Updates have been made to the terminal wiring instructions to all 06E, 06CC (50-99CFM) semi-hermetic reciprocating and 06T screw compressors built after 2003, as well as good practice recommendations during installation. Additionally Carlyle has increased the recommended torque of the jam nut #3 (Figure 2) used to tighten the field power wires.

This change is to ensure the power wiring is secure in the field. The legacy and now obsolete bulletin 98T-1 recommended up to 12 ft-lbs max torque to tighten the power wiring (jam nut #3). Carlyle has increased the required torque to **18 ft-lbs max** and dropped the requirement of adding Loctite (thread lock) to the jam nut #3. This increase in allowable torque is based on the following limitations:

- **Allowed on any terminals where a jumper bar is used over jam nut #2** (Figures 1 thru 7). This allows the increased torque to any across-the-line wiring arrangements shown in attached Figures 3 & 4 on all current and older compressors.
- **For compressors being wired per figures 5, 6, & 7** the #2 jam nut must be restrained when the higher torque is applied to jam nut #3. Carlyle recommends using serviceable Loctite to restrain jam nut #2. To assist in this application, jam nut #2 at terminals T1, T2, T3 & T7, T8, T9 will have Loctite applied at Carlyle factory on all 06E, 06CC, & 06T compressors beginning with serial number (06E, 06CC (50-99 CFM) starting 0203J00322 and for 06T starting 0403J09339). Compressors built after this serial number will be able to be applied with the higher 18 ft-lbs max torque.
- **Compressors built before this serial number should have Loctite applied on the terminal bolts in the area where jam nut #2 is installed for wiring arrangements shown in figures 5, 6 & 7.** The following procedure is recommended:
  - Install plastic insulator on top of jam nut #1.
  - Install jam nut #2 on top of plastic insulator and torque to 3 ft-lbs.
  - Put a small amount of serviceable Loctite (Grade AA Green #089 can be used) on top of jam nut #2 at terminal bolt thread surface. Loctite recommends letting the material set for 72 hours before disturbing.
- **Terminals T4, T5 & T6 will always have a jumper bar applied with them. Therefore higher torque can be applied without adding any Loctite. These terminals may also have the plastic isolator removed to add the 3-hole jumper as shown in Figures 4 & 7. Loctite will not be applied to these terminals at Carlyle for this reason nor is it recommended in the field.**
FIGURE 1: 06E, 06CC (50-99CFM), & 06T Terminal Box & Wiring:
Note: 06T terminal arrangement shown. The 06E and 06CC (50-99 CFM) terminal box may or may not have three electrical posts in place of the 4 thermistor pins shown below.

FIGURE 2: Detail View of Terminal Post Arrangement:
06E COMPRESSORS (ACROSS-THE-LINE (XL) START):

Figure 3: 6-Pin Terminal Plate
- For all across-the-line start
- Jumper bars at all terminals
- 06T’s wired with 6-pin terminals
- See Figure 2 for jumper bars & power terminal connections
- Torque power wires to 18 ft-lbs max
- Loctite not required on jam nut #2 for any terminals with jumper bars

Figure 4: 9-Pin Terminal Plate
- For 208/230V across-the-line start with 9-pin terminal plate
- Jumper bars at all terminals
- Not an option with 06T’s
- See Figure 2 for jumper bars & power terminal connections
- Torque power wires to 18 ft-lbs max
- Loctite not required on jam nut #2 for any terminals with jumper bars

Figure 5: 9-Pin Terminal Plate
- For 460V across-the-line start with 9-pin terminal plate
- No jumper bars at terminals 1, 2 & 3
- Not an option with 06T’s
- See Figure 2 for jumper bars & power terminal connections
- Torque power wires to: 18 ft-lbs max if loctite applied to jam nut #2 at terminals T1, T2 & T3

06E COMPRESSORS (PART WINDING (PW) START):

Figure 6: 6-Pin Terminal Plate
- For all part-winding start
- No jumper bars at all terminals
- 06T’s wired with 6-pin terminals
- See Figure 2 for jumper bars & power terminal connections
- Torque power wires to: 18 ft-lbs max if loctite applied to jam nut #2 at all terminals

Figure 7: 9-Pin Terminal Plate
- For 208/230V part-winding start with 9-pin terminal plate
- No jumper bars at terminals 1, 2 & 3 and 7, 8 & 9
- See Figure 2 for jumper bars & power terminal connections
- Torque power wires to: 18 ft-lbs max if loctite applied to jam nut #2 at terminals T1, T2, T3, T7, T8 & T9

WARNING
With 208/230/460V 300 Series Models, the 460V cannot be wired for PW start. Use distinct 460V 600 Series Models for any 460V PW application.