MODEL DESCRIPTION

VECTOR NDKA TIER4 (NDK), 2 & 3 COMPARTMENT MULTI-TEMP DOMESTIC

Carrier Transicold Division Carrier Corporation P.O. Box 4805 Syracuse, New York 13221

KIT PART NO.

76-02066-02

WRITTEN AUTHORIZATION OF CARRIER CORPORATION.

PART. NO.

98-02633

SUPERSEDES:

TITLE

) E E	SEFARAIE	r A K		
	T N C T D V V	\cap T T \cap N \cap	DRAWING NO.		
INSTALLATION	1 N 2 I R U	CIIONS		98-026	33
ATLERS: 2 & 3 COMPARTMEN	VT MUTI-TF	MP VECTOR NDKA			SHEET 1 OF 9

CONTENTS	SHEET
GENERAL INFORMATION	1
SWING RADIUS	2
UNIT DIMENSIONAL DATA	2
EVAP. BACK PANEL: TRAILER OR RAIL	3
TRAILER OR BOXCAR PREPARATION	4
UNIT INSTALLATION	5
UNIT LIFTING LOCATION	5
BATTERY INSTALLATION	6 & 7
STAND BY POWER PLUG INSTALLATION	8
BOTTOM PANEL INSTALLATION	9

GENERAL INFORMATION	1
SWING RADIUS	2
UNIT DIMENSIONAL DATA	2
EVAP. BACK PANEL: TRAILER OR RAIL	3
TRAILER OR BOXCAR PREPARATION	4
UNIT INSTALLATION	5
UNIT LIFTING LOCATION	5
BATTERY INSTALLATION	6 & 7
STAND BY POWER PLUG INSTALLATION	8
BOTTOM PANEL INSTALLATION	9

(Carrie:	r
TRANSICO	L D
United Technologie	s

CROSS REFERENCE INDEX

DESCRIPTION	INSTALLATION DRAWING NO.	KIT NO.
FUEL TANKS (22" DIAMETER)	98-02634	76-00884
LED LIGHT BAR INSTALLATION INSTRUCTIONS	98-03246	76-02000-03
REMOTE EVAPORATOR INSTALLATION KIT (2 COMP)	98-03339	76-02067-00
REMOTE EVAPORATOR INSTALLATION KIT (3 COMP)	98-03339	76-02067-01

NOTES:

- 1.0 COMPLETE INSTALLATION INCLUDES AND IS NOT LIMITED TO:
- 1.1 UNIT INSTALLATION 1.2 BATTERY INSTALLATION
- 1.3 DEFROST LINE ROUTING AND CLAMPING
- 1.4 FUEL LINE CONNECTIONS TO UNIT
- 1.5 COMPLETION OF PRE-DELIVERY INSPECTION(PDI) PER MODEL
 - 1.5.1 UNIT PREP AND INITIAL ADJUSTMENTS
 - 1.5.2 CHECKLIST
 - 1.5.3 UNIT RUN IN PER PDI CHECKLIST 1.5.4 WARRANTY REGISTRATION CARD SUBMITTAL
- 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 IT'S SERVICE LIFE. CARRIER TRANSICOLD DOES NOT CONVEY ANY ENDORSEMENT OR WARRANTY FOR THE TRAILER'S OR BOXCAR'S STRUCTURAL INTEGRITY.
 - WEIGHTS: VECTOR NDKA REEFER UNIT (WET, LESS BATTERY): 2177 LBS [988 kg] BATTERY: 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 PRE-DELIVERY INSPECTION AND WARRANTY REGISTRATION DOCUMENTS ARE SHIPPED WITH UNIT AND ARE LOCATED IN THE SIDE DOOR POCKET WITH UNIT MANUAL AND SCHEMATIC.

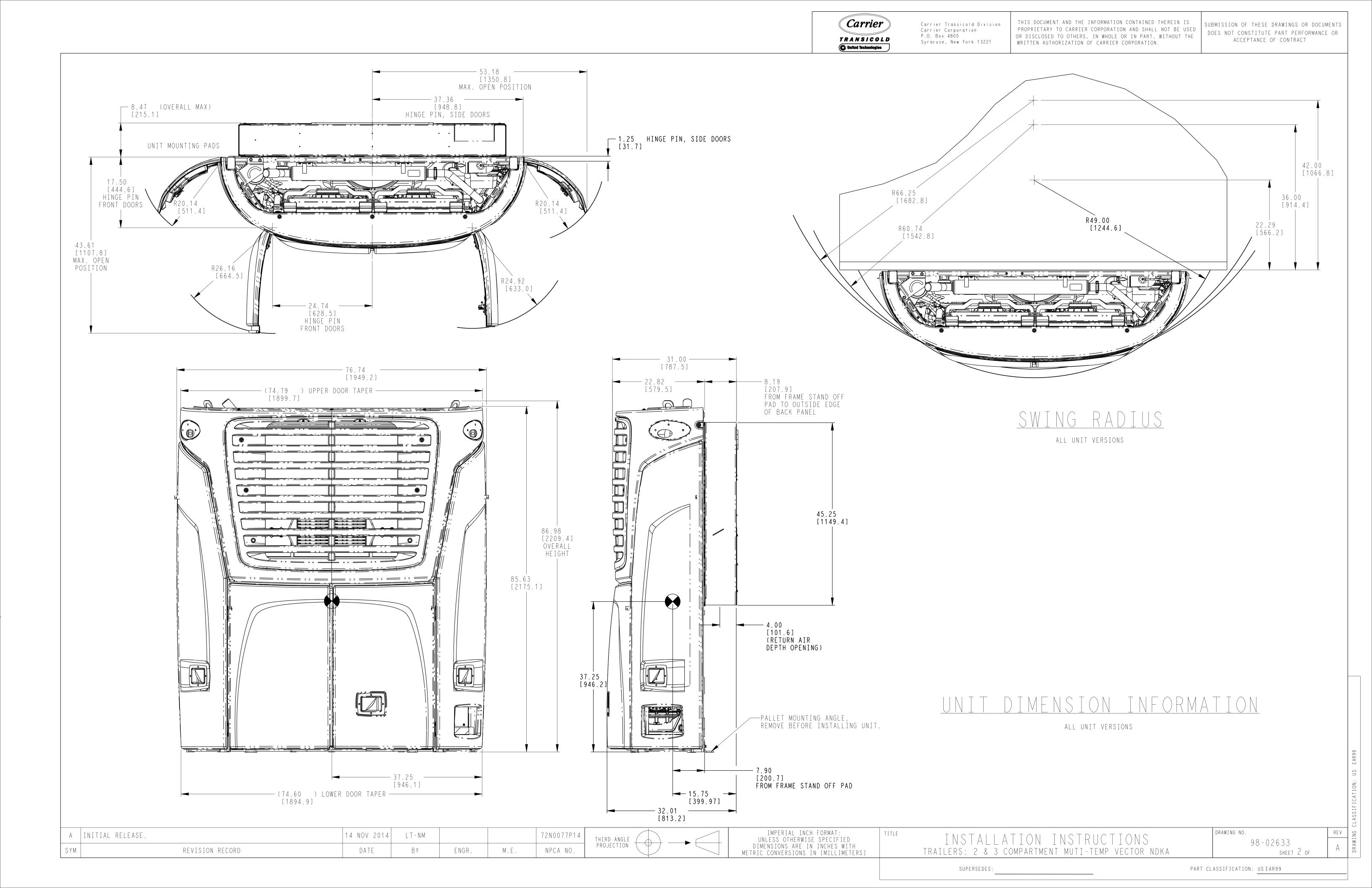
С	UPDATED SHEET INDEX. ADDED NOTE 6.0, REMOTE EVAP INSTALL KITS AND KIT PART NUMBERS TO CHARTS AND ADDED SHEET 9. SEE SHEET 5.	05 APR 2017	ZMG			72N0217P1
В	NOTE 2.0: REMOVED LISTING FOR UNIT WEIGHT OF 2132 LBS.	11NOV2015	KFV			77N0033P1
А	INITIAL RELEASE	17 NOV 2014	LT-NM			72N0077P1
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	М.Е.	NPCA NO.

THIRD ANGLE PROJECTION

IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

PART CLASSIFICATION: US EAR99

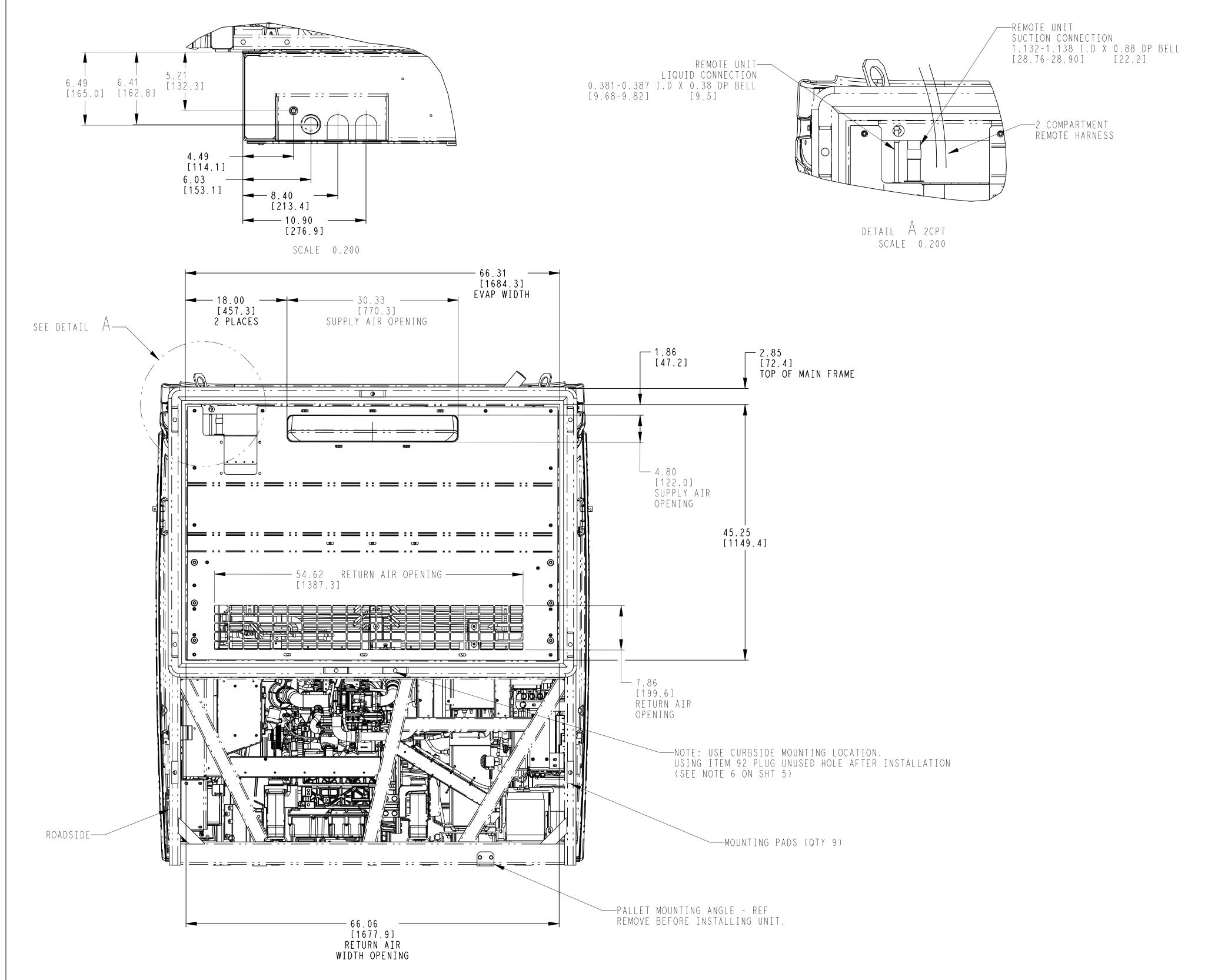
SEE SEPARATE PARTS LIST



Carrier Transicold Division Carrier Corporation P.O. Box 4805 Syracuse, New York 13221

THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS PROPRIETARY TO CARRIER CORPORATION AND SHALL NOT BE USED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF CARRIER CORPORATION.

SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT



<u>REAR VIEW: WITH STANDARD BACK PANELS</u>

А	INITIAL RELEASE.	14 NOV 2014	LT-NM			72N0077P14
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	M.E.	NPCA NO.

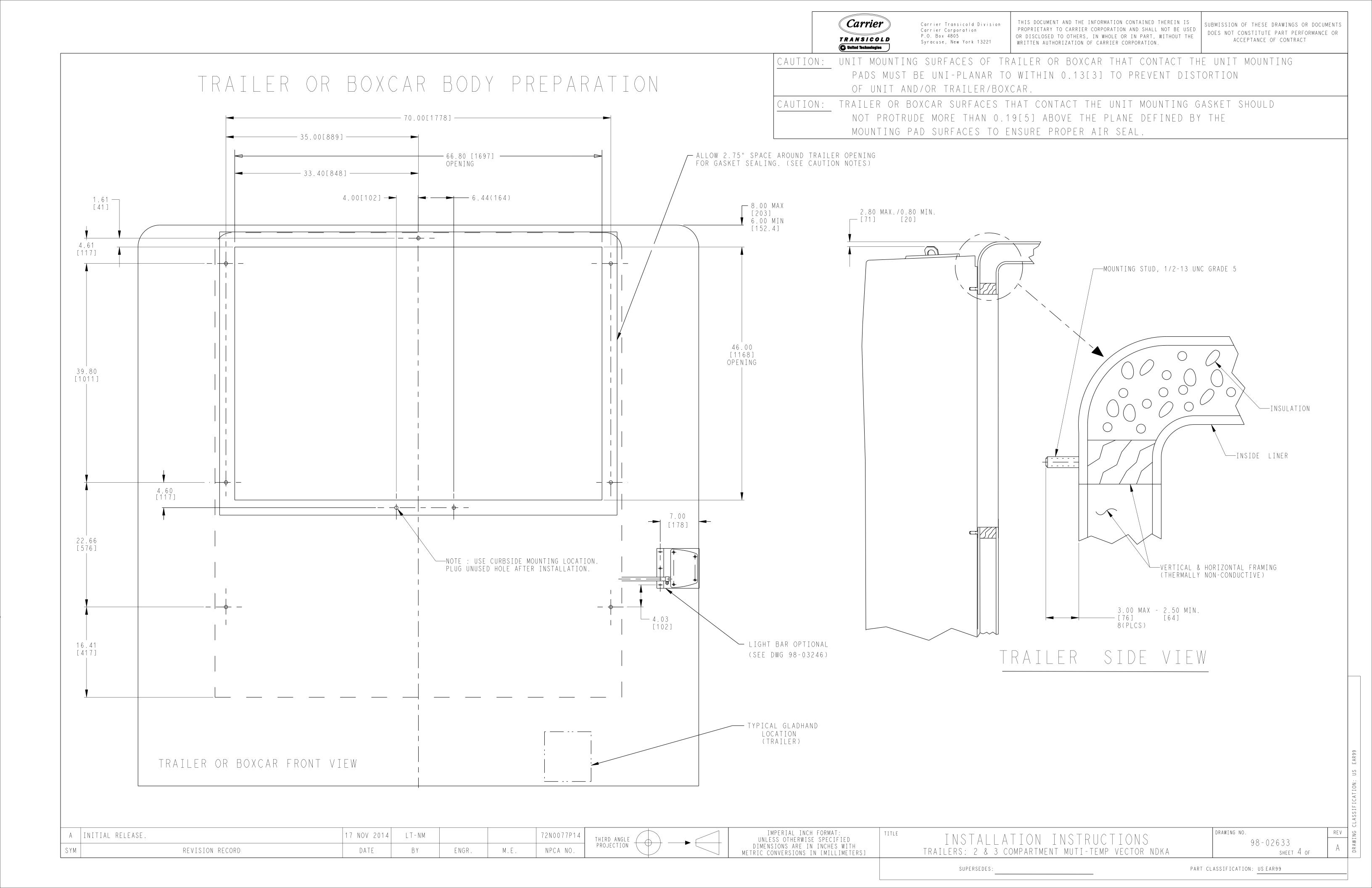
THIRD ANGLE PROJECTION

IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

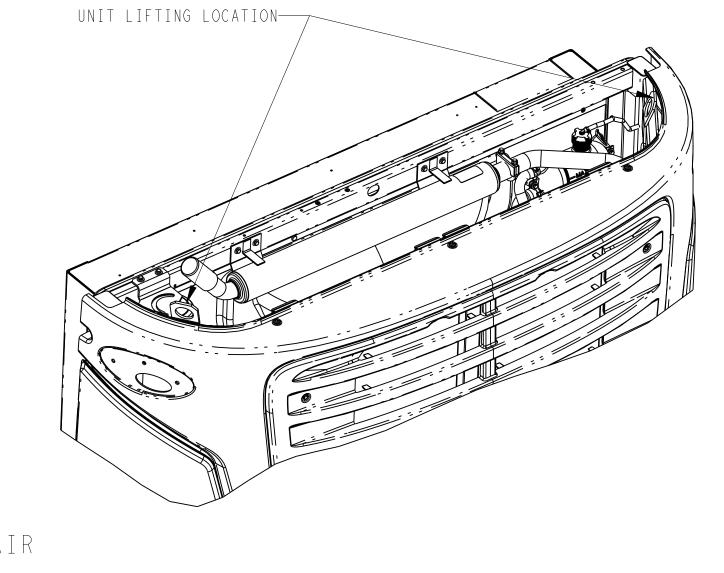
INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA DRAWING NO. 98-02633 sнеет 3 of

PART CLASSIFICATION: US EAR99

SUPERSEDES:





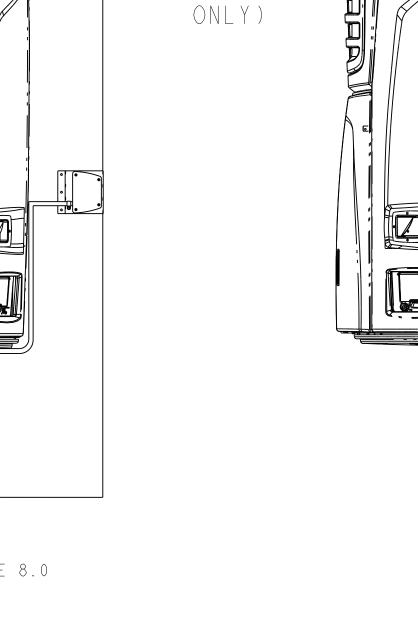


-SEE NOTES 5.0 AND 6.0 FOR BATTERY-INSTALLATION SEE SHTS 6 & 7 SEE NOTE 8.0 DRAIN LINES SUPPLIED WITH REEFER UNIT,

) SEE NOTE 7.0

APPLY CARRIER OVAL AFTER UINT IS FASTENED TO TRAILER AND MOUNTING HOLE IS PLUGGED.

TWO PLACES



INSIALLAIION

CONDENSER AIR (FRONT FACE 4.00[102] BULKHEAD INSIDE OPENING -----6.00 [152] MIN CLEARANCE FOR SOLID BULKHEAD (TOP OF FLOOR TO BOTTOM OF BULKHEAD) SEE NOTE 13 FOR OPTIONAL BULKHEAD CONFIGURATION - EVAPORATOR AIR — RETURN AIR SCREEN RECOMMENDED (DO NOT KINK OR OTHERWISE CLOSE DOWN TUBE I.D.)

PREPARE UNIT FOR INSTALLATION:

- 1.0 PREPARE THE BODY TO RECEIVE THE UNIT. DIMENSIONS FOR EVAPORATOR OPENING AND MOUNTING STUD LOCATIONS CAN BE FOUND ON SHEET 4 OF THIS DRAWING.
- 2.0 REMOVE WIRE TIES HOLDING DEFROST DRAIN HOSES, TUBE, AND FUEL LINES. PLACE LINES WHERE THEY WILL NOT BE CAUGHT BETWEEN THE UNIT FRAME AND THE MOUNTING SURFACE. REMOVE PALLET MOUNTING ANGLE ON BACK BOTTOM OF FRAME.
- 3.0 OPEN SIDE DOORS TO ALLOW ACCESS TO MOUNTING STUD LOCATIONS ON UNIT.
- 4.0 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.

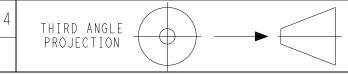
UNIT INSTALLATION:

- 5.0 RAISE THE UNIT AND INSTALL IN THE BODY OPENING. ENSURE THAT ALL EIGHT STUDS ARE FULLY ENGAGED IN THE UNIT FRAME. PLACE WASHER (ITEM 70) AND LOCK-NUT (ITEM 45) ON EACH OF THE 8 STUDS. (NOTE: THE LOWER CENTER STUD MUST BE ACCESSED FROM THE FRONT OF THE UNIT.) SNUG THE NUTS, THEN EVENLY TIGHTEN ALL EIGHT TO 60 FT-LB/81.6 NM USING A TORQUE WRENCH. REMOVE LIFTING APPARATUS.
- 6.0 INSTALL BUTTON PLUGS (ITEM 92) IN UNIT FRAME WHERE MOUNTING STUDS ARE LOCATED AND ADDITIONAL UNUSED HOLE (SEE SHT.3).
- 7.0 ROUTE DEFROST DRAIN HOSES DOWN THE FRONT OF THE TRAILER OR BOXCAR AND CLAMP TO FRONT WALL USING 2 CLAMPS (ITEM 15) AND 2 THREAD FORMING SCREWS (ITEM 30) FOR EACH DRAIN HOSE. CUT HOSE TO PROPER LENGTH (APPROXIMATELY 3.00[76.2] ABOVE 5+h-WHEEL PLATE ON TRAILER) AND INSTALL KAZOOS (ITEM 90) ON THE HOSES.
- 8.0 INSTRUCTIONS FOR FUEL LINE CONNECTION ARE SUPPLIED WITH THE FUEL TANK KIT. INSTRUCTIONS FOR LIGHT BAR INSTALLATION ARE INCLUDED WITH THE LIGHT BAR KIT.

AFTER INSTALLATION

- 9.0 INSTALL BATTERY ACCORDING TO INSTRUCTIONS ON SHEETS 6 & 7. IF UNIT HAS BEEN SUPPLIED WITH BATTERY, CONNECT BATTERY CABLES ACCORDING TO THE INSTRUCTIONS ON SHEETS 6 & 7.
- 10.0 PERFORM PRE-DELIVERY INSPECTION. COPIES OF COMPLETED CHECKLIST SHOULD BE SUPPLIED TO SELLING DEALER AND CUSTOMER.
- OPERATE UNIT IN CONTINUOUS RUN WITH REAR DOORS OPEN (MANUAL) MODE. REFER TO THE PRE-DELIVERY INSPECTION FORM SUPPLIED WITH UNIT FOR THE RECOMMENDED LENGTH OF TIME. PERFORM FINAL INSPECTION ON UNIT. RUN- IN SET UP SHOULD BE "PER PDI SHEET".
- IMPORTANT: PRIOR TO FINAL DELIVERY TO CUSTOMER, WARRANTY REGISTRATION MUST BE COMPLETED. ONE COPY SHOULD BE PROVIDED TO THE CUSTOMER, ONE COPY TO THE SELLER, AND THE FINAL COPY MUST BE SENT TO CARRIER TRANSICOLD. IN-SERVICE DATE MUST BE STAMPED ON THE UNIT IN THE PROPER LOCATION (SERIAL NUMBER PLATE) TO ACTIVATE WARRANTY COVERAGE.
- 13.0 OPTIONAL BULKHEAD CONFIGURATION: HOLE PATTERN OR OPEN AREA FOR RETURN AIR FLOW MUST TOTAL AT LEAST 2.75 SQ.FT. OF AIR PASSAGE. HOLE PATTERN OR OPEN AREA MUST BE RECESSED SO THAT CARGO LOADED AGAINST BULKHEAD WILL NOT OBSTRUCT AIR PASSAGE OPENINGS. PERFORATED BULKHEADS, THAT MEET THESE REQUIREMENTS, MAY BE INSTALLED TIGHT WITH FLOOR.

С	REVISED NOTES 10.0, 11.0 & 12.0.	05 APR 2017	ZMG			72N0217P17
А	INITIAL RELEASE.	17 NOV 2014	LT-NM			72N0077P14
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	M.E.	NPCA NO.



IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]

 (\bigcirc)

SEE NOTE 11.0

INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA DRAWING NO. 98-02633 SHEET 5 OF

PART CLASSIFICATION: US EAR99

SUPERSEDES:

BATTERY INSTALLATION INSTRUCTIONS

SEE NEXT SHEET FOR PICTORIALS OR REFER TO BATTERY INSTALLATION DOCUMENT IN POLY BAG FASTENED TO FRAME RAIL.

UNITS SUPPLIED WITH BATTERY INSTALLED

- 1.0 CUT WIRE TIE(S) THAT HOLD BATTERY CABLES TO EACH OTHER.
- 2.0 CONNECT RED BATTERY CABLE TO THE POSITIVE (+) BATTERY TERMINAL; CONNECT BLACK CABLE TO NEGATIVE (-) BATTERY TERMINAL (USE OF CORROSION INHIBITOR IS RECOMMENDED).
- 3.0 POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

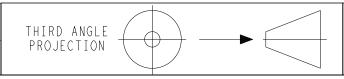
UNITS SUPPLIED WITHOUT BATTERY INSTALLED

1.0 USE THE FOLLOWING INFORMATION TO CORRECTLY SELECT THE BATTERY PERFORMANCE NEEDED FOR REFRIGERATION 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 (O DEGREES FAHRENHEÍT) AND NOT 0°C (O DEGREES CELSIUS) FAILURE TO USE THE PROPER BATTERY SIZE WILL RESULT IN REDUCED BATTERY LIFE AND A NO-START CONDITION. THE RECOMMENDED MAXIMIM BATTERY WEIGHT IS 80 LBS.
- 2.0 CUT WIRE TIE HOLDING THESE PARTS TO THE FRAME AND REMOVE PARTS. PLACE BATTERY IN TRAY WITH POSITIVE (+) TERMINAL TO THE REAR OF THE UNIT (AS SHOWN). CONNECT BATTERY CABLES (THE USE OF A CORROSION INHIBITOR ON THE TERMINALS IS RECOMMENDED); RED CABLE TO POSITIVE (+) TERMINAL, BLACK CABLE TO THE NEGATIVE (-) TERMINAL. CABLES SHOULD BE ROUTED TOWARD THE COMPRESSOR (AS SHOWN). TIGHTEN TERMINAL CONNECTORS SECURELY.
- 3.0 INSTALL L-BRACKETS AND J-HOOKS AND HOLD-DOWN CHANNEL USING NUTS, PLAIN AND LOCK WASHERS AS SHOWN. SECURELY TIGHTEN THE SCREWS TO PREVENT MOVEMENT OF THE BATTERY.
- 4.0 POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

А	INITIAL RELEASE.	17 NOV 2014	LT-NM			72N0077P14
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	М.Е.	NPCA NO.



IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]

INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA DRAWING NO. 98-02633 sheet 6 of

PART CLASSIFICATION: US EAR99

SUPERSEDES:

CURB SIDE VIEW

INSTALL BATTERY INTO UNIT WITH POSITIVE (+) TERMINAL TOWARD THE REAR.

BATTERY INSTALLATION PROCEDURE FOR UNITS SHIPPED WITHOUT BATTERY.

LOCATE BAG STRAPPED TO VERTICAL REAR TUBE NEXT TO BATTERY TRAY AND REMOVE U-BRACKET, L-BRACKETS & MOUNTING HARDWARE.

SECTION A-A BATTERY CABLE ARRANGEMENT.

A INITIAL RELEASE. LT-NM 17 NOV 2014 REVISION RECORD ENGR. NPCA NO. ВҮ М.Е.



IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

REAR VIEW

INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA

BATTERY— L-BRACKET

DRAWING NO. 98-02633 SHEET 7 OF

──BATTERY L-BRACKET

SUPERSEDES: PART CLASSIFICATION: US EAR99

Electrical Specifications & Minimum Standby Infrastructure for Carrier Transicold Trailer units equipped with Standby

	Vector NDKA W/STBY
Operating Voltage	460V / 3ph / 60Hz
Full Load Amp Draw (FLA)	22 A
kVA	18.5
Locked Rotor Amp Draw (LRA)	90 A
Electrical Receptacle	IEC IP 67 pin & sleeve, 480V, 30A, 4
(installed on unit)	wire, 3 pole
Receptacle p/n	22-04166-01
Phase reversal	Automatic
Standby circuit breaker &	& cordset specifications
Standby cable type & gauge (min 50' long, up to 75' long)	SOOW, 600V, 90C, 10/4 (3ph + G)
Recommended external circuit breaker	30A
Connector p/n	22-02944-00

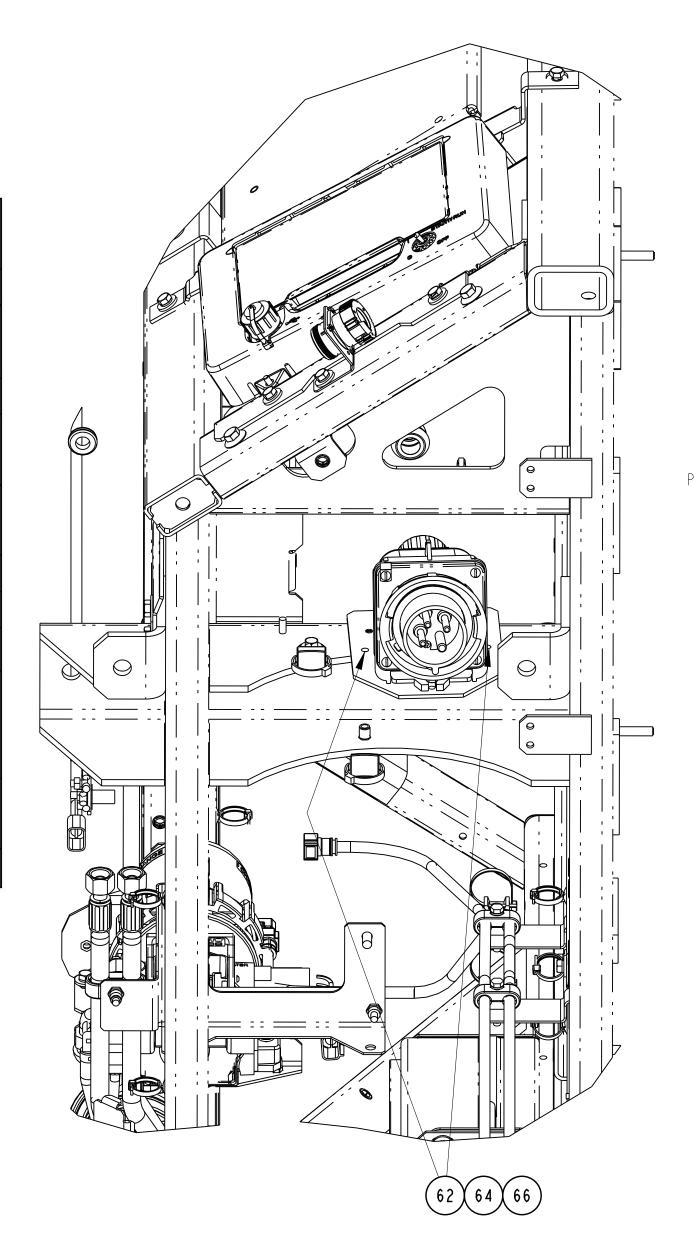
Minimum Requirements for Standby Infrastructure

- 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 10/4 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.

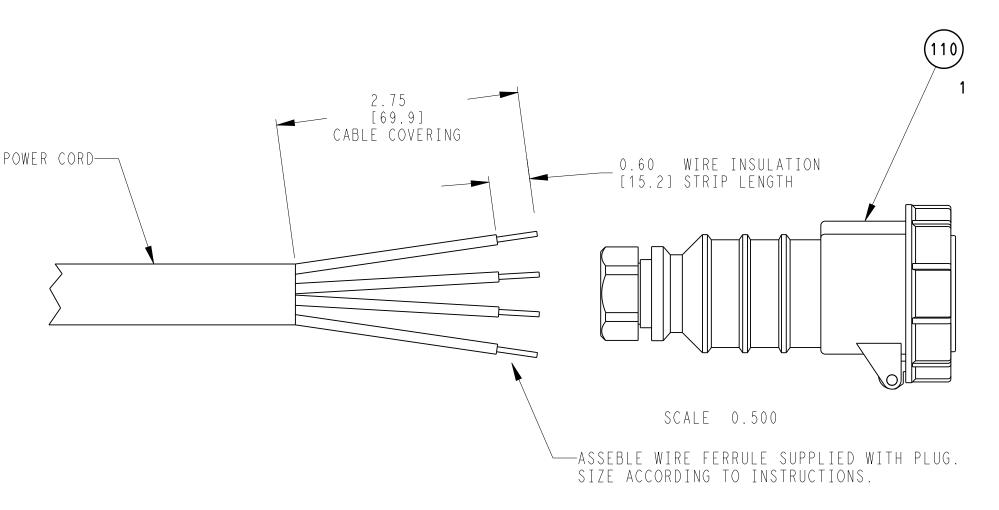
10 NOV 2014

LT - NM

ENGR.



PARTIAL LOWER ROADSIDE VIEW STANDBY PLUG MOUNTING

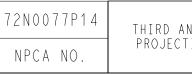


WARNING:

READ ENTIRE SUPPLIER DIRECTIONS SUPPLIED WITH PLUG BEFORE STARTING INSTALLATION.

А	RELEASE.	
SYM		REVISION

RECORD



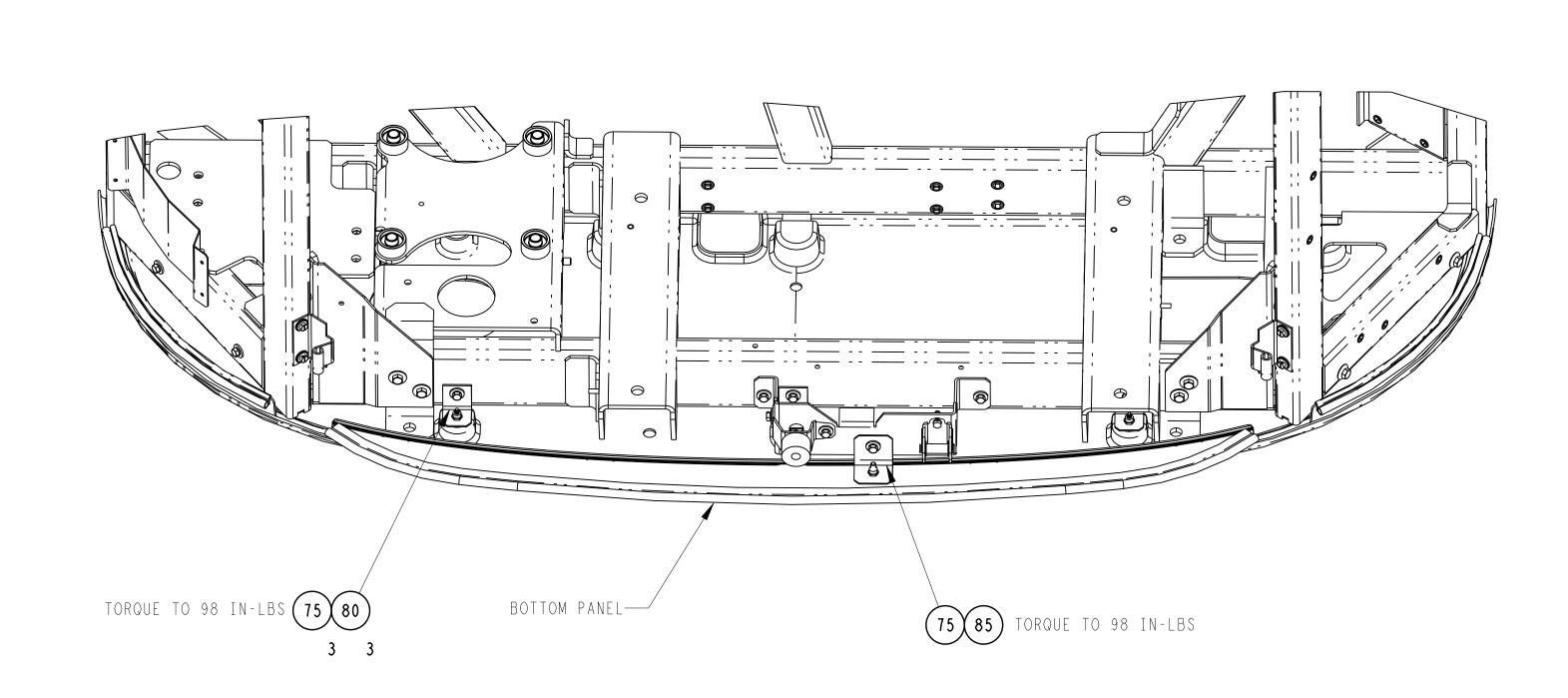


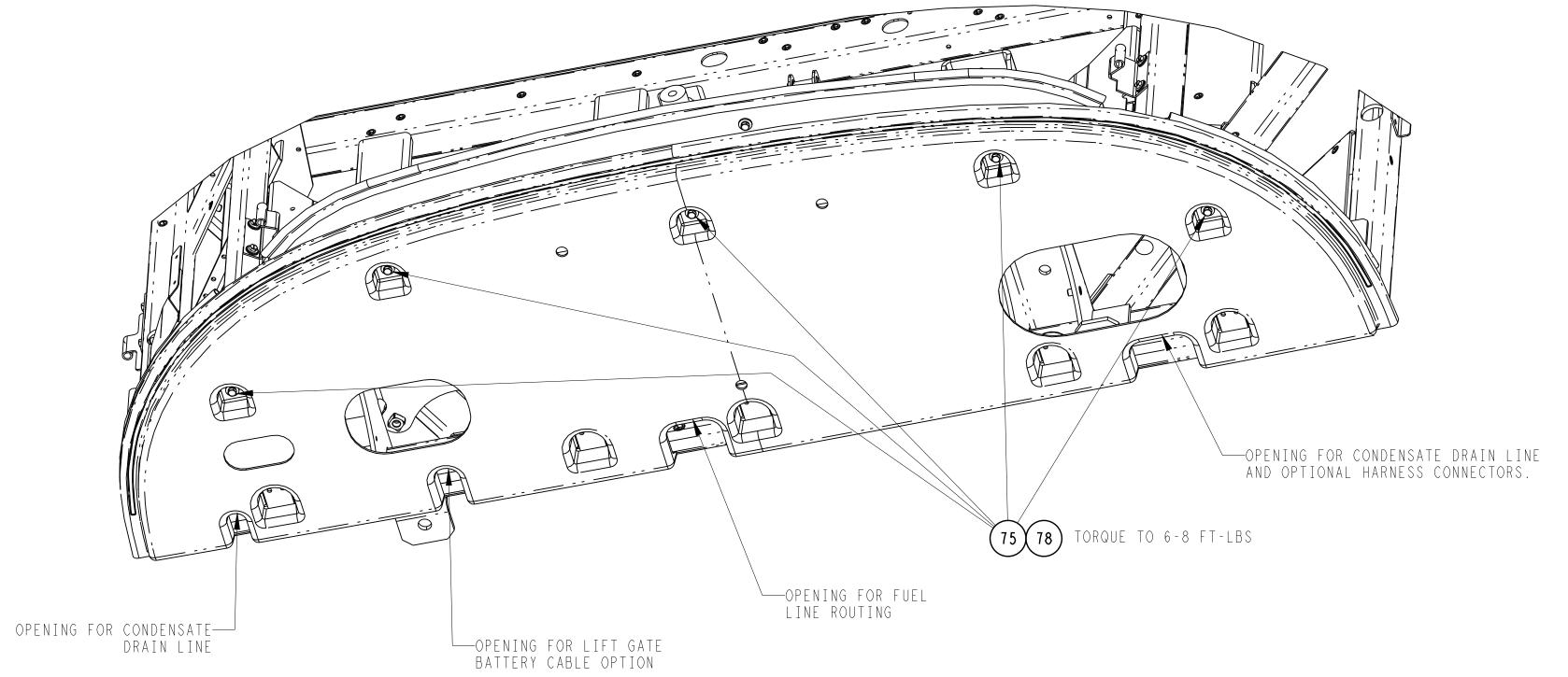
INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA

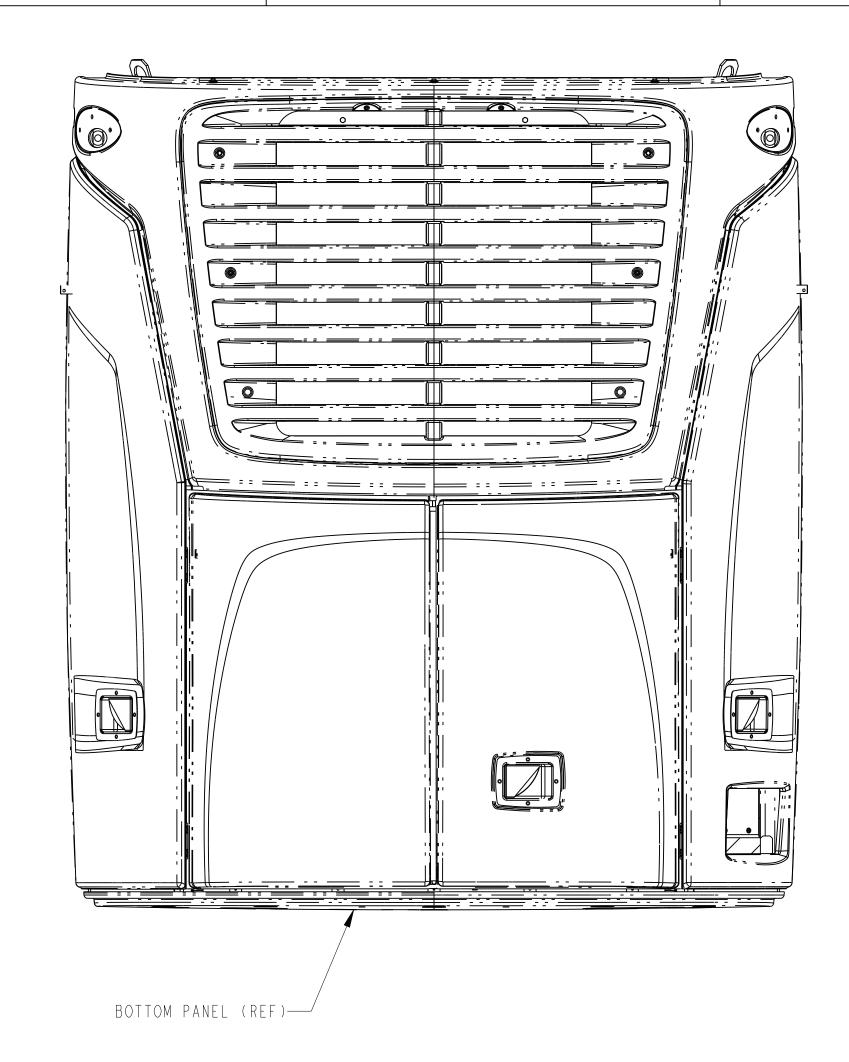
SUPERSEDES:

98-02633 SHEET 8 OF

PART CLASSIFICATION: US EAR99



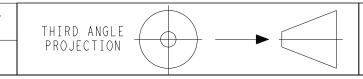




BOTTOM PANEL INSTALLATION

- NOTES: 1.0 INSTALL (3) MOUNTING ANGLES (ITEM #80) AND (1) MOUNTING ANGLE (ITEM #85) WITH RIVNUTED FLANGE POINTING DOWN. SECURE TO FRAME USING SUPPLIED SCREWS (ITEM #75), KEEPING THE BOTTOM OF THE ANGLES FLUSH AND PARALLEL TO THE BOTTOM OF THE FRAME.
- 2.0 SLIDE (5) OPENINGS IN BOTTOM PANEL OVER (5) REAR MOUNTING ANGLES ON THE FRAME AND SECURE BOTTOM PANEL TO OTHER (6) MOUNTING ANGLES USING SUPPLIED SCREWS (ITEM #75) AND WASHERS (ITEM #78).

					T	
С	NEW SHEET.	05 APR 2017	ZMG			72N0217P17
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	М.Е.	NPCA NO.



IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

INSTALLATION INSTRUCTIONS TRAILERS: 2 & 3 COMPARTMENT MUTI-TEMP VECTOR NDKA DRAWING NO. 98-02633 sheet 9 of