommended on 2 compressor units. This ¼" or 3/8" tubing is to run from a connection on the underside of the crankcase motor barrel interconnecting each compressor. The purpose of this 06E motor barrel equalization line is to prevent large quantities of oil accumulating in the motor compartment of compressors when cycled off that could be slugging on start-up.

NOTE: The motor barrel equalization line is in addition to either the crankcase oil equalization line or the oil floats.

THANK YOU FOR YOUR INTEREST IN A1 COMPRESSOR FOR MORE INFORMATION OR TECHNICAL ASSISTANCE PLEASE CALL 1 800 743-6009

> YOU MAY EMAIL YOUR QUESTIONS TO: Horace Park

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