

Carrier

A United Technologies
Company

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

CROSS REFERENCE INDEX

DESCRIPTION	INSTALLATION DRAWING NO.	KIT NO.
FUEL TANKS (22" DIAMETER)	98-02201	76-00295-XX
LED LIGHT BAR INSTALLATION INSTRUCTIONS	98-03246	76-02000-XX

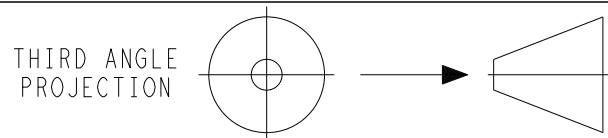
NOTES:

- 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
 - 1.3.4 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 TRANSCOLD 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 [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.
- 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).

PART. NO.	MODEL DESCRIPTION
98-02525-00	NDP-532 (DOMESTIC) NO STBY
98-02525-01	NDP-532 (DOMESTIC) W/STBY

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
CHUTE DIMENSIONAL INFORMATION	7
STAND BY POWER PLUG INSTALLATION	8

C	UPDATED SHEET INDEX. SEE SHEET 8.	10 MAR 11	ZMG			72N0219P11
B	NOTE 1.3: ADDED (PDI) NOTE 2.0: 2020 LBS WAS 2035LBS, 80 LBS WAS 65 LBS UPDATED SHEET INDEX	09-MAR-10	KM			72N0026P10
A	INITIAL RELEASE -01, UPDATED SHEET INDEX, SEE SHEET 8	27JUL2009	RS			72N043GP09
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.



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

TITLE

INSTALLATION INSTRUCTIONS

TRAILER & RAIL; VECTOR 6500

DRAWING NO.

98-02525

SHEET 1 OF 8

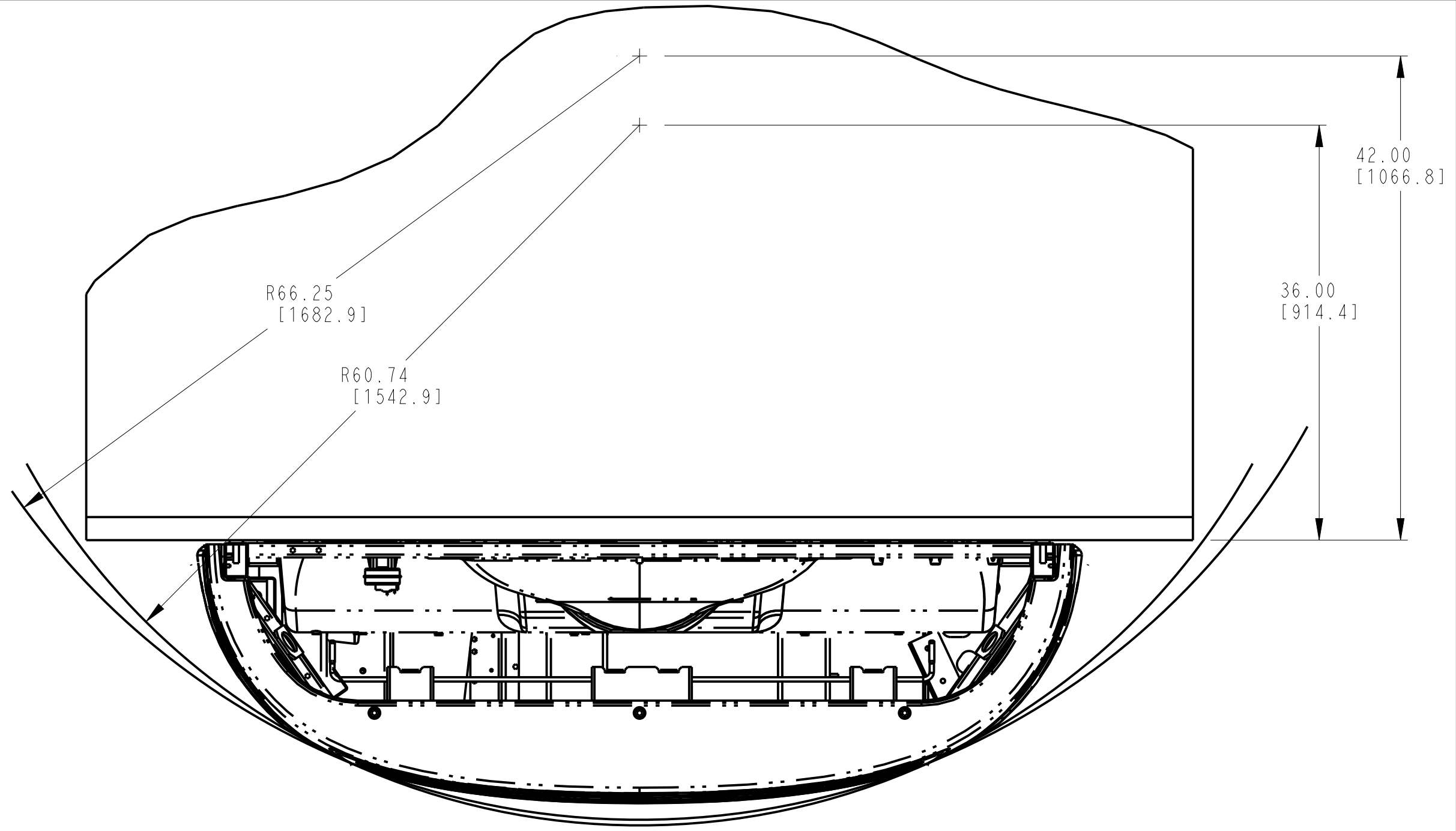
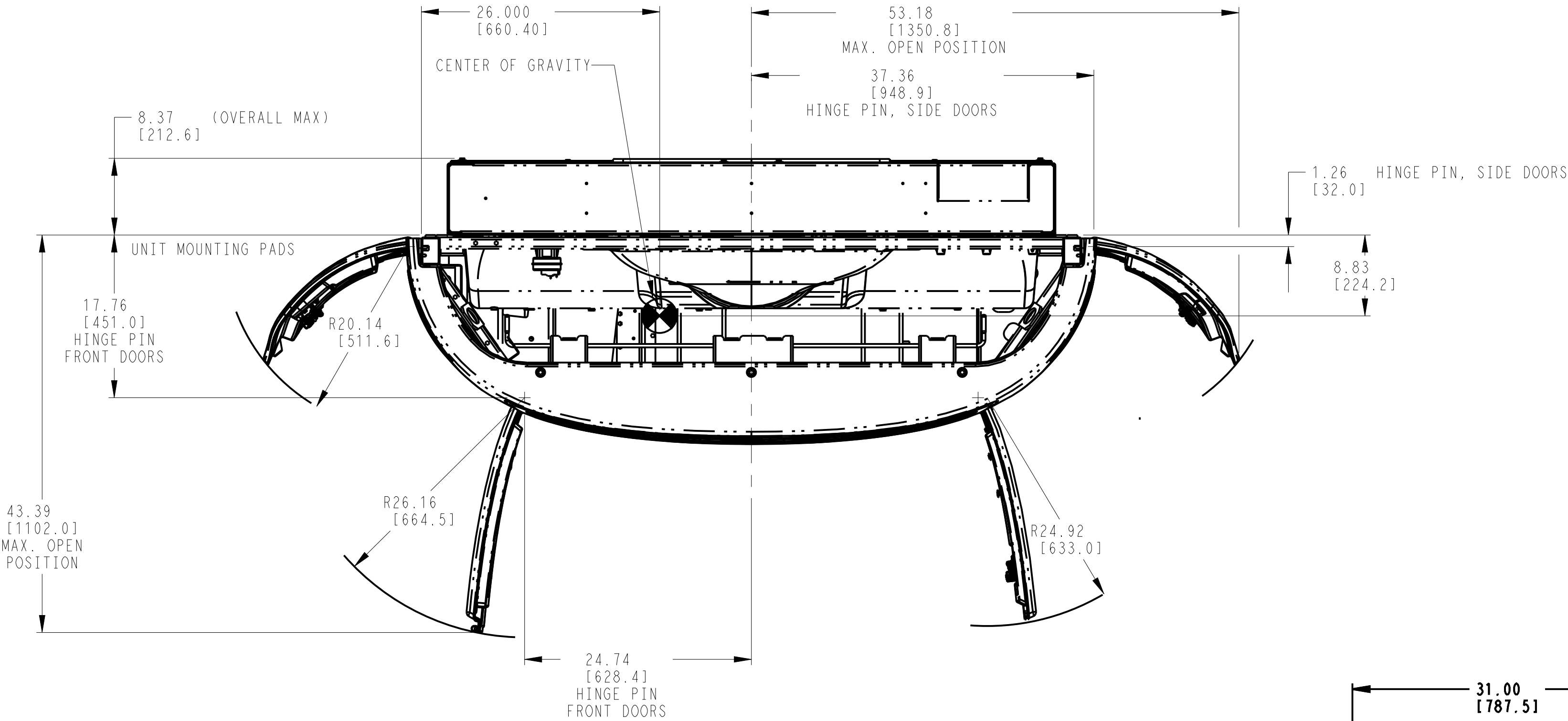
RE

C

SUPERSEDES

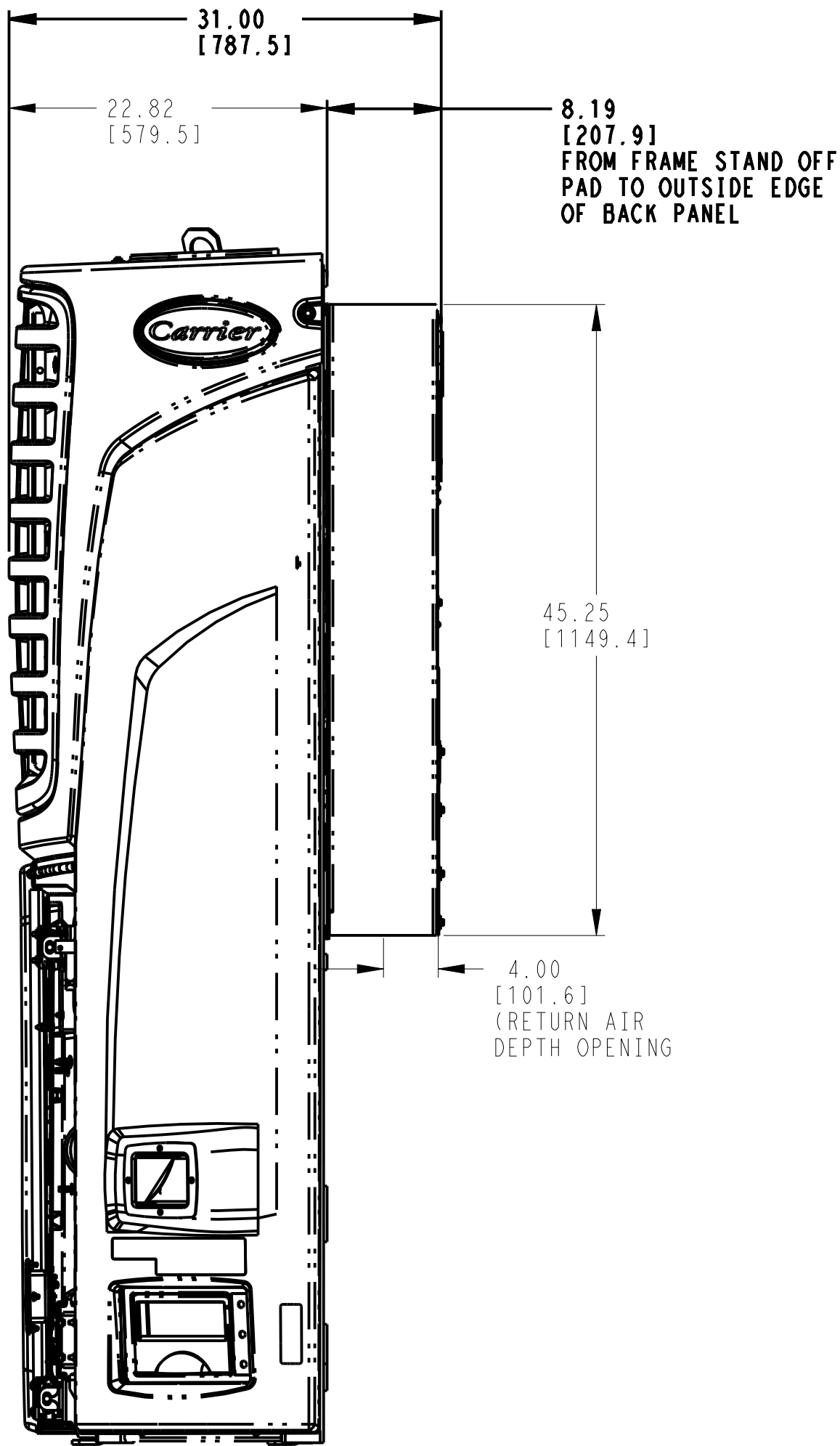
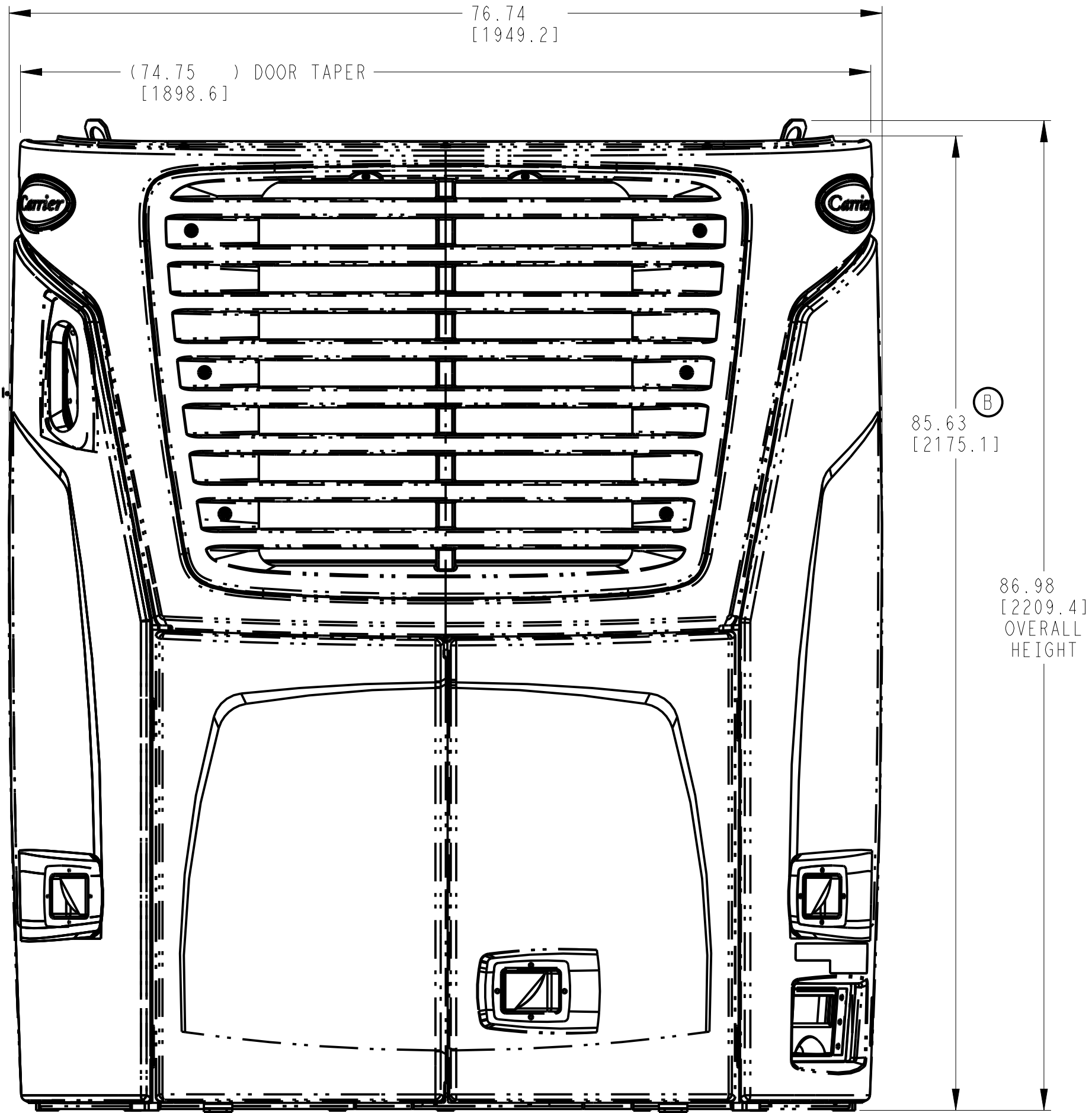
PRINT DISTRIBUTION

98



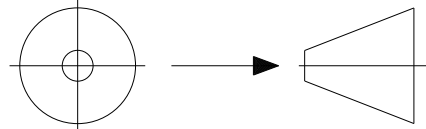
SWING RADIUS

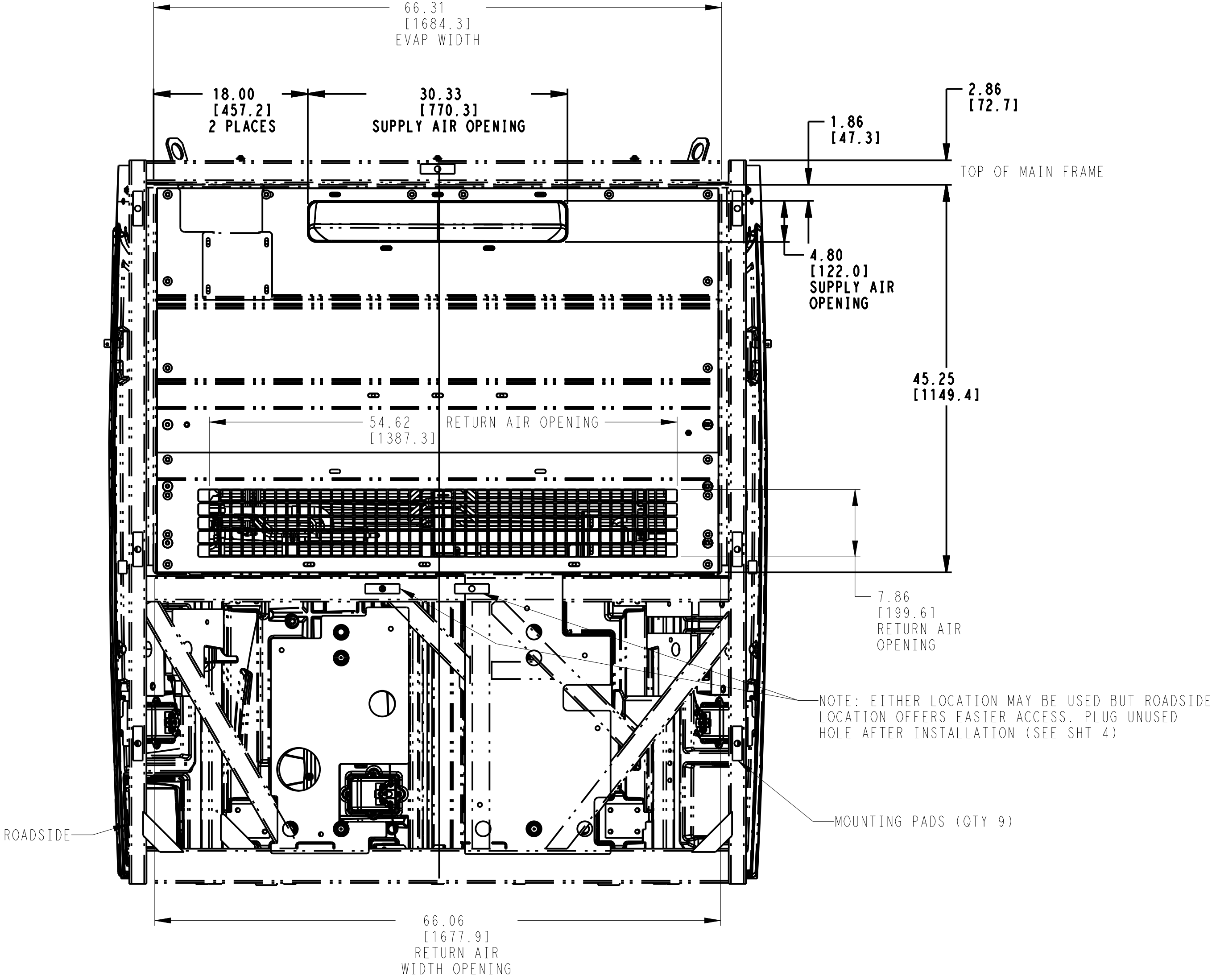
ALL UNIT VERSIONS



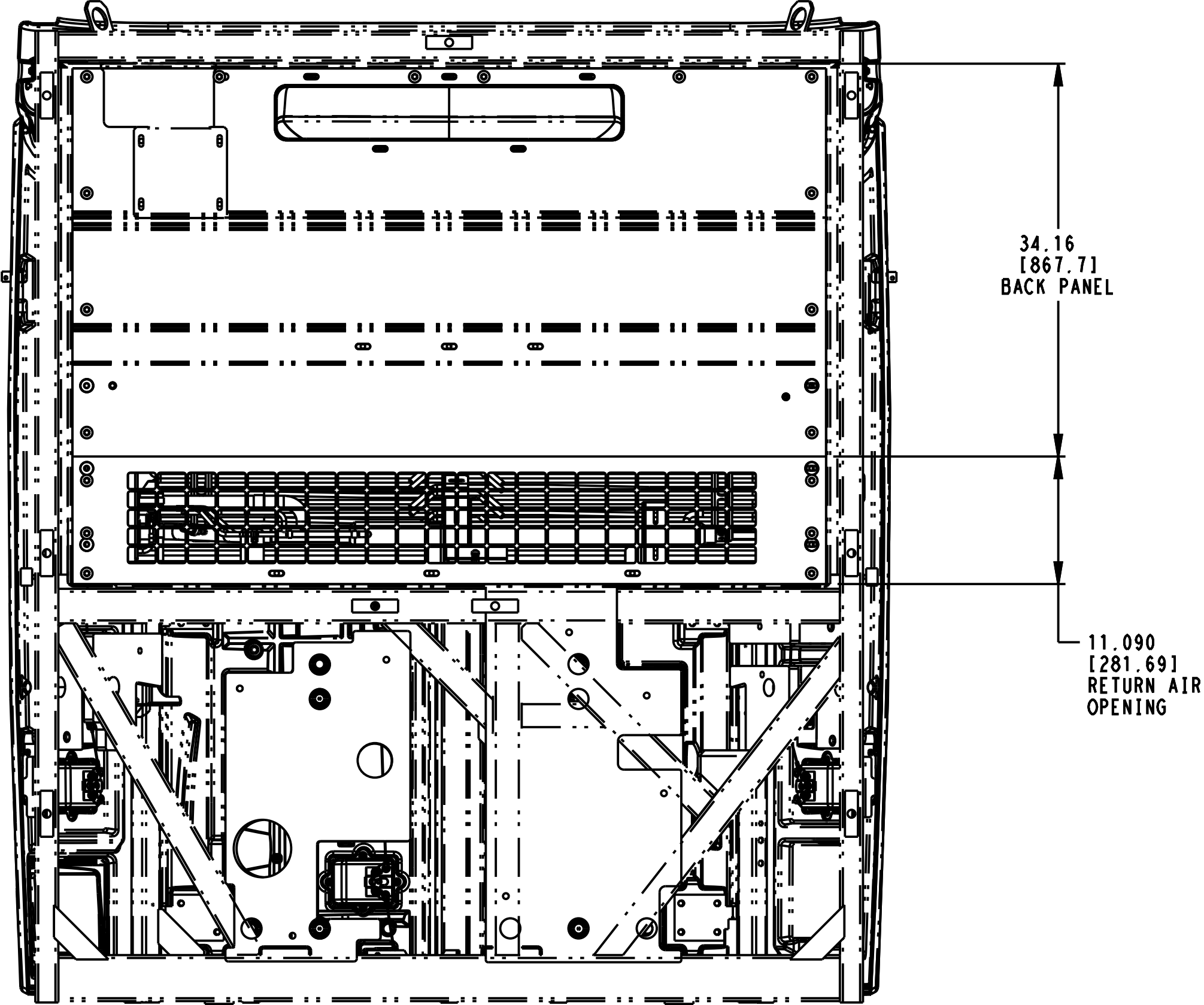
UNIT DIMENSION INFORMATION

ALL UNIT VERSIONS

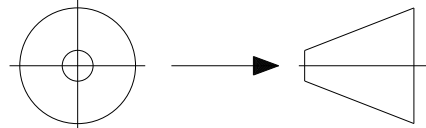
B	ADDED 85.63 DIM.	09-MAR-10	KM			72N0026P10	THIRD ANGLE PROJECTION 	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 6500	DRAWING NO. 98-02525 SHEET 2 OF	REV B
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07					
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					



REAR VIEW : WITH UPPER AND LOWER BACK PANELS



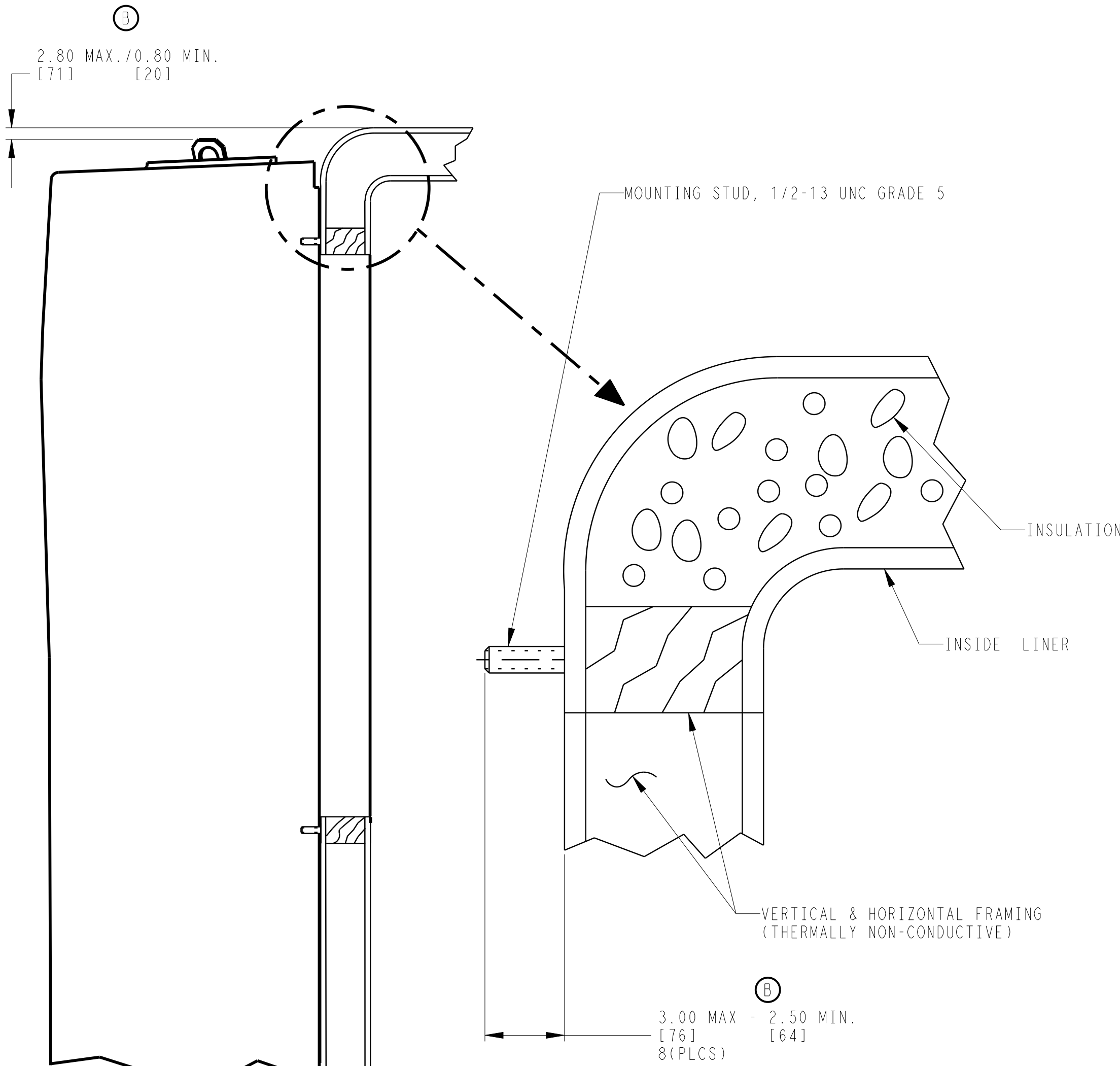
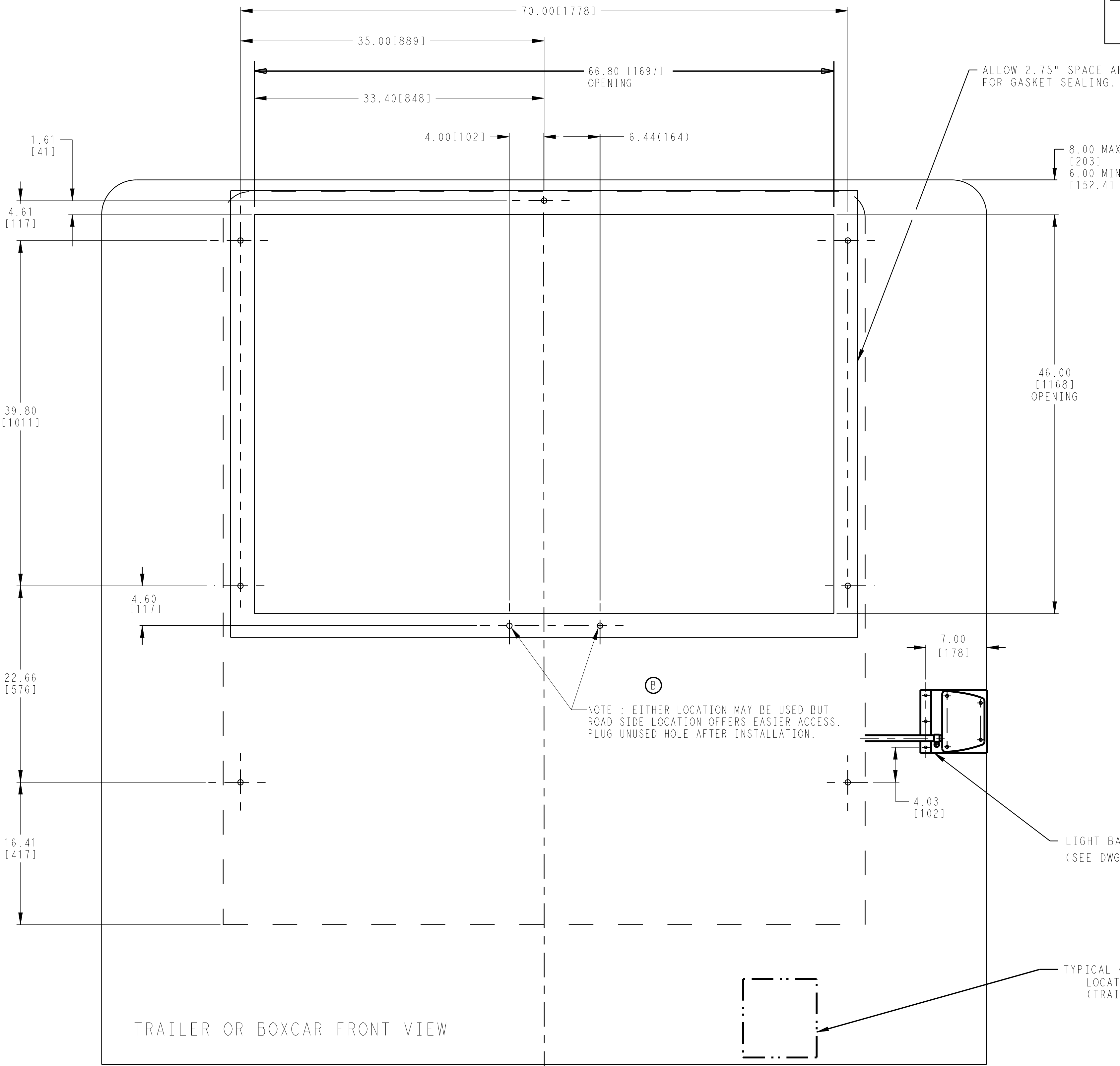
REAR VIEW : UPPER BACK PANEL ONLY

B	PANELS WAS PANALS	09-MAR-10	KM			72N0026P10	<div>THIRD ANGLE PROJECTION</div>	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 6500	DRAWING NO. 98-02525 SHEET 3 OF	REV B
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07					
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					

TRAILER OR BOXCAR BODY PREPARATION

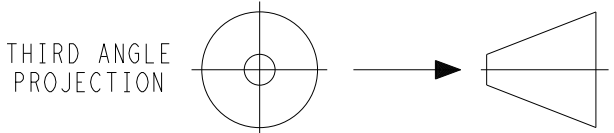
CAUTION: UNIT MOUNTING SURFACES OF TRAILER OR BOXCAR THAT CONTACT THE UNIT MOUNTING PADS MUST BE UNI-PLANAR TO WITHIN 0.13[3] TO PREVENT DISTORTION OF UNIT AND/OR TRAILER/BOXCAR.

CAUTION: 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.



TRAILER SIDE VIEW

B	ADDED STUD LOCATION NOTE, 3.00 MAX-2.50 MIN. WAS 2.50 MIN. 2.80 MAX-0.80MIN. WAS 5.00 MAX.-1.00 MIN.	09-MAR-10	KM			72N0026P10
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.

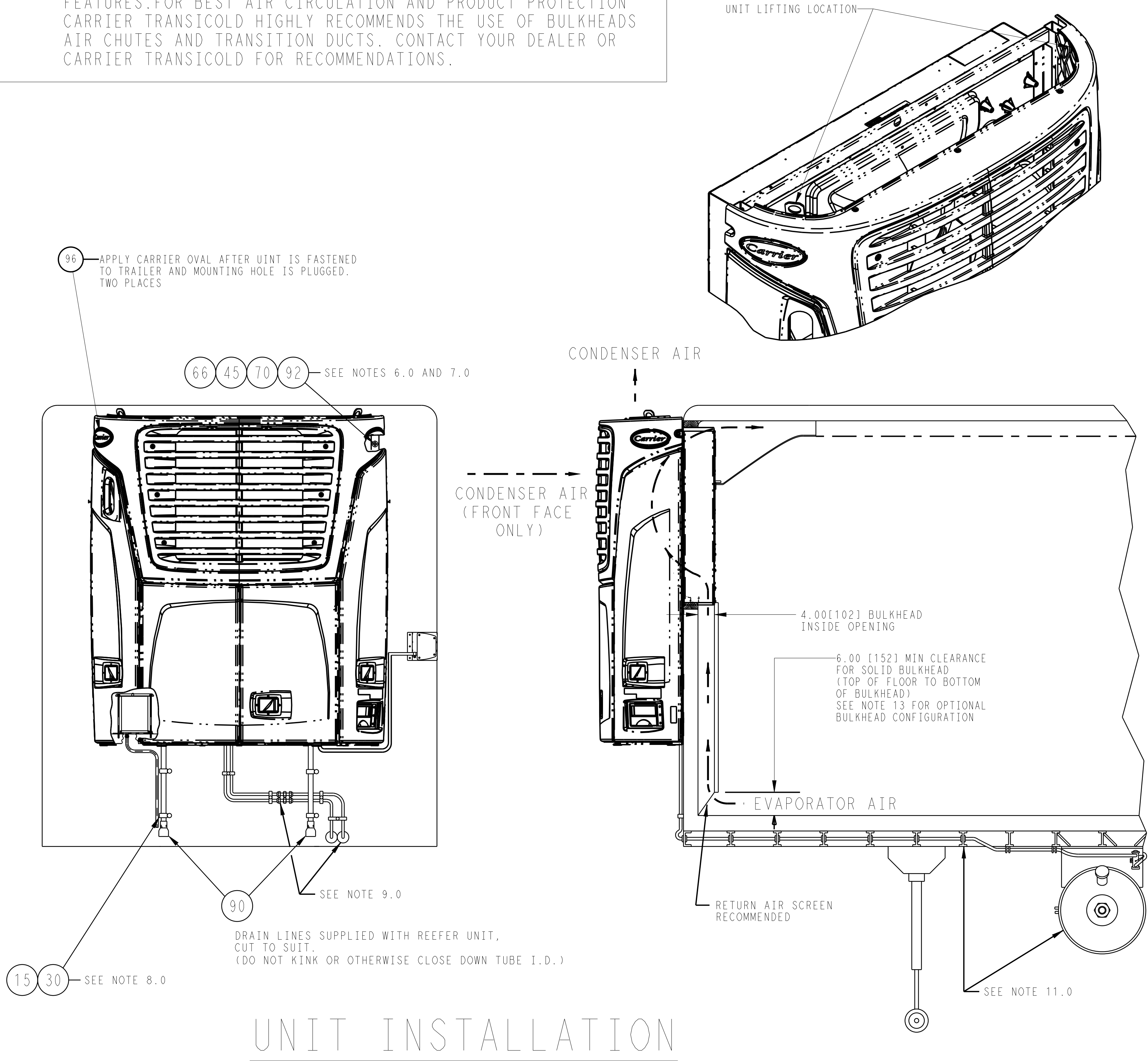


IMPERIAL INCH FORMAT:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES WITH
METRIC CONVERSIONS IN [MILLIMETERS]

TITLE
INSTALLATION INSTRUCTIONS
TRAILER & RAIL; VECTOR 6500

DRAWING NO.	REV
98-02525	B
SHEET 4 OF	

NOTE: BULKHEAD,AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES.FOR BEST 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:

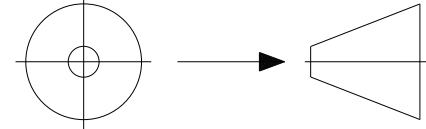
- 1.0 PREPARE THE BODY TO RECEIVE THE UNIT. DIMENSIONS FOR EVAPORATOR OPENING AND MOUNTING STUD LOCATIONS CAN BE FOUND ON SHEET 4 OF THIS DRAWING.
- 2.0 REMOVE WIRE TIES HOLDING DEFROST DRAIN HOSES, COOLANT OVERFLOW TUBE, AND FUEL LINES. PLACE LINES WHERE THEY WILL NOT BE CAUGHT BETWEEN THE UNIT FRAME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

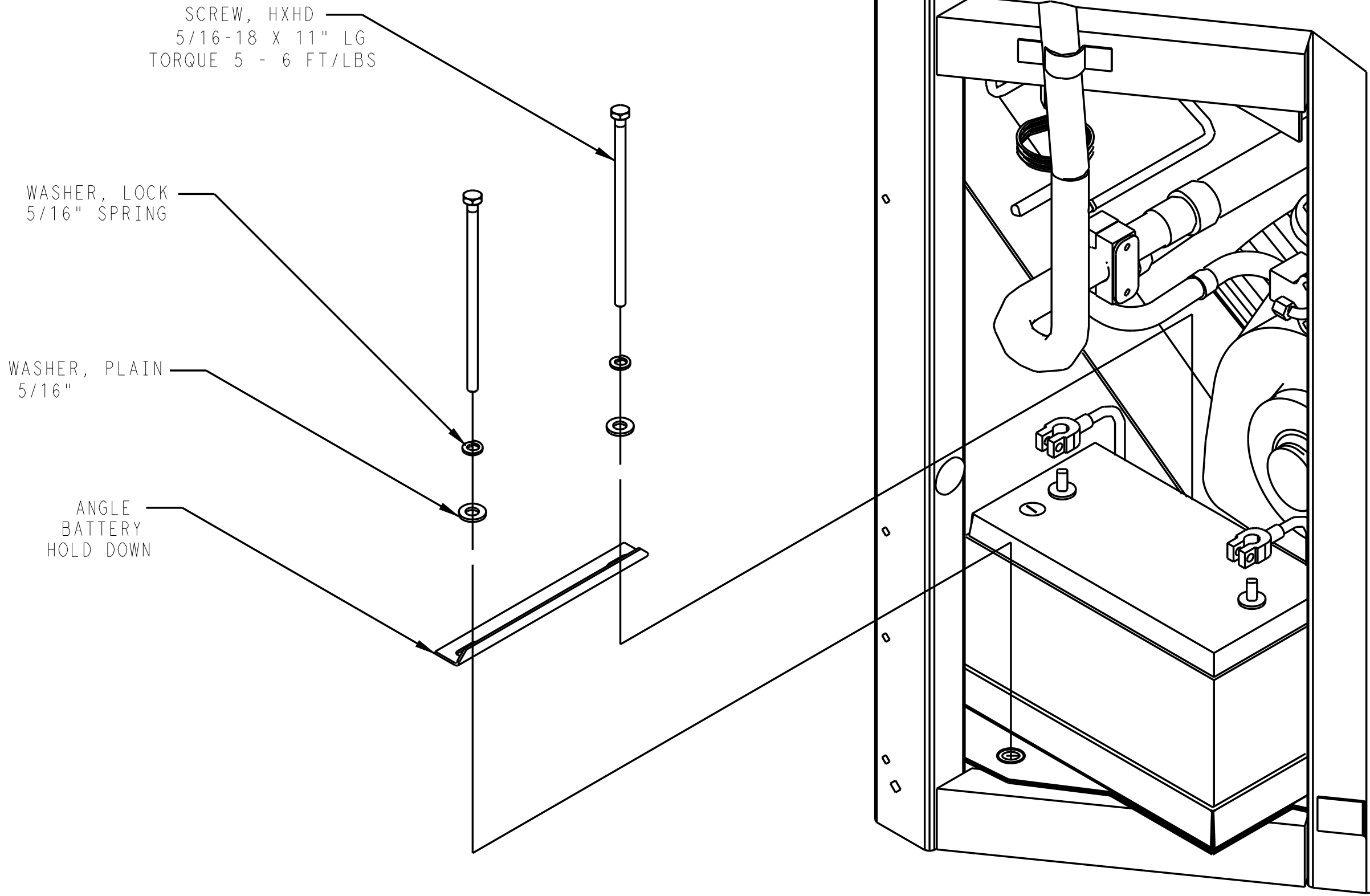
UNIT INSTALLATION:

- 6.0 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.
- 7.0 INSTALL BUTTON PLUGS (ITEM 92) IN UNIT FRAME WHERE MOUNTING STUDS ARE LOCATED AND ADDITIONAL UNUSED HOLE (SEE SHT.2).
- 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 5th-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.

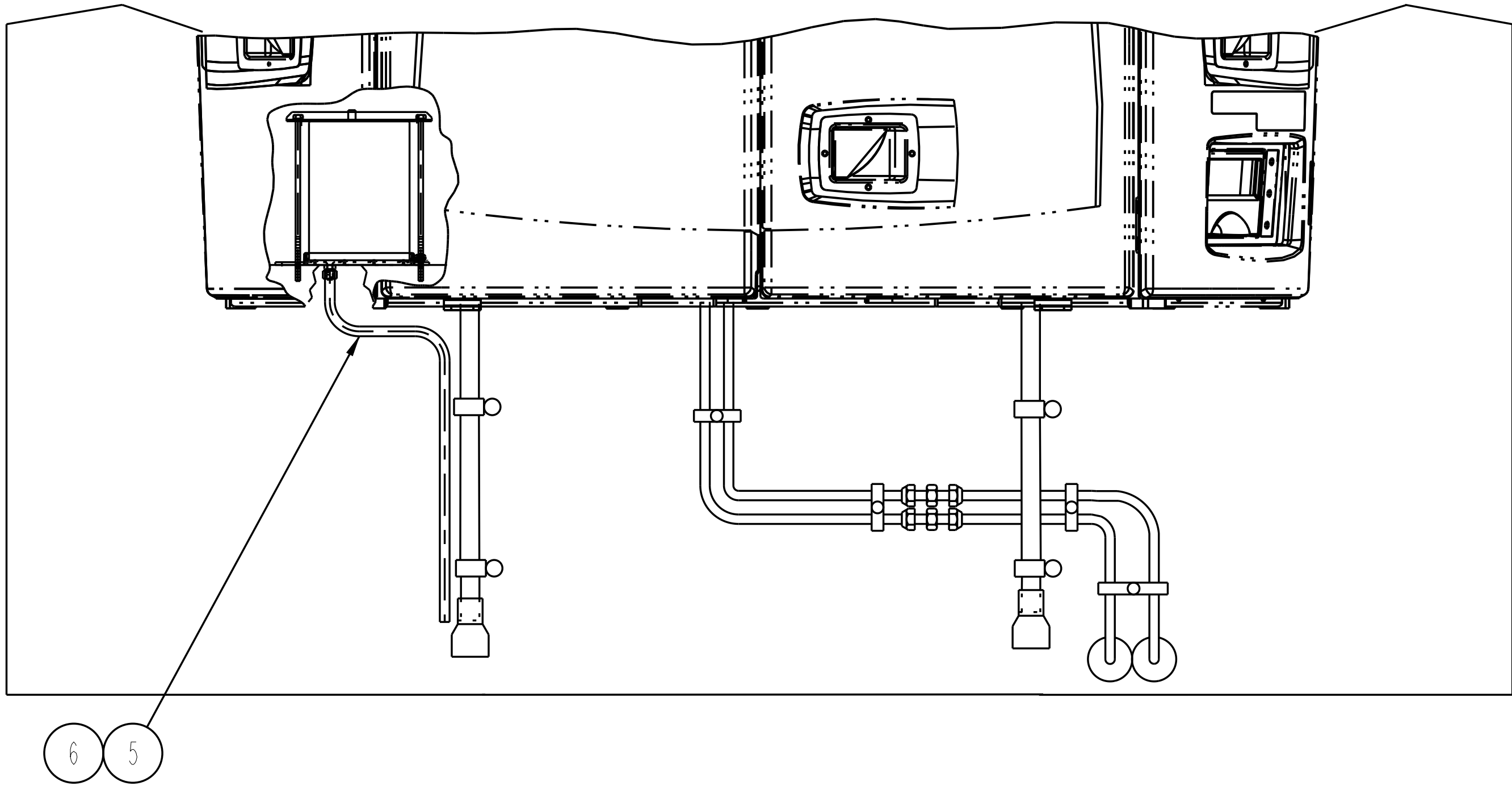
AFTER INSTALLATION

- 10.0 PERFORM PRE-DELIVERY INSPECTION (ITEM 99). COPIES OF COMPLETED CHECKLIST SHOULD BE SUPPLIED TO SELLING DEALER AND CUSTOMER.
- 11.0 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. RUN- IN SET UP SHOULD BE "PER PDI SHEET".
B
- 12.0 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 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.
B

B	NOTE 5.0 : "SPREADER BAR" WAS " OR STRAPS" NOTE 11.0 : ADDED "WITH REAR DOORS OPEN" NOTE 13.0 : SQFT WAS FT	09-MAR-10	KM			72N0026P10	THIRD ANGLE PROJECTION 	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 6500	DRAWING NO. 98-02525 SHEET 5 of	REV B
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07					
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					



ITEMS SUPPLIED IN BATTERY KIT
(PARTS IN POLY BAG AND/OR ATTACHED TO BATTERY TRAY)



UNITS SUPPLIED WITH BATTERY INSTALLED

- 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 (USE OF CORROSION INHIBITOR IS RECOMMENDED).
- 3.0 POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.
- 4.0 INSTALL DRAIN HOSE (ITEM 6) TO BARB ON BOTTOM OF BATTERY TRAY USING CLAMP (ITEM 5). ROUTE AND CLAMP HOSE TO UNIT DRAIN LINE USING WIRE TIES (ITEM 55).

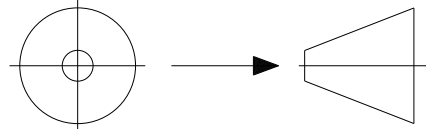
UNITS SUPPLIED WITHOUT BATTERY INSTALLED

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

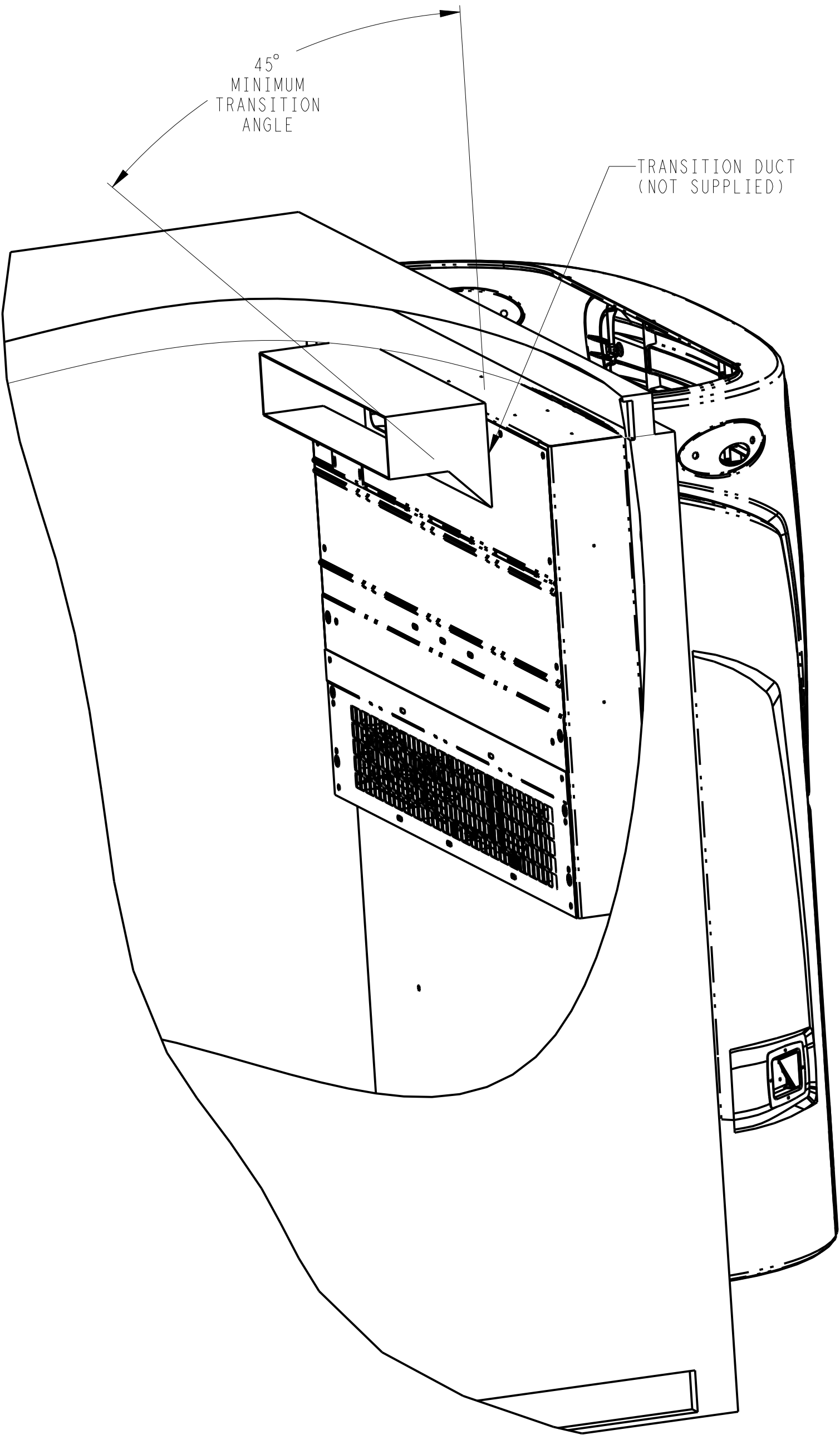
GROUP SIZE: GROUP 31
VENT LOCATION: SIDE VENT
VOLTS: 12 VOLTS DC
AMPERAGE: MINIMUM 700 COLD CRANKING AMPS @ 0°F
MINIMUM 545 COLD CRANKING AMPS @ -20°F

NOTE: WHEN SELECTING A SPECIFIC BRAND OF BATTERY, ALWAYS ENSURE THAT THE BATTERY CHOSEN IS RATED AT 0°F (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 MAXIMIM BATTERY WEIGHT IS 65 LBS.

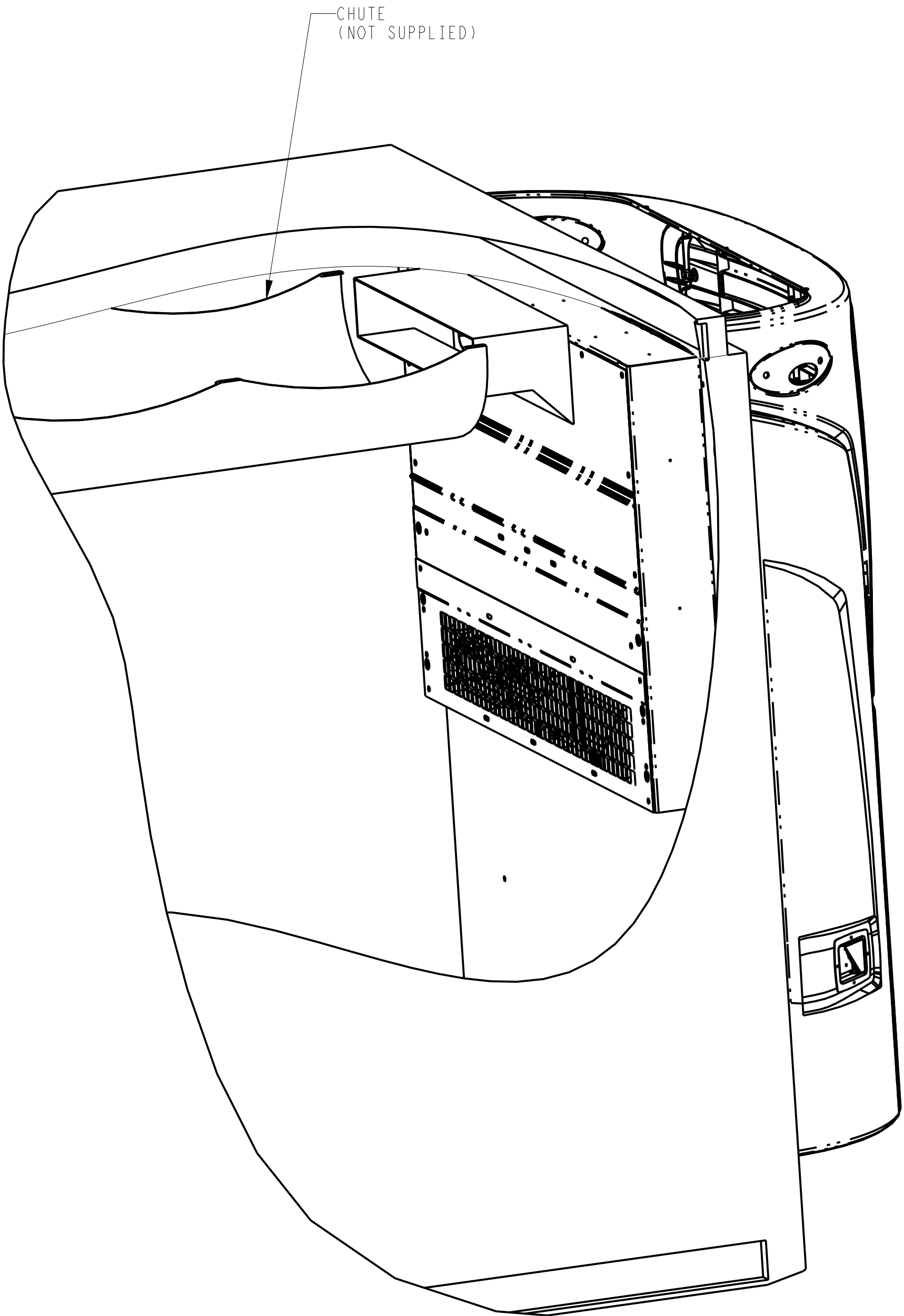
- 2.0 CUT WIRE TIE HOLDING THESE PARTS IN THE BATTERY TRAY AND REMOVE PARTS. PLACE BATTERY IN TRAY WITH NEGATIVE (-) TERMINAL TO THE REAR OF THE UNIT (AS SHOWN). CONNECT BATTERY CABLES (THE USE OF A CORROSION INHIBITOR ON THE TERMINALS IS RECOMMENDED); RED CABLE TO POSITIVE (+) TERMINAL, BLACK CABLE 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.
- 5.0 INSTALL DRAIN HOSE (ITEM 6) TO BARB ON BOTTOM OF BATTERY TRAY USING CLAMP (ITEM 5). ROUTE AND CLAMP HOSE TO UNIT DRAIN LINE USING WIRE TIES (ITEM 55).

B	VECTOR 6500 WAS (NDP-532) IN TITLE BLOCK	09MAR2010	RS			72N0026P10	THIRD ANGLE PROJECTION 	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 6500	DRAWING NO. 98-02525 SHEET 6 OF	REV B
-	PRELIMINARY RELEASE.	16-JUN-2008	TSV			72N023GN07					
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					

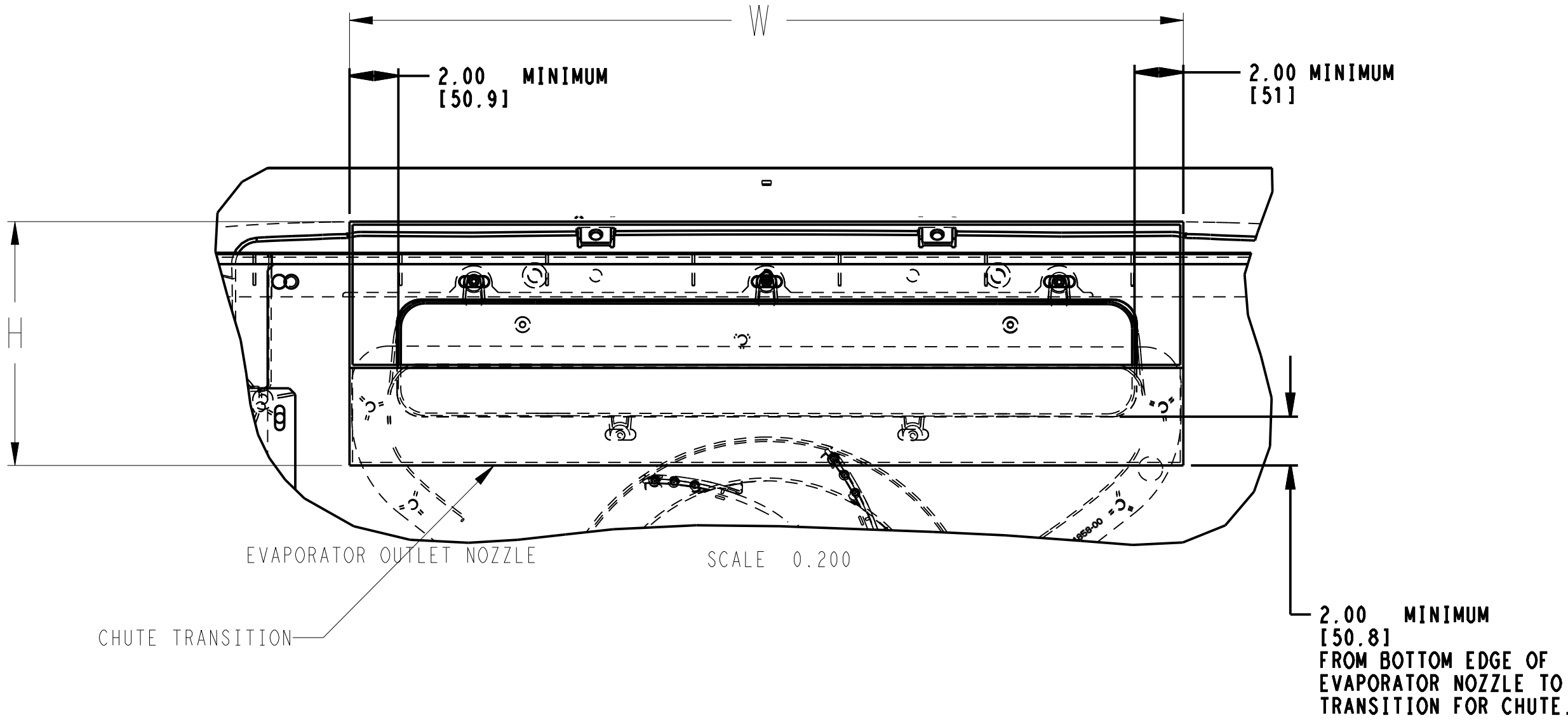
NOTE: BULKHEAD, AIR CHUTE AND TRANSITION DUCT SHOWN ARE OPTIONAL FEATURES. FOR BEST AIR CIRCULATION AND PRODUCT PROTECTION CARRIER TRANSICOLD HIGHLY RECOMMENDS THE USE OF BULKHEADS AIR CHUTES AND TRANSITION DUCTS. CONTACT YOUR DEALER OR CARRIER TRANSICOLD FOR RECOMMENDATIONS.



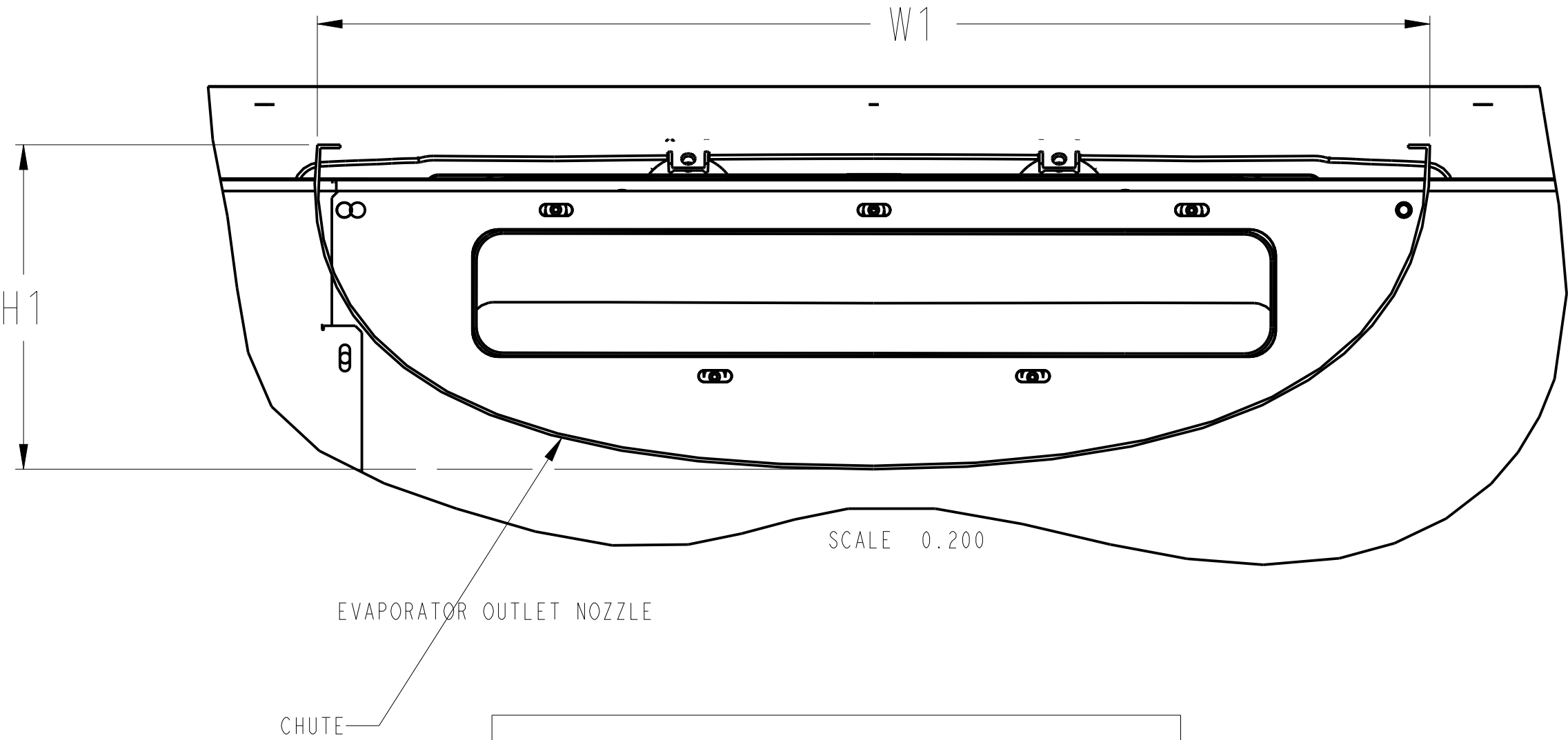
CHUTE REMOVED FOR CLARIFICATION
OF TRANSITION



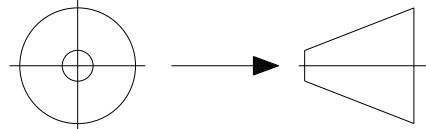
TRANSITION & CHUTE DETAILS



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



SOFT CHUTE MINIMUM DIMENSIONS	
W1	H1
60.00	9.00
54.00	9.75
48.00	11.00
42.00	12.25
36.00	13.75
30.00	15.00

B	CORRECTED TYPO FOR "CLARIFICATION"	09-MAR-10	KM			72N0026P10	<div>THIRD ANGLE PROJECTION</div> 	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS TRAILER & RAIL; VECTOR 6500	DRAWING NO. 98-02525 SHEET 7 OF	REV B
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07					
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					

Electrical Specifications & Minimum Standby Infrastructure

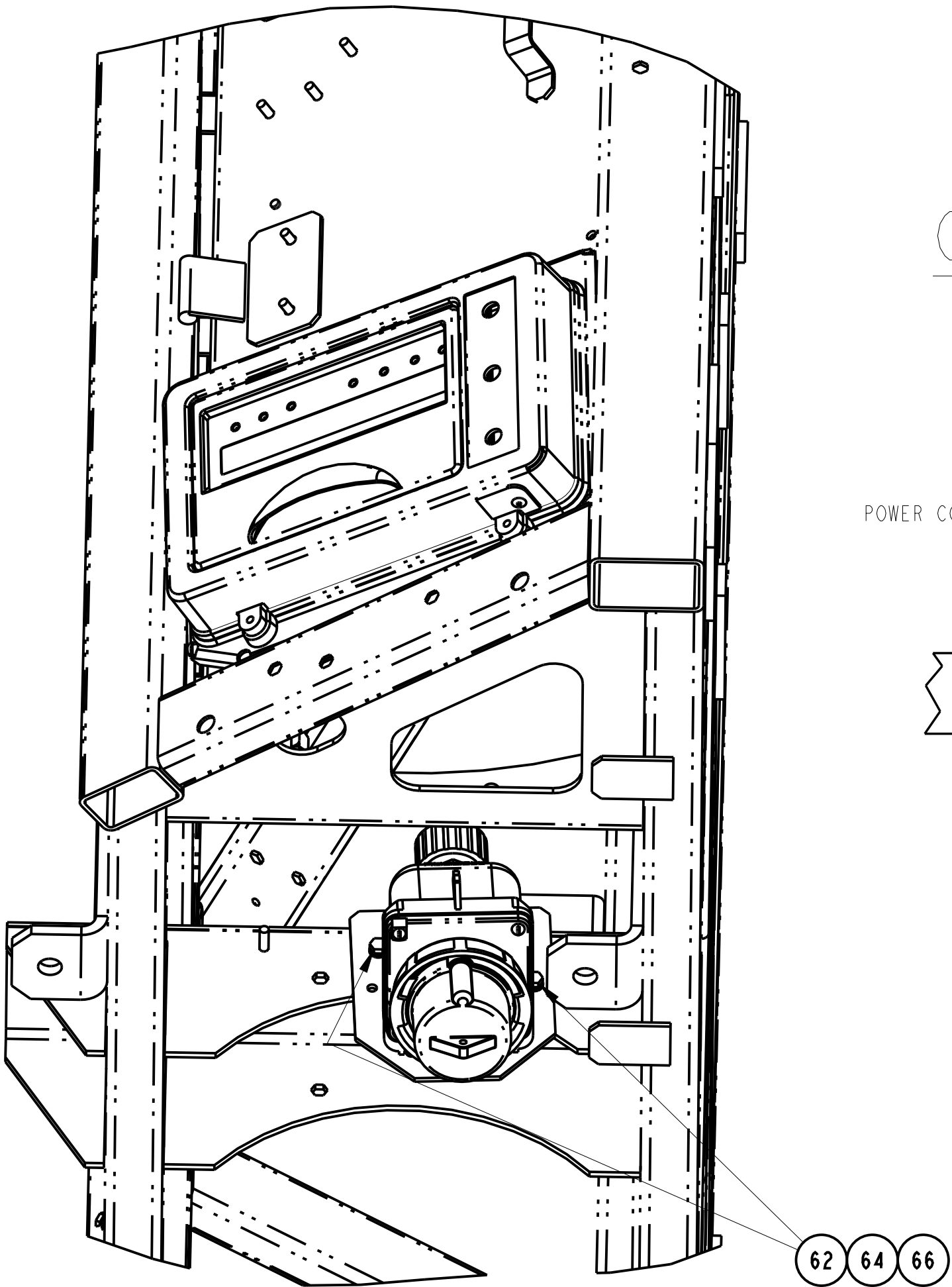
for

Carrier Transicold Trailer units equipped with Standby

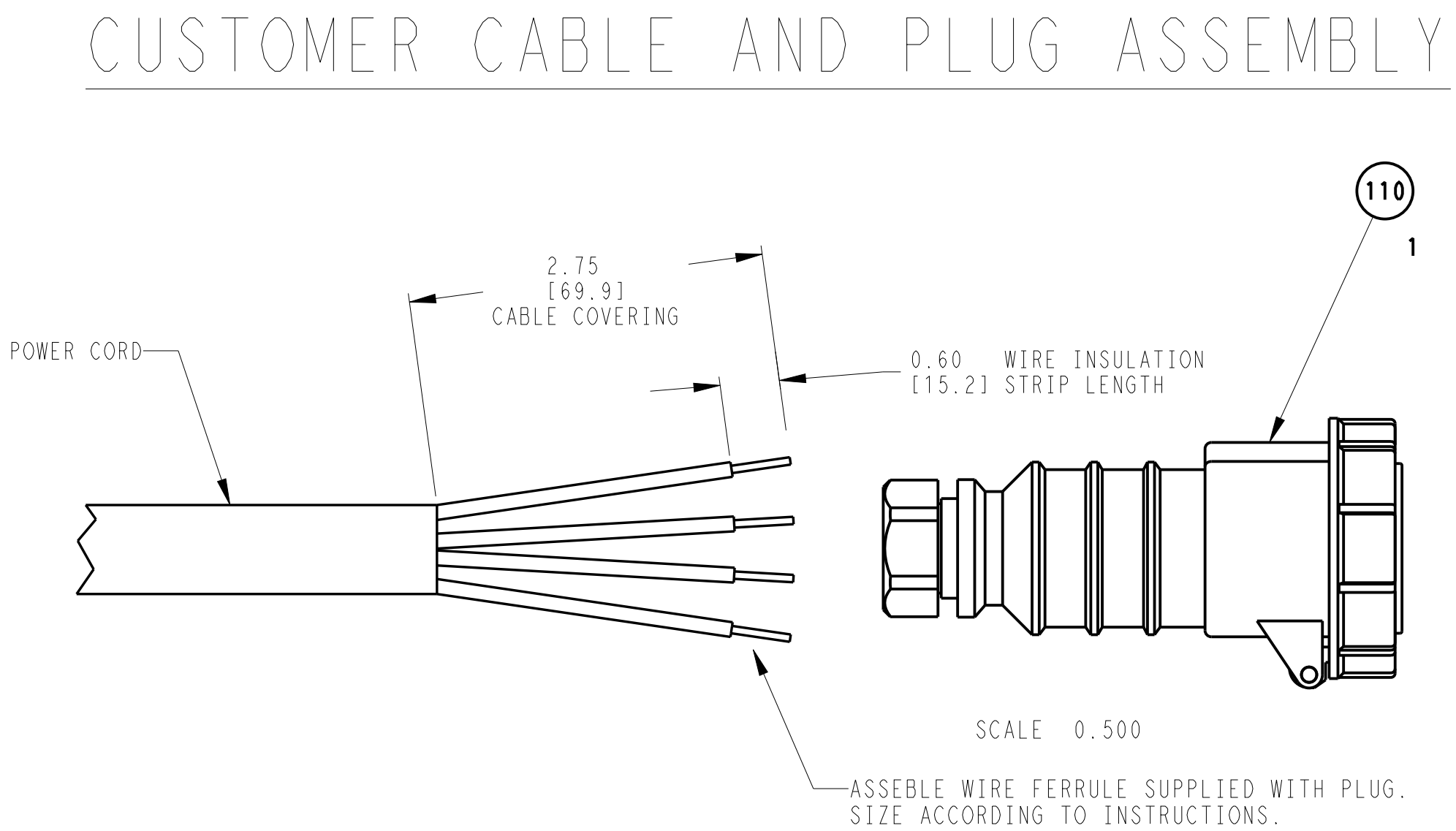
	Vector 6500 WSTBY
Operating Vltage	460V / 3ph / 60Hz
Full Load Amp Draw (FLA)	25 A
kVA	20.8
Locked Rotor Amp Draw (LRA)	99 A
Electrical Receptacle (installed on unit)	IEC IP 67 pin & sleeve, 480V, 30A, 4 wire, 3 pole
Receptacle p/n	22-04166-00
Phase reversal	Automatic
Standby circuit breaker & cordset 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	22-04167-00

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.



PARTIAL LOWER
ROADSIDE VIEW
STANDBY PLUG MOUNTING



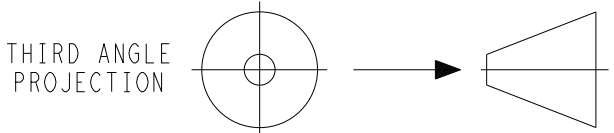
WARNING:

BE SURE POWER IS DIS-CONNECTED TO CUSTOMER CABLE.

READ ENTIRE SUPPLIER DIRECTIONS SUPPLIED WITH PLUG BEFORE STARTING INSTALLATION.

- 01 ONLY

C	UPDATED NOTE 6, RECEPTACLE AND POWER PLUG.	10 MAR 11	ZMG			72N0219P11
B	NOTE 6.0 WAS 7.0 : REMOVED B/4 SOOW CABLE	09-MAR-10	KM			72N0026P10
A	REMVD. HARN. VIEW, ADDED SPECS & CUST. CABLE & PLUG VIEW	27JUL2009	RS			72N043GP09
-	INITIAL RELEASE.	16-JUN-2008	TSV			72N023GN07
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.



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

TITLE

INSTALLATION INSTRUCTIONS
TRAILER & RAIL; VECTOR 6500

DRAWING NO.	REV
98-02525	C
SHEET 8 OF	