#### CROSS REFERENCE INDEX INSTALLATION DESCRIPTION KIT NO. DRAWING NO. 98-02201 FUEL TANKS (22" DIAMETER) 76-00295-XX LED LIGHT BAR INSTALLATION INSTRUCTIONS 98-03246 76-02000-03 DECAL KIT: ENGLISH - ARABIC 98-03346 76-02033-01

98-03349

76-02033-04

### NOTES:

I.O COMPLETE INSTALLATION INCLUDES AND IS NOT LIMITED TO: I.I UNIT INSTALLATION

I.I.I MOUNTING HOLE PLUG INSTALLATION

DECAL KIT: ENGLISH - CHINESE

1.2 BATTERY INSTALLATION, INCLUDING DRAIN HOSE 1.3 COMPLETION OF PRE-DELIVERY INSPECTION(PDI) PER MODEL I.3.I UNIT PREP AND INITIAL ADJUSTMENTS

I.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 IT'S SERVICE LIFE. CARRIER TRANSICOLTHED DOES NOT CONVEY ANY ENDORSEMENT OR WARRANTY FOR THE TRAILER'S OR BOXCAR'S STRUCTURAL INTEGRITY. WEIGHTS:

VECTOR 8500 REEFER UNIT (WET, LESS BATTERY): 1810 LBS [821.0 kg] VECTOR 8500 REEFER UNIT W/EES (WET, LESS BATTERY): 1855 LBS [841.0 kg] BATTERY (TYPICAL): 80 LBS [36kg] 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.

3.1 MOUNTING STUDS MUST NOT PROTRUDE MORE THAN 3.0 INCHES FROM THE TRAILER OR BOXCAR SURFACE FOR PROPER INSTALLATION OF THE MOUNTING HOLE PLUGS.

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.

<u> </u>		<u> </u>
KIT PART NO.	INSTALLATION DRAWING NO.	MODEL DESCRIPTION
76 - 02066 - 01	98-02583	VECTOR 8500 (DOMESTIC) W/STBY
10-02000-01	90-02303	VECTOR 8500R (DOMESTIC) RAIL EDITION W/STBY

CONTENTS	SHEET
GENERAL INFORMATION	
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
CHUTE DIMENSIONAL INFORMATION	8
STAND BY POWER PLUG INSTALLATION	9
BOTTOM PANEL INSTALLATION	10

SHEET	REV	Н	G	Н	Н	Н	В	E	-	A	F
INDEX	SHEET		2	3	4	5	6	7	8	9	10

# SEE SEPARATE PARTS LIST

H UPDATED SHEET INDEX. SEE SHEETS 3, 4 & 5. ADDED NOTES 1.1 & 3.1. 26 OCT 2022 ECN1161283 G UPDATED SHEET INDEX, SEE SHEETS 2 & 5. 14 AUG 2019 RC LT-SK 72N0242P19 UPDATED SHEET INDEX. ADDED NOTE 6.0, SHT.10, DECALS KITS AND 04 APR 2017 ZMG 72N02I7PI7 INSTALLATION KIT P/N TO CHARTS. SEE SHEETS 5 & 10. LT-SJ UPDATED SHEET INDEX, SEE SHEET 7. 19 JUN 2015 72N005IPI4 REVISION RECORD ВҮ ENGR. М.Е. NPCA NO.

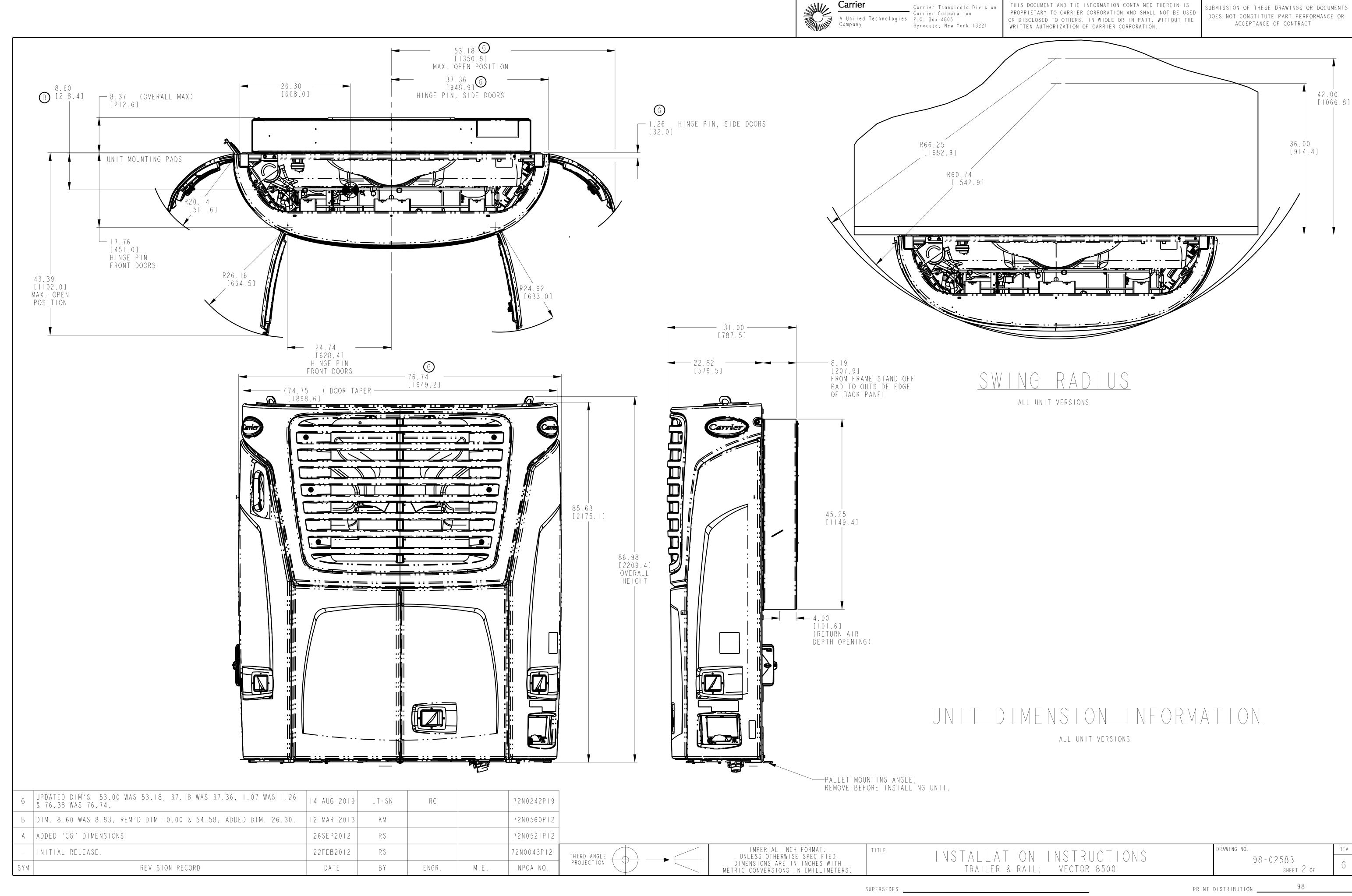
THIRD ANGLE PROJECTION

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

INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 8500

SUPERSEDES:

98-02583 SHEET | OF | (



34.16

[867.7] BACK PANEL

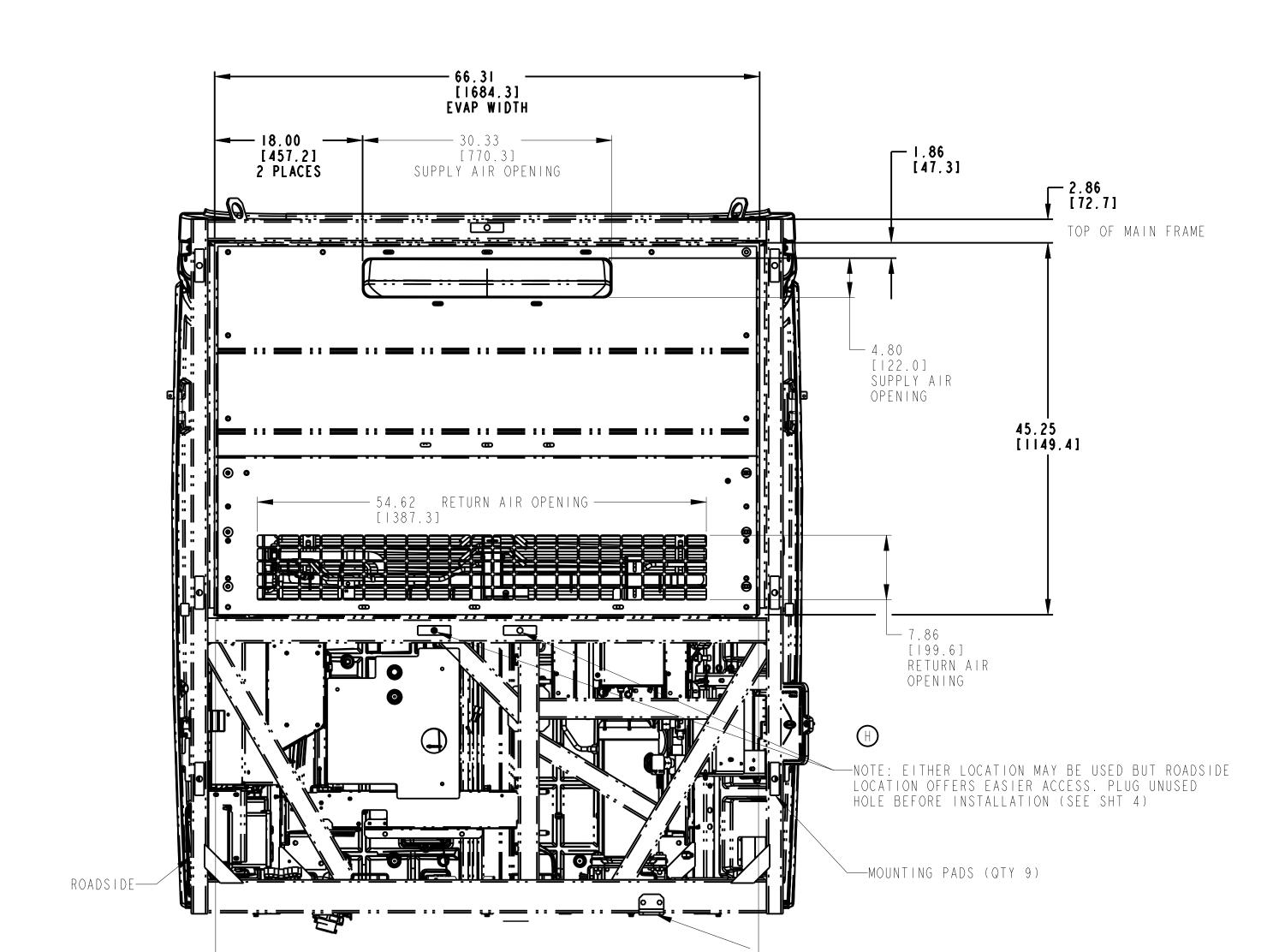
└─ II.088

— PALLET MOUNTING ANGLE - REF REMOVE BEFORE INSTALLING UNIT.

[281.62] RETURN AIR

OPENING

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





<u>REAR VIEW: WITH UPPER AND LOWER BACK PANELS</u>

Н	REVISED NOTE TO PLUG UNUSED HOLE BEFORE INSTALLATION, WAS PLUG UNUSED HOLE AFTER INSTALLATION.	26 OCT 2022	ZMG	HW		ECN1161283
-	INITIAL RELEASE.	07MAR2012	RS			72N0043P12
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	M . E .	NPCA NO.

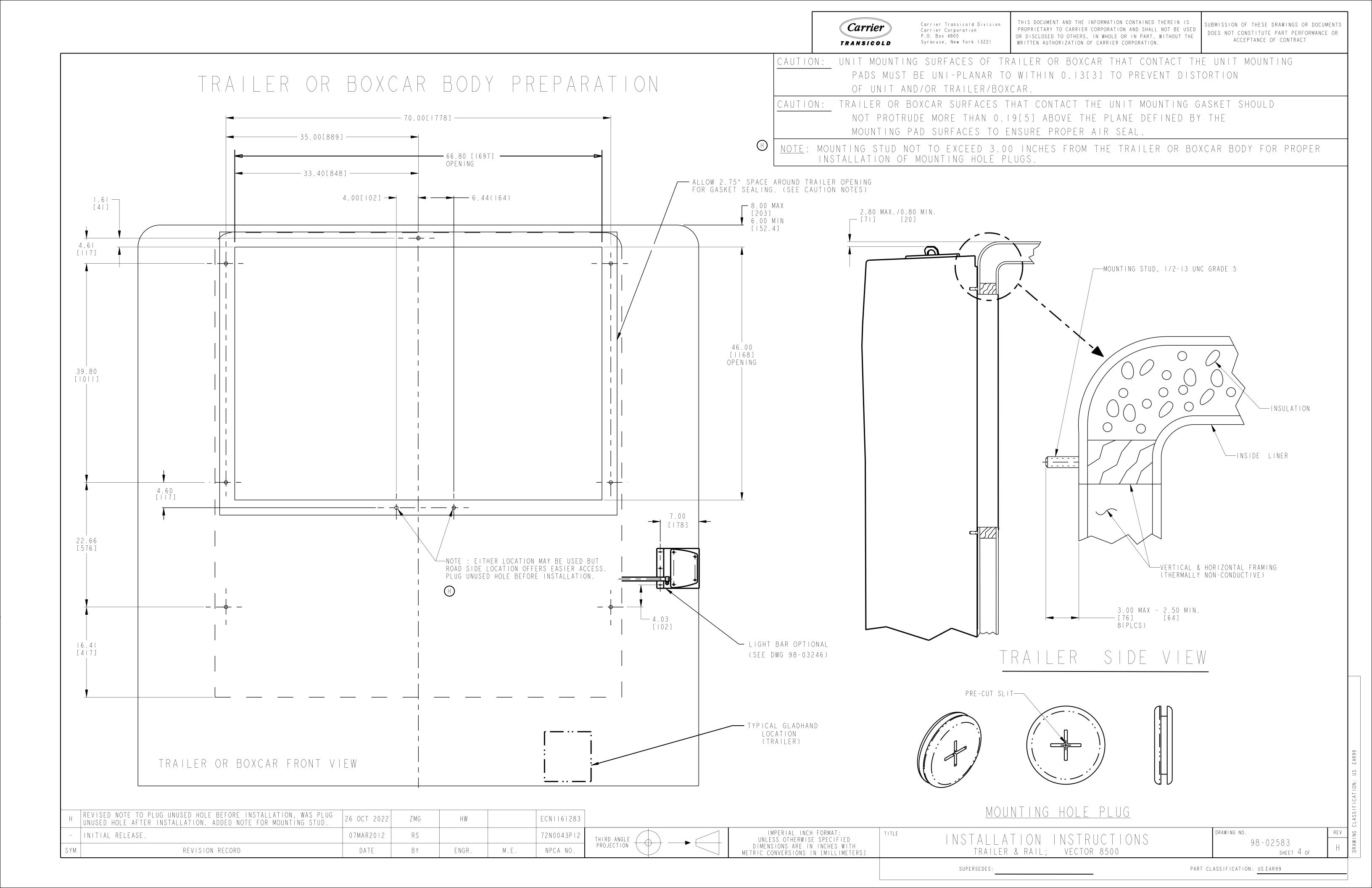
THIRD ANGLE PROJECTION

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

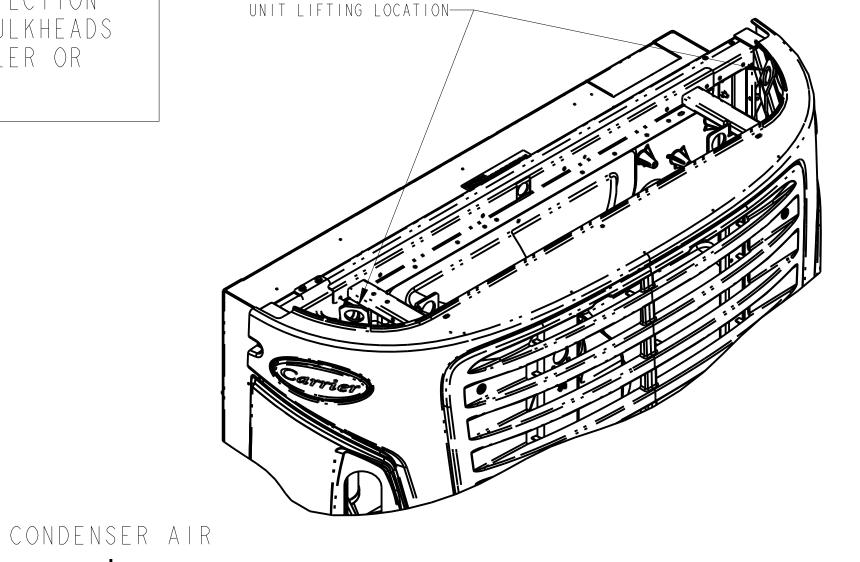
INSTALLATION INSTRUCTIONS
TRAILER & RAIL; VECTOR 8500

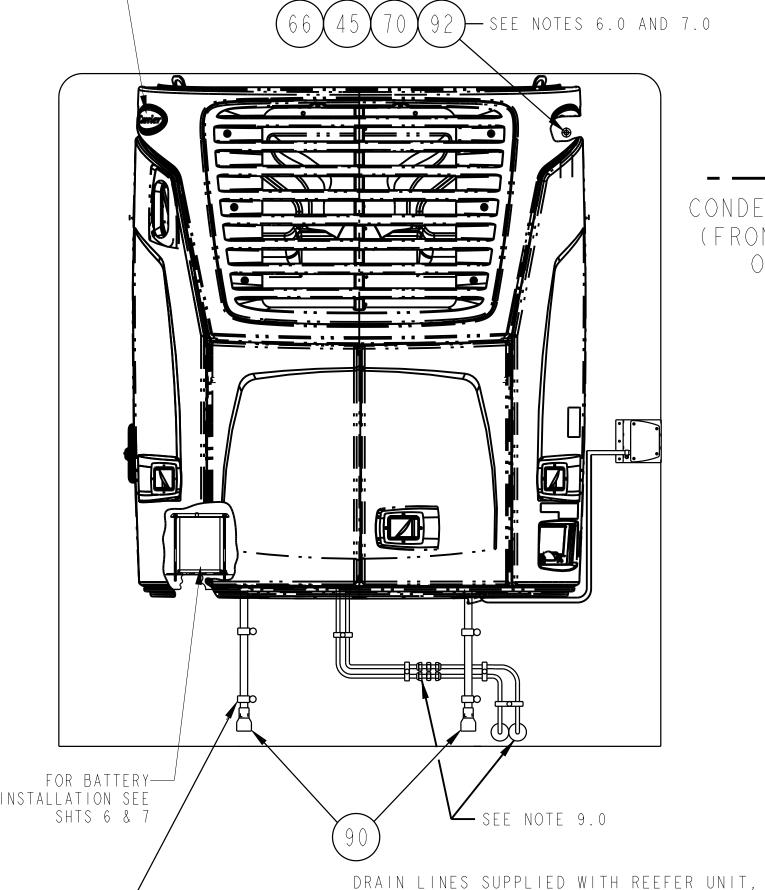
DRAWING NO. 98-02583 sнеет 3 of

SUPERSEDES:







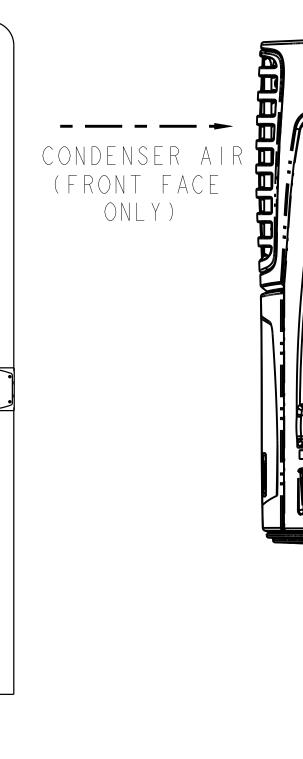


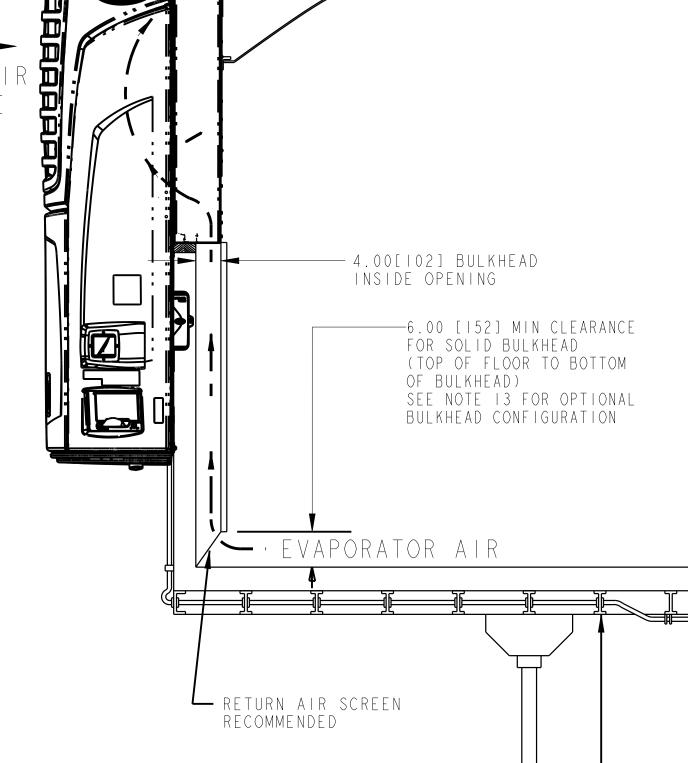
CUT TO SUIT.

SEE NOTE 8.0

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

TWO PLACES

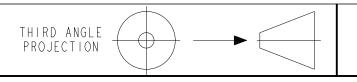




UNIINSIALLAIION

Н	UPDATED SPEC 1.0 & 7.0. ADDED SPEC 3.1.	26 OCT 2022	ZMG	HW		ECN1161283
G	UPDATED STEP 4.0 & 5.0.	14 AUG 2019	LT-SK	RC		72N0242P19
F	REVISED NOTES 10.0, 11.0 AND 12.0.	04 APR 2017	ZMG			72N0217P17
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	M . E .	NPCA NO.

(DO NOT KINK OR OTHERWISE CLOSE DOWN TUBE I.D.)



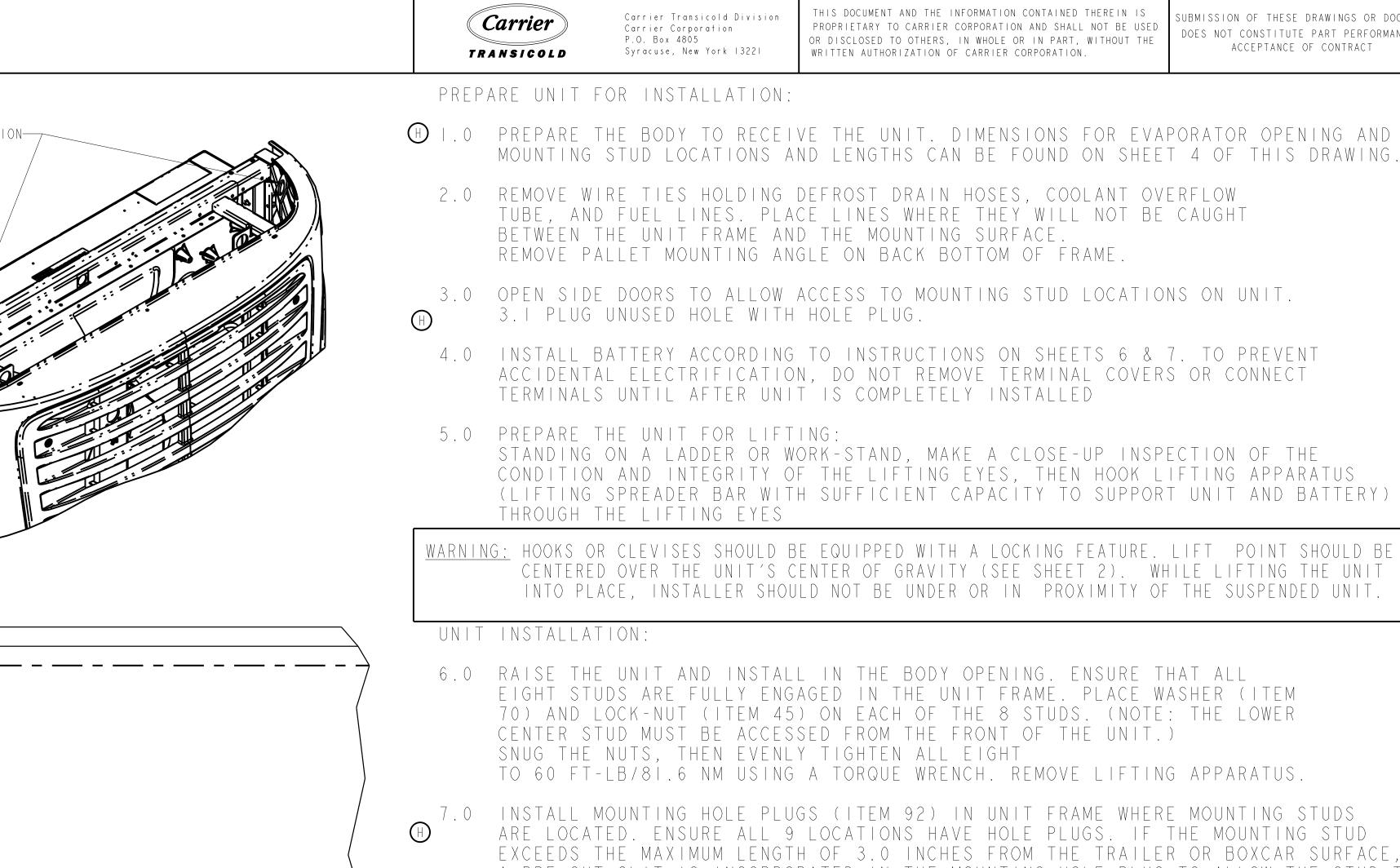
IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH TITLE METRIC CONVERSIONS IN [MILLIMETERS]

SEE NOTE II.O

INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 8500

DRAWING NO. 98-02583

sheet 5 of PART CLASSIFICATION: US EAR99



- \_ 7.0 INSTALL MOUNTING HOLE PLUGS (ITEM 92) IN UNIT FRAME WHERE MOUNTING STUDS ARE LOCATED. ENSURE ALL 9 LOCATIONS HAVE HOLE PLUGS. IF THE MOUNTING STUD EXCEEDS THE MAXIMUM LENGTH OF 3.0 INCHES FROM THE TRAILER OR BOXCAR SURFACE, A PRE-CUT SLIT IS INCORPORATED IN THE MOUNTING HOLE PLUG TO ALLOW THE STUD TO PROTRUDE THROUGH THE PLUG. (SEE SHT.4).
- 8.0 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.
- 9.0 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

- 10.0 PERFORM PRE-DELIVERY INSPECTION. COPIES OF COMPLETED CHECKLIST SHOULD BE SUPPLIED TO SELLING DEALER AND CUSTOMER.
- II.O 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".
- 12.0 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.

# BATTERY INSTALLATION INSTRUCTIONS

## SEE NEXT SHEET FOR PICTORIALS OR REFER TO BATTERY INSTALLATION DOCUMENT IN POLY BAG FASTENED TO BATTERY TRAY PLATE.

### UNITS SUPPLIED WITH BATTERY INSTALLED

- I.O 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 (USE OF CORROSION INHIBITOR IS RECOMMENDED).
- 3.0 POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

 $\bigcirc$ 

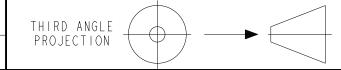
### UNITS SUPPLIED WITHOUT BATTERY INSTALLED

I.O 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 FAHRENHEIT) 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 IN THE BATTERY TRAY 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 SCREWS AND HOLD-DOWN CHANNEL USING 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.

В	REMÍD NOTE 4.0 FROM "UNITS SUPPLIED WITH BATTERY INSTALLED" NOTES, REMÍD NOTE 5.0 FROM "UNITS SUPPLIED WITHOUT BATTERY INSTALLED" NOTES	12 MAR 2013	LT-KM			72N0560PI2
А	NOTE 2: 'POSITIVE (+) WAS NEGATIVE (-)'	05NOV2012	RS			72N052IPI2
-	INITIAL RELEASE.	07MAR2012	RS			72N0043P12
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]

TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 8500

SUPERSEDES:

RAWING NO. 98-02583 SHEET 6 OF

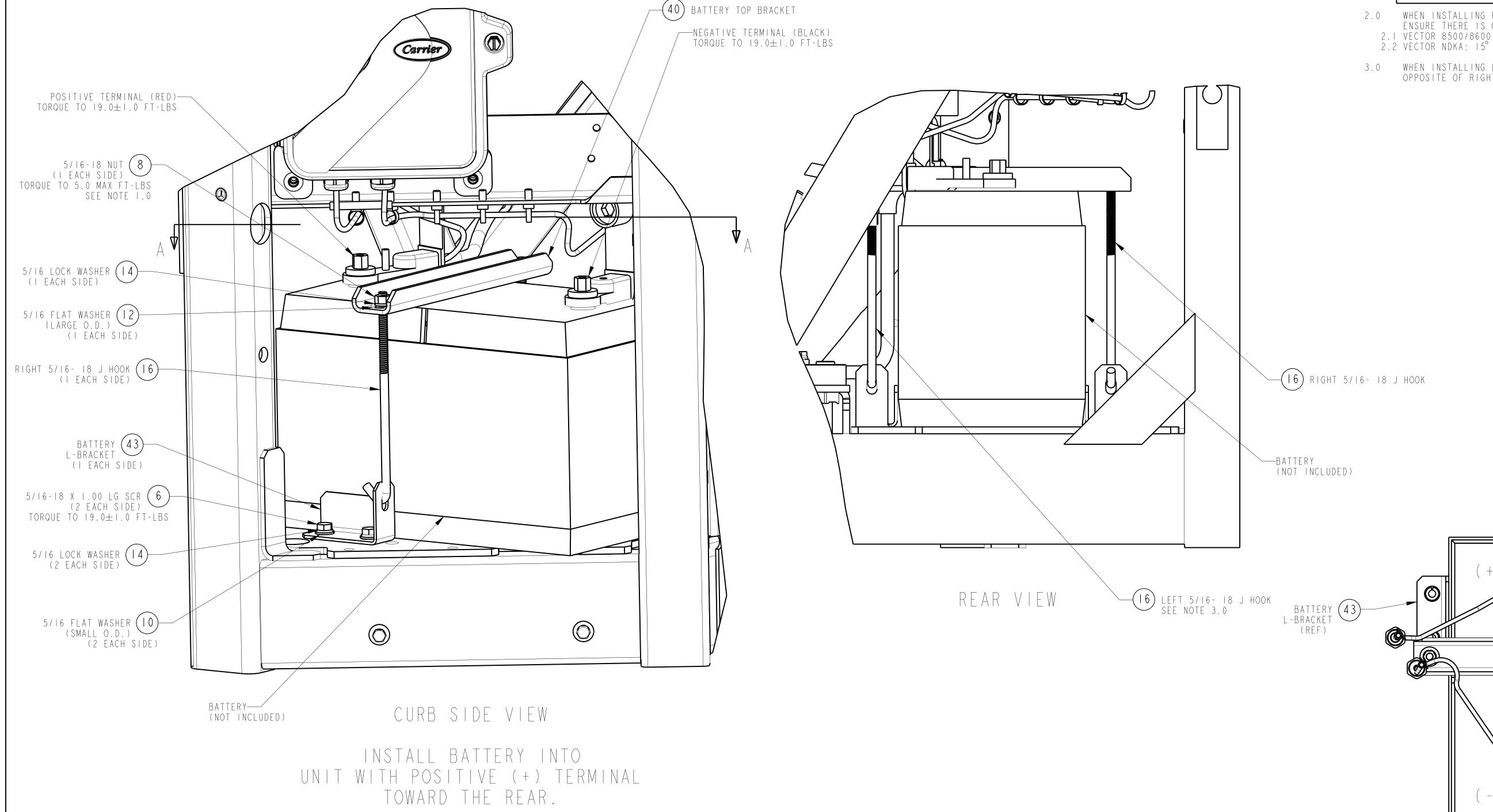
Carrier Transicold Division Carrier Corporation P.O. Box 4805 Syracuse, New York 13221

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



- CAUTION: DUE TO DIFFERENT BATTERY MFG. WHEN APPLYING TORQUE TO BATTERY U-BRACKET, MAKE SURE THERE IS NO BATTERY HOUSING DISTORTION OR CRUSHING.
- 2.0 WHEN INSTALLING POSITIVE BATTERY CABLE TO BATTERY POST ENSURE THERE IS CLEARANCE BETWEEN THE CABLE AND THE FRAME. 2.1 VECTOR 8500/8600: 0°
- 3.0 WHEN INSTALLING LEFT J-HOOK INTO L-BRACKET ROTATE OPPOSITE OF RIGHT J-HOOK.



BATTERY INSTALLATION PROCEDURE FOR

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

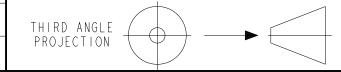
UNITS SHIPPED WITHOUT BATTERY.

VIEW A-A BATTERY CABLE ARRANGEMENT.

TOP OF BATTERY

TYPICAL CABLE ROUTING FOR: VECTOR 8500, 8500R

	E	BATTERY INSTALLATION PROCEDURE UPDATED	22 JUN 2015	LT-SJ			72N005IPI4	
-	В	SECT B-B NOTE; "TY-WRAPPED" WAS "TY-RAPED"	03APR2013	FM			72N0560PI2	1
-	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 TRAILER & RAIL; VECTOR 8500

SUPERSEDES:

DRAWING NO. 98-02583 sheet 7 of

SEE NOTE 2.0

— (43) BATTERY L-BRACKET (REF)



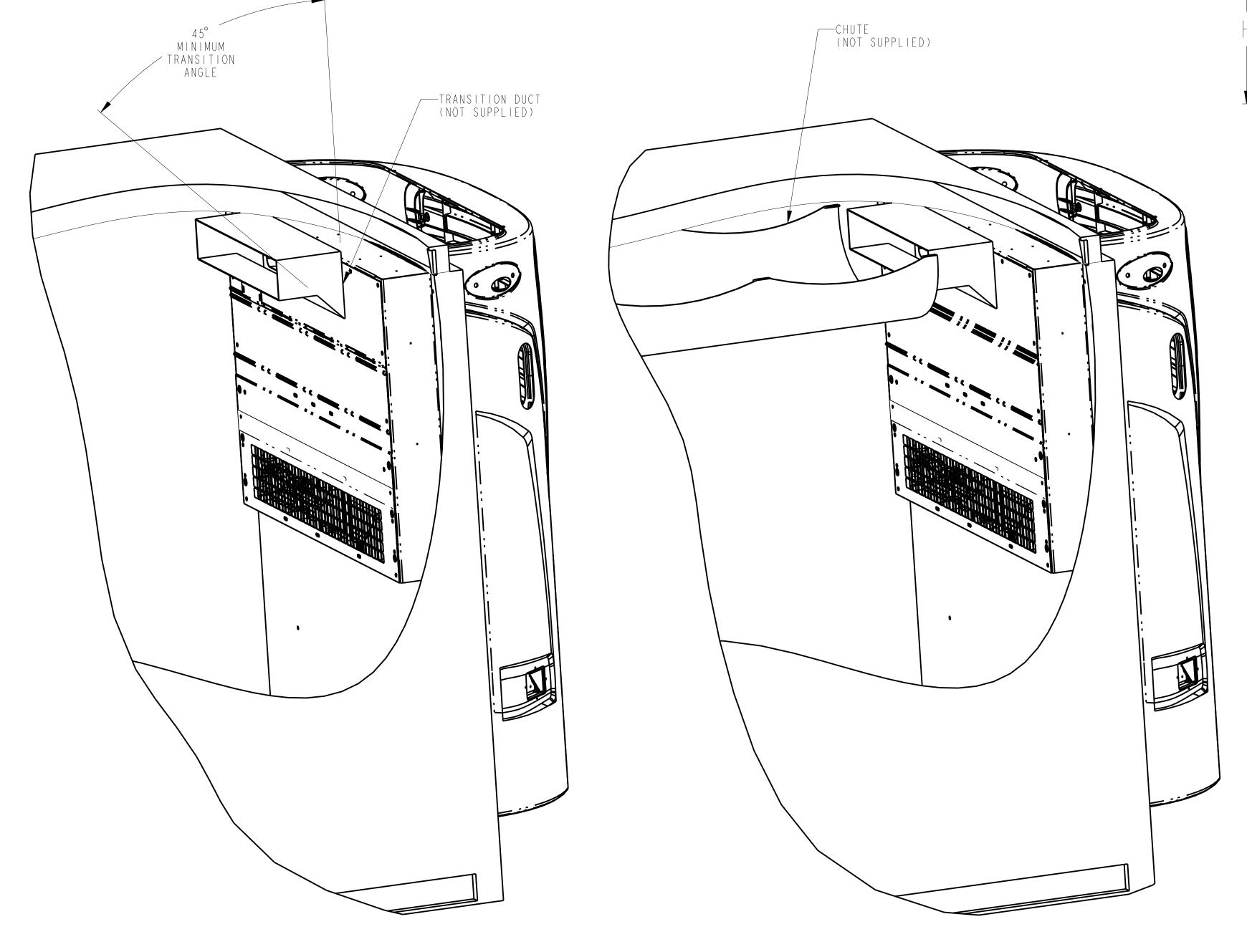
Carrier Transicold Division Carrier Corporation P.O. Box 4805 Syracuse, New York 13221 THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS PROPRIETARY TO CARRIER CORPORATION AND SHALL NOT BE USED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF CARRIER CORPORATION.

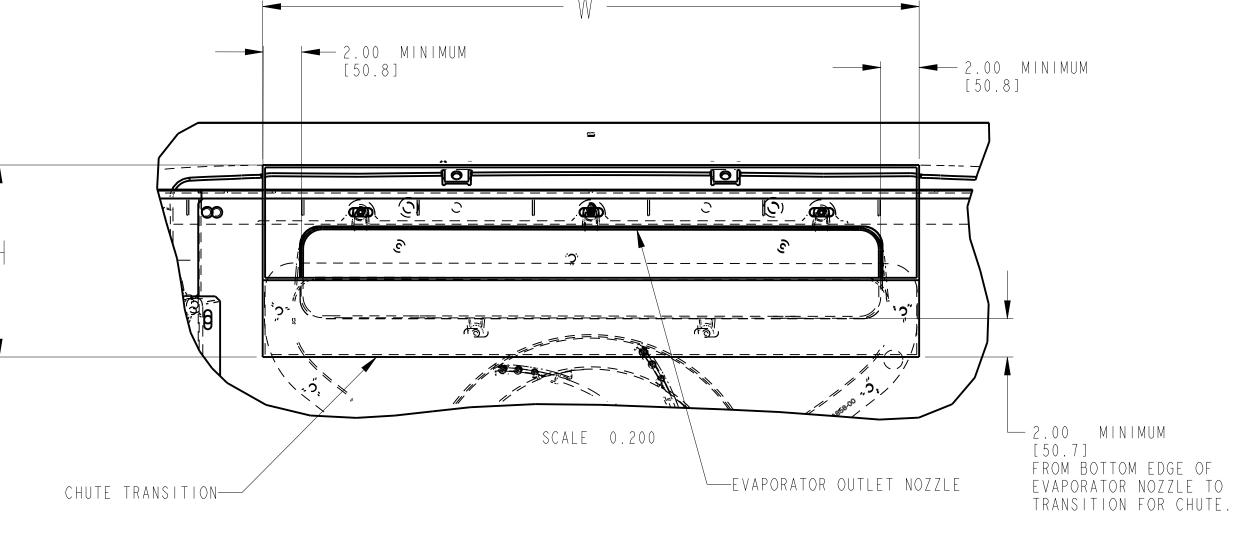
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS

DOES NOT CONSTITUTE PART PERFORMANCE OR

ACCEPTANCE OF CONTRACT

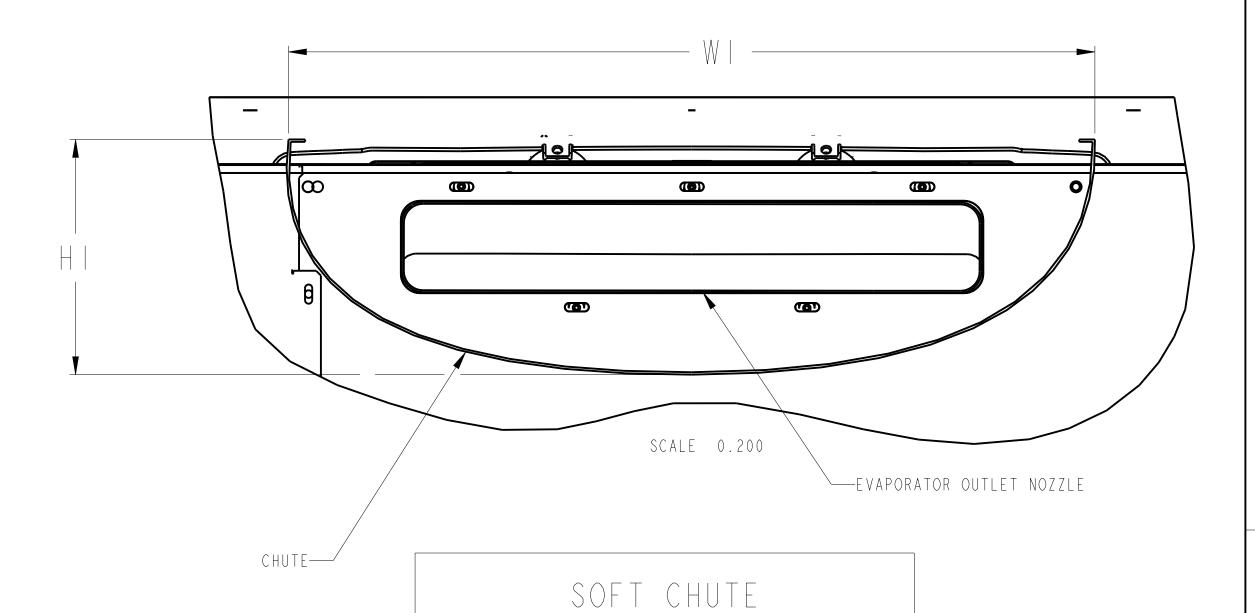






### HARD RECTANGULAR CHUTE MIN. DIMENSIONS

W	H
60.00	6.00
54.00	6.75
48.00	7.50
42.00	8.75
36.00	10.00
30.00	12.00



CHUTE REMOVED FOR CLARIFICATION OF TRANSITION

TRANSITION & CHUTE DETAILS

$\mathbb{W}$	HI
60.00	9.00
54.00	9.75
48.00	11.00
42.00	12.25
36.00	13.75
30.00	15.00

MINIMUM DIMENSIONS

-	INITIAL RELEASE.	07MAR2012	ZMG			72N0043P12
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
TRAILER & RAIL; VECTOR 8500

DRAWING NO. REV 9N MAD SHEET 8 OF - MAD

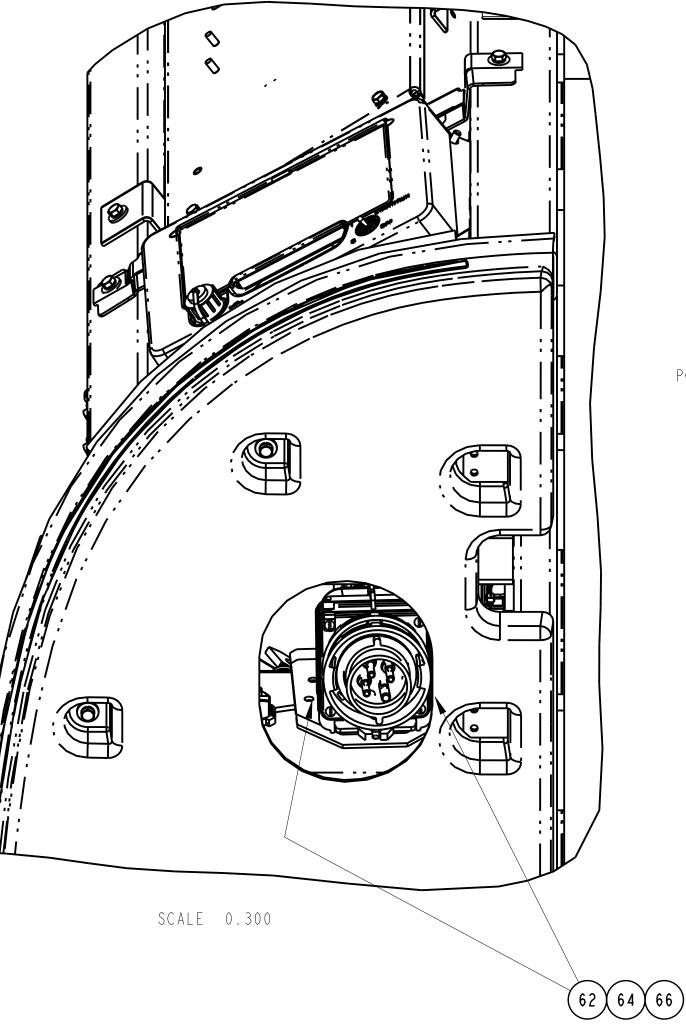
SUPERSEDES: PART CLASSIFICATION: US EAR99

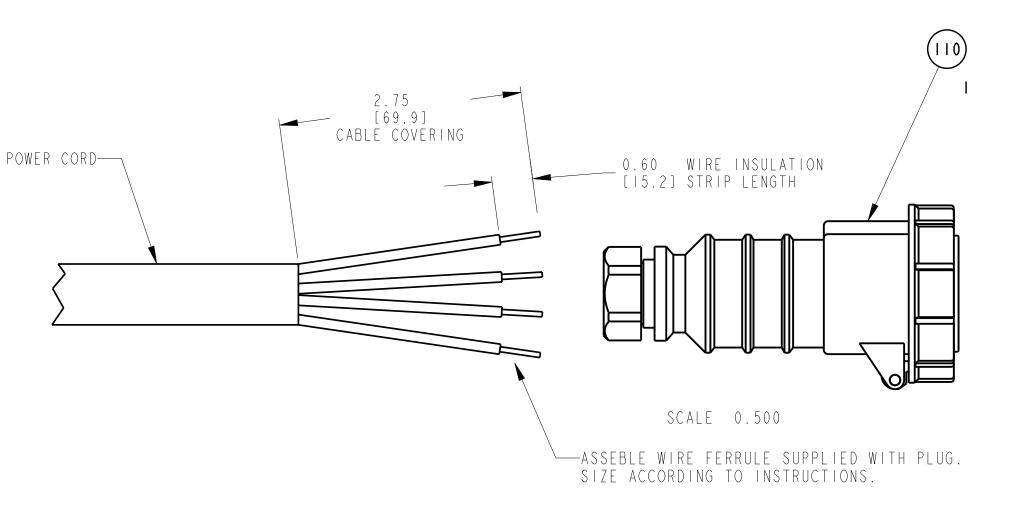
## Electrical Specifications & Minimum Standby Infrastructure for Carrier Transicold Trailer units equipped with Standby

Vector 8500 W/STBY
460V / 3ph / 60Hz
22 A
18.5
90 A
IEC IP 67 pin & sleeve, 480V, 30A, 4
wire, 3 pole
22-04166-01
Automatic
& cordset specifications
SOOW, 600V, 90C, 10/4 (3ph + G)
30 A
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.
- 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.



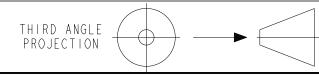


## **WARNING:**

READ ENTIRE SUPPLIER DIRECTIONS SUPPLIED WITH PLUG BEFORE STARTING INSTALLATION.

PARTIAL LOWER ROADSIDE VIEW STANDBY PLUG MOUNTING

А	8500 WAS 6500; 22-04166-01 WAS -00; 22-02944-00 WAS 22-04167-00	030CT2012	RS			72N052IPI2
-	INITIAL RELEASE.	07MAR2012	RS			72N0043P12
SYM	REVISION RECORD	DATE	ВҮ	ENGR.	М.Е.	NPCA NO.

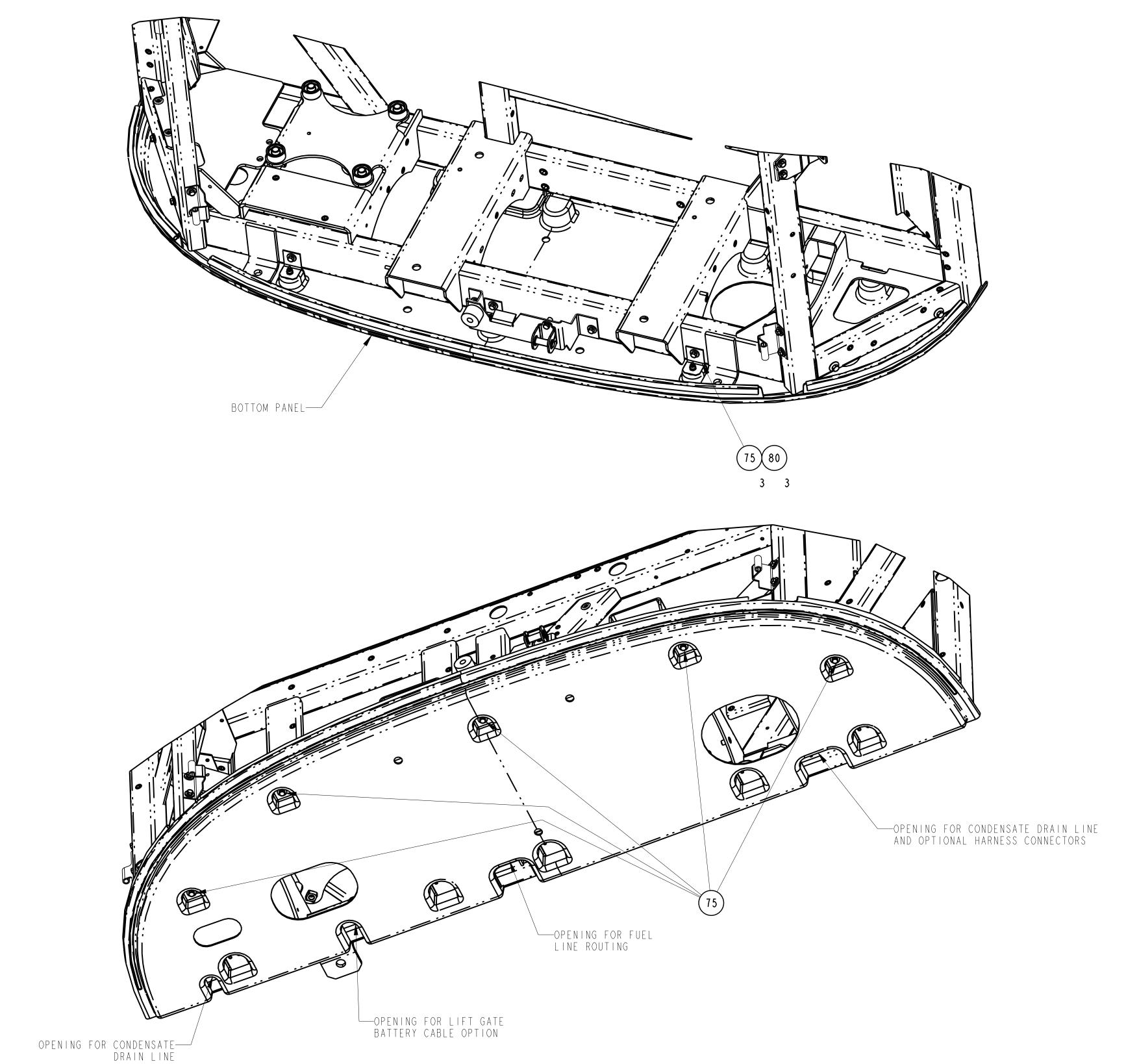


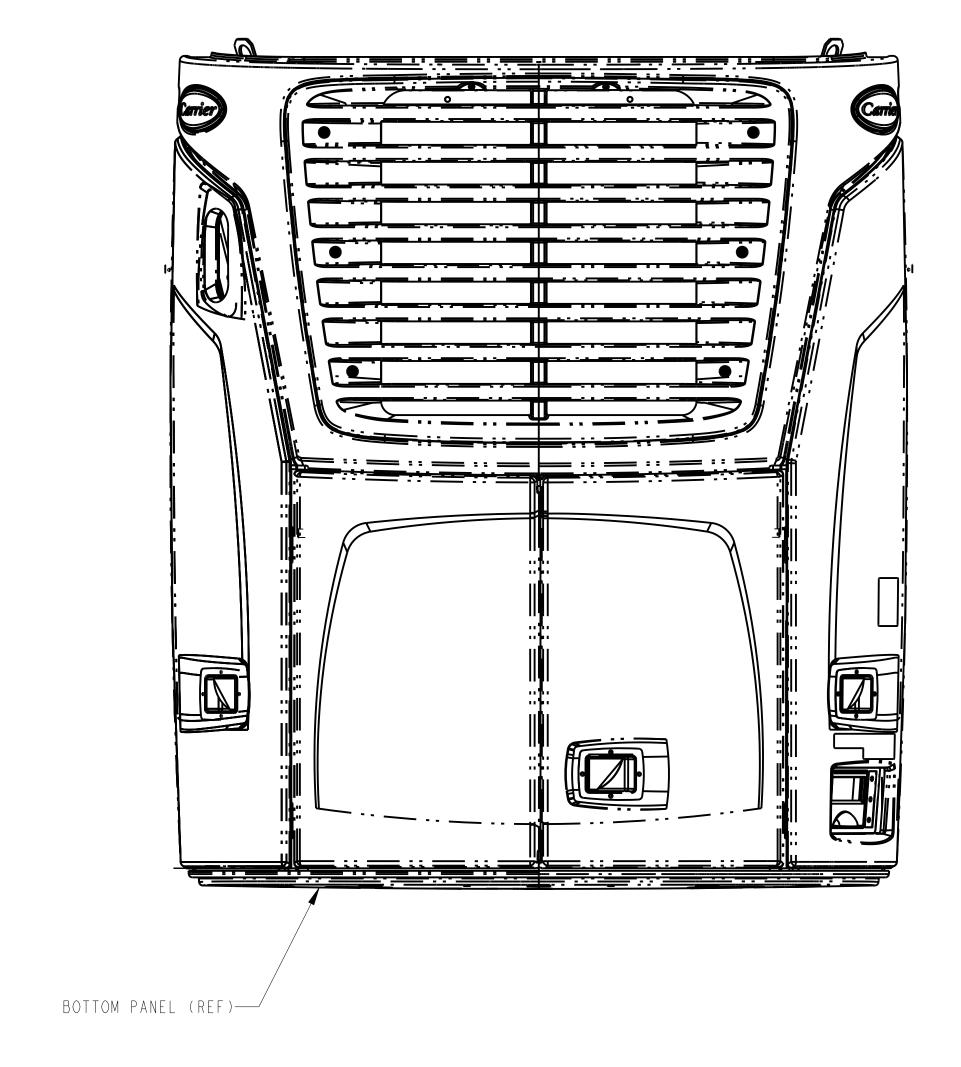
IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

SUPERSEDES:

INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 8500

98-02583 SHEET 9 OF

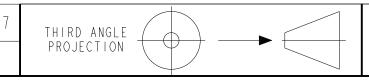




BOTTOM PANEL INSTALLATION

NOTES: I.O INSTALL (3) MOUNTING ANGLES (ITEM #80), WITH RIVNUTED FLANGE DOWN, TO FRAME USING SUPPLIED SCREWS (ITEM #75). TORQUE SCREWS TO 96 IN-LBS, KEEPING THE BOTTOM OF THE ANGLES FLUSH AND PARALLEL TO THE BOTTOM OF THE FRAME. 2.0 SLIDE (5) OPENINGS IN THE BOTTOM PANEL OVER THE (5) REAR MOUNTING ANGLES ON THE FRAME AND SECURE BOTTOM PANEL TO OTHER (5) MOUNTING ANGLES USING SUPPLIED SCREWS (ITEM #75). TORQUE SCREWS SECURELY TO 96 IN-LBS.

F	NEW SHEET	04 APR 2017	ZMG			72N02I7PI
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
TRAILER & RAIL; VECTOR 8500

SUPERSEDES:

DRAWING NO. 98-02583 SHEET | O OF