NOTES:

1.0 COMPLETE INSTALLATION INCLUDES AND IS NOT LIMITED TO:

1.1 UNIT INSTALLATION

1.2 BATTERY INSTALLATION, INCLUDING DRAIN HOSE

1.3 COMPLETION OF PRE-DELIVERY INSPECTION (PDI) PER MODEL

1.3.1 UNIT PREP AND INITIAL ADJUSTMENTS

1.3.2 CHECKLIST

1.3.3 UNIT RUN IN PER PDI CHECKLIST

1.2.4 WARRANTY REGISTRATION CARD SUBMITTAL

1.4 DEFROST LINE ROUTING AND CLAMPING

1.5 FUEL LINE CONNECTIONS TO UNIT

2.0 THE TRAILER OR BOXCAR STRUCTURE MUST BE EVALUATED BY THE TRAILER OR BOXCAR MANUFACTURER TO DETERMINE IT'S ABILITY TO WITHSTAND THE LOADS IMPOSED BY THE UNIT OVER ITS SERVICE LIFE. CARRIER TRANSICOLD DOES NOT CONVEY ANY ENDORSEMENT OR WARRANTY FOR THE TRAILER'S OR BOXCAR'S STRUCTURAL INTEGRITY.

WEIGHTS:

NDP-532 REEFER UNIT (WET, LESS BATTERY): 2020 LBS [916 kg]

BATTERY (TYPICAL): 80 LBS [36 kg] MAXIMUM

3.0 UNIT MOUNTING SURFACES OF THE TRAILER OR BOXCAR THAT CONTACT THE UNIT MOUNTING PADS MUST BE UNI-PLANAR TO WITHIN 0.13 [3] TO PREVENT DISTORTION OF THE UNIT AND/OR TRAILER.

4.0 TRAILER OR BOXCAR SURFACES THAT CONTACT THE UNIT MOUNTING GASKET SHOULD NOT PROTRUDE MORE THAN 0.19 [5] ABOVE THE PLANE DEFINED BY THE MOUNTING PAD SURFACES TO ENSURE PROPER AIR SEAL.

5.0 ALL DIMENSIONS SHOWN ARE IN INCHES, WITH THE METRIC CONVERSIONS IN [MILLIMETERS].

6.0 IMPERIAL INCH FORMAT:

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]

7.0 CENTER COMPANY: C & L

8.0 INSTALLATION INSTRUCTIONS - INITIAL RELEASE. 16-JUN-2008 TSV 72N023GN07

A INITIAL RELEASE - 01, UPDATED SHEET INDEX, SEE SHEET 8 27JUL2009 RS 72N043GP09

B UPDATED SHEET INDEX 09-MAR-10 KM 72N0026P10

C UPDATED SHEET INDEX. SEE SHEET 8. 10 MAR 11 ZMG 72N0219P11

98-02525-01 NDP-532 (DOMESTIC) W/STBY

SEE SEPARATE PARTS LIST
NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES FOR Pistan air circulation and product protection. Carrier Transicold highly recommends the use of BULKHEADS, AIR CHUTES AND TRANSITION DUCTS. Contact your dealer or Carrier Transicold for recommendations.

PREPARE UNIT FOR INSTALLATION:
1. Prepare the body to receive the unit. Dimensions for evaporator opening and mounting stud locations can be found on Sheet 4 of this drawing.
2. Remove wire ties holding defrost drain hoses, coolant overflow tube, and fuel lines. Place lines where they will not be caught between the unit frame and the mounting surface.
3. Open side doors to allow access to mounting stud locations on unit.
4. Install battery according to instructions on Sheet 6. If unit has been supplied with battery, connect battery cables according to the instructions on Sheet 6.
5. Prepare the unit for lifting:
   - Standing on a ladder or work stand, hook lifting apparatus (lifting spreader bar with sufficient capacity to support unit and battery) through the lifting eyes. Lift point should be centered over the unit.

UNIT INSTALLATION:
6. Raise the unit and install in the body opening. Ensure that all coaching stops (if any) are fully engaged in the unit frame. Install the bolts in the lower center that must be accessible through the unit. Tighten the nuts to the specified torque:
   - To 60 ft-lb/81.6 Nm using a torque wrench. Remove lifting apparatus.
7. Install button plugs (Item 92) in unit frame where mounting studs are located and additional unused holes (Item 93).
8. Route defrost drain hoses down the floor of the trailer or boxcar and clamp to front wall using 2 clamps (Item 15) and 2 trim forming screws (Item 30) for each drain hose. Cut hose to proper length (approximately 4 5/8 inches above 5th-wheel plate on trailer) and install kazos (Item 90) on the hoses.
9. Instructions for fuel line connection are supplied with the fuel tank kit. Instructions for light bar installation are included with the light bar kit.
11. Operate unit in continuous run with rear doors open (manual mode) for a minimum of 8 hours (12 hours preferred). Perform final inspection on unit and set up final delivery for customer.
12. Important: Prior to final delivery to customer, warranty registration item 101 must be completed. One copy should be provided to the customer, one copy to the dealer, and the final copy must be stamped on the unit in the proper location (serial number plate). To activate warranty coverage.
13. Optional airflow configuration: hole pattern or open area for return air flow must total at least 2.75 sq. ft. of open area. Hole pattern or open area must be at least 2.75 sq. ft. of open area. The cargo loaded against the bulkhead will not obstruct these opening requirements. This may be installed tight with floor.

NOTE 5.0: "SPREADER BAR" WAS "OR STRAPS"

NOTE 11.0: ADDED "WITH REAR DOORS OPEN"

NOTE 13.0: SQFT WAS "FT"
ITEMS SUPPLIED IN BATTERY KIT (PARTS IN POLY BAG AND/OR ATTACHED TO BATTERY TRAY)

1.0 CUT WIRE TIE(S) THAT HOLD BATTERY CABLES TO UNIT FRAME.
2.0 CONNECT RED BATTERY CABLE TO THE POSITIVE (+) BATTERY TERMINAL, CONNECT BLACK CABLE TO NEGATIVE (-) BATTERY TERMINAL USING WIRE TIES (ITEM 55) TO UNIT FRAME.
3.0 INSTALL DRAIN HOSE (ITEM 6) TO BARB ON BOTTOM OF BATTERY TRAY USING CLAMP (ITEM 5).

UNITS SUPPLIED WITH BATTERY INSTALLED

1.0 USE THE FOLLOWING INFORMATION TO CORRECTLY SELECT THE BATTERY PERFORMANCE NEEDED FOR REFRAIGERATION UNITS.

GROUP SIZE: GROUP 31
VENT LOCATION: SIDE VENT
VOLTS: 12 VOLTS DC
AMPERAGE: MINIMUM 700 COLD CRANKING AMPS @ 0°F
MINIMUM 545 COLD CRANKING AMPS @ -20°F

NOTE: WHEN SELECTING A SPECIFIC BRAND OF BATTERY, ALWAYS ENSURE THAT THE BATTERY CHOSEN IS RATED AT 0°F (0 DEGREES FAHRENHEIT) AND NOT 0°C (0 DEGREES CELSIUS). FAILURE TO USE THE PROPER BATTERY SIZE WILL RESULT IN REDUCED BATTERY LIFE AND A NO-START CONDITION. THE RECOMMENDED MAXIMUM BATTERY WEIGHT IS 65 LBS.

2.0 CUT WIRE TIE HOLDING THESE PARTS IN THE BATTERY TRAY AND REMOVE PARTS.

3.0 INSTALL SCREWS AND HOLD-DOWN CHANNEL USING PLAIN AND LOCK WASHERS AS SHOWN.

4.0 INSTALL DRAIN HOSE (ITEM 6) TO BARB ON BOTTOM OF BATTERY TRAY USING CLAMP (ITEM 5).
NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES FOR BEST AIR CIRCULATION AND PRODUCT PROTECTION. CARRIER TRANSICOLD HUGELY RECOMMENDS THE USE OF BULKHEADS, AIR CHUTES AND TRANSITION DUCTS. CONTACT YOUR DEALER OR CARRIER TRANSICOLD FOR RECOMMENDATIONS.

TRANSMISSION DUCT

SOFT CHUTE MIN. DIMENSIONS

<table>
<thead>
<tr>
<th>W</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>9.00</td>
</tr>
<tr>
<td>36</td>
<td>9.75</td>
</tr>
<tr>
<td>42</td>
<td>12.25</td>
</tr>
<tr>
<td>48</td>
<td>12.50</td>
</tr>
<tr>
<td>54</td>
<td>13.75</td>
</tr>
<tr>
<td>60</td>
<td>15.00</td>
</tr>
</tbody>
</table>

HARD RECTANGULAR CHUTE MIN. DIMENSIONS

<table>
<thead>
<tr>
<th>W</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>9.00</td>
</tr>
<tr>
<td>36</td>
<td>9.75</td>
</tr>
<tr>
<td>42</td>
<td>12.25</td>
</tr>
<tr>
<td>48</td>
<td>13.00</td>
</tr>
<tr>
<td>54</td>
<td>13.75</td>
</tr>
<tr>
<td>60</td>
<td>15.00</td>
</tr>
</tbody>
</table>

CHUTE REMOVED FOR CLARIFICATION OF TRANSITION

TRANSITION & CHUTE DETAILS

INSTALLATION INSTRUCTIONS

- INITIAL RELEASE. 16-JUN-2008 TSV 72N023GN07
- B CORRECTED TYPO FOR "CLARIFICATION" 09-MAR-10 KM 72N0026P10

NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES FOR BEST AIR CIRCULATION AND PRODUCT PROTECTION. CARRIER TRANSICOLD HUGELY RECOMMENDS THE USE OF BULKHEADS, AIR CHUTES AND TRANSITION DUCTS. CONTACT YOUR DEALER OR CARRIER TRANSICOLD FOR RECOMMENDATIONS.
Electrical Specifications & Minimum Standby Infrastructure for Carrier Transicold Trailer units equipped with Standby

**Vector 6500 WSTBY**

<table>
<thead>
<tr>
<th>Operating Voltage</th>
<th>480V / 3ph / 60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Load Amp Draw (FLA)</td>
<td>25 A</td>
</tr>
<tr>
<td>KVA</td>
<td>20.8</td>
</tr>
<tr>
<td>Locked Rotor Amp Draw (LRA)</td>
<td>99 A</td>
</tr>
<tr>
<td>Electrical Receptacle (installed on unit)</td>
<td>IEC IP-67 pin &amp; sleeve, 480V, 30A, 4 wire, 3 pole</td>
</tr>
<tr>
<td>Receptacle pin</td>
<td>22-04166-00</td>
</tr>
<tr>
<td>Phase reversal</td>
<td>Automatic</td>
</tr>
<tr>
<td>Standby circuit breaker &amp; cordset specifications</td>
<td></td>
</tr>
<tr>
<td>Standby cable type &amp; gauge (min 50' long, up to 75' long)</td>
<td>SOOW, 600V, 90C, 104 (3ph + G)</td>
</tr>
<tr>
<td>Recommended external circuit breaker</td>
<td>30A</td>
</tr>
<tr>
<td>Connector pin</td>
<td>22-04167-00</td>
</tr>
</tbody>
</table>

**Minimum Requirements for Standby Infrastructure**

1. Ensure that the standby power installation is performed by a licensed electrician who is familiar with both local and national electric codes and requirements.
2. Each refrigeration unit must be protected by an individual circuit breaker sized per the appropriate unit electrical specification listed above.
3. A continuous earthing ground conductor must be provided at the plug and through the power cord to the refrigeration unit.
4. Carrier Transicold recommends that customers establish an Assured Equipment Grounding Conductor Program per the National Electric Code (NEC). Per the Assured Equipment Grounding Conductor Program, the NEC calls for all cordsets to be verified for ground continuity and correct wiring on a 3 month basis.
5. A neutral conductor MUST NOT be connected to the refrigeration units. All Carrier Transicold refrigeration units are balanced three phase systems, therefore, the unit only requires three phase wires and a ground conductor.
6. Standby power cordsets between the circuit breaker and the refrigeration unit MUST be constructed from 104 SOOW cable. Carrier recommends a minimum cable length of 50 feet to limit maximum fault currents and prevent damage to the power circuits within the unit.

**WARNING:**

Be sure power is dis-connected to customer cable. Read entire supplier directions supplied with plug before starting installation.

---

**Customer Cable and Plug Assembly**

-01 ONLY