									\$10000		
	CROSS REFERENCE		_ X								PART. NO
	DESCRIPTION INSTALLAT DRAWING N			KIT NO.							98-02473-0
	FUEL TANKS (22" DIAMETER) 98-0220		76	-00295-XX							98-02473-
	LIGHT BAR INSTALLATION INSTRUCTIONS 98-03140		76	-00542-00							
	LED LIGHT BAR INSTALLATION INSTRUCTIONS 98-0324		76	- 0 2 0 0 0 - X X							98-02473-0
	NOTES:										98-02473-0
F	 1.3 COMPLETE INSTALLATION INCLUDES AND IS NOT LIMITED TO: 1.1 UNIT INSTALLATION 1.3 COMPLETION OF PRE-PELIVERY INSPECTION (POLIPER MODEL 1.3.1 UNIT PREP AND NITIAL ADJUSTMENTS 1.3.2 CHECKIST 1.3.3 UNIT RUN IN FER POLICHCCLIST 1.3.5 DATALIAR DOWNLOAD VEDIFICATION 1.4 DEFROST LINE CONTICE AND CLAMPING 1.5 FUEL LINE CONCECTIONS TO UNIT 2.3 THE TRAILER OF DROCKING TO UNIT 2.3 THE TRAILER OF DROCKING TO UNIT 2.3 THE TRAILER OF DROCKING TO THE TRAILER'S OR BOXCA'S STRUC WE CHECKING CLIPS CARRIEST FAND. THE COMPOSED MOT CONCENT 1.4 DEFERMINE IT'S ADDITI'S ON THE TRAILER'S OR BOXCA'S STRUC WE CHECKING CLIPS CHECKING THE TRAILER'S OR BOXCA'S STRUC WE CHECKING TO SOXCAR SUPFRISHED UNIT (WET, LESS BATTERY): 1625 NDL X2 2000A REEFER UNIT (WET, LESS BATTERY): 1650 BATTERY (TYPICAL): SO 3.3 UNIT MOUNTING SUFFRIES OF THE TRAILER CR POXCAR THAT CONTACT PADS NLST BE UNI-PLANAR TO WITHIN 3.13 ISI TO PREVENT DISTON THE UNIT AND/OR TRAILER. 3.3 UNIT MOUNTING SUFFRIES TO ENSURE PROPER AIR SEAL. 3.3 ALL D MENSIONS SHOWN ARE IN INCHES, WITH THE VETRIC CONVERS [YILL METERS]. 	THE UNIT ANY TURAL INTEGRI LBS LBS LBS T THE UNIT MO RTION OF ASKET SHOULD	ΤΥ. UNTING	URER		72N008IPII					
	UPDATED SHEET INDEX. ADDED (PDI) TO NOTE I.3. CORRECTED UNIT										
E	NAMES AND WEIGHTS IN NOTE 2.0. IN SHEET CONTENT CHART REMOVED BASIC AND FULL FROM UNIT DIMENSION DATA, AND CORRECTED SPELLING ERRORS. SEE SHEETS 4, 5 AND 6.	260CT2009	ZMG			72N25IGP09					
D	ADDED -03 NDL-93 (EMEA).	23FEB2009	ZMG			72N206GP09 72N00IGP07					
С	UPDATED TITLE BLOCK TO REFLECT MODELS COVERED. WAS EXTRA & ULTRA XT, ULTRA AND ULTIMA XTC. UPDATED SHEET INDEX, ADDED BACK PANEL TO CONTENTS TABLE.	29AUG2007	PJS			SHT.87					
B	ADDED SHEET 3, RENUMBERED SHEETS, SEE SHEETS 2 THRU 7. UPDATED SHEET INDEX, REMOVED EVAP BACK PANEL FROM CONTENTS TABLE	17APR2007	ZMG			72N2I7GP07 72N00IGP06					
A	DELETED SHEET 3, RENUMBERED SHEETS, SEE SHEET 2 THRU 7.	21APR2006 28FEB2006	R S R S			SHT.55 72N022GN04		IMPERIAL INCH F		TITLE	
SYM		DATE	BY	ENGR.	М.Е.	NPCA NO.	THIRD ANGLE PROJECTION	UNLESS OTHERWISE S DIMENSIONS ARE IN I METRIC CONVERSIONS IN	SPECIFIED NCHES WITH		INSTALL Rail; X2 18
L				1		1	Т			-	, .

	Carrier A United Technologies Company	Carrier Transicold Divi Carrier Corporation P.O. Box 4805 Syracuse, New York 1322	
		PART. N	√0.
		98-02473	3 - 0
		98-02473	3 - 0
		98-02473	3 - 0

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.	DOES NOT CONSTITUTE PART PERFORMANCE OR I
---	---

MODEL DESCRIPTION

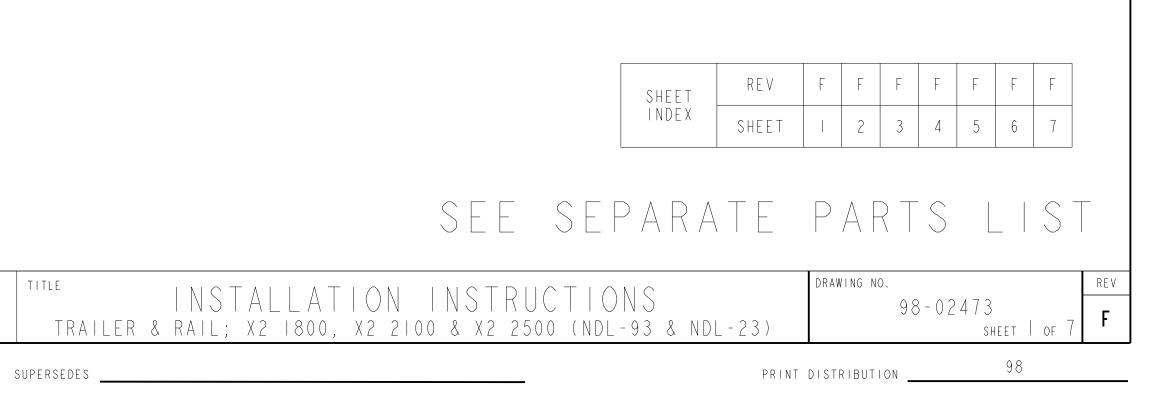
-00 NDL-93 (DOMESTIC)

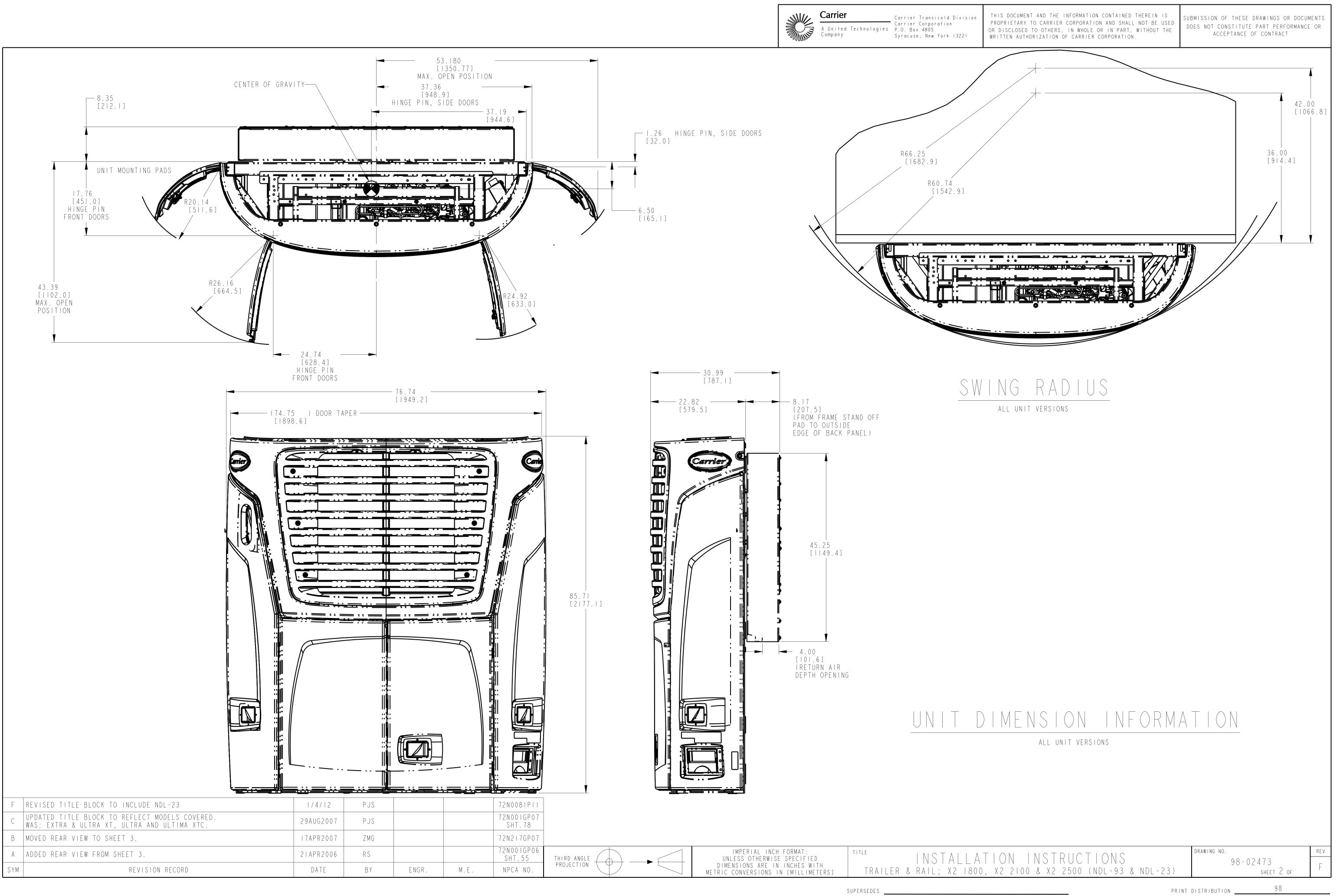
-OI NDL-93 RAIL EDITION (DOMESTIC)

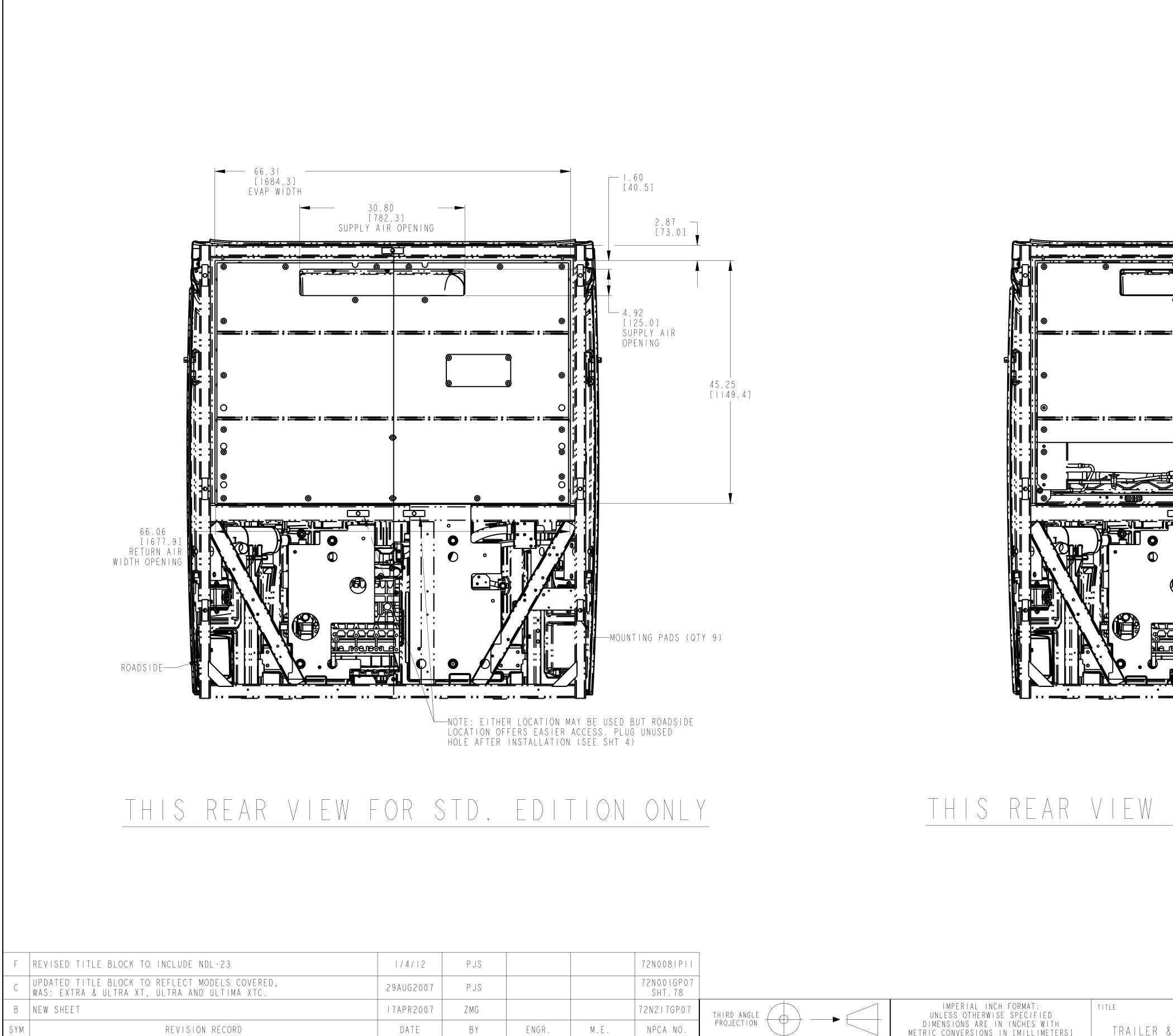
-02 NDL-93 (AUSTRALIA)

73-03 NDL-93 (EMEA)

CONTENTS	SHEET
GENERAL INFORMATION	
SWING RADIUS	2
UNIT DIMENSIONAL DATA, STD AND STEALTH	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





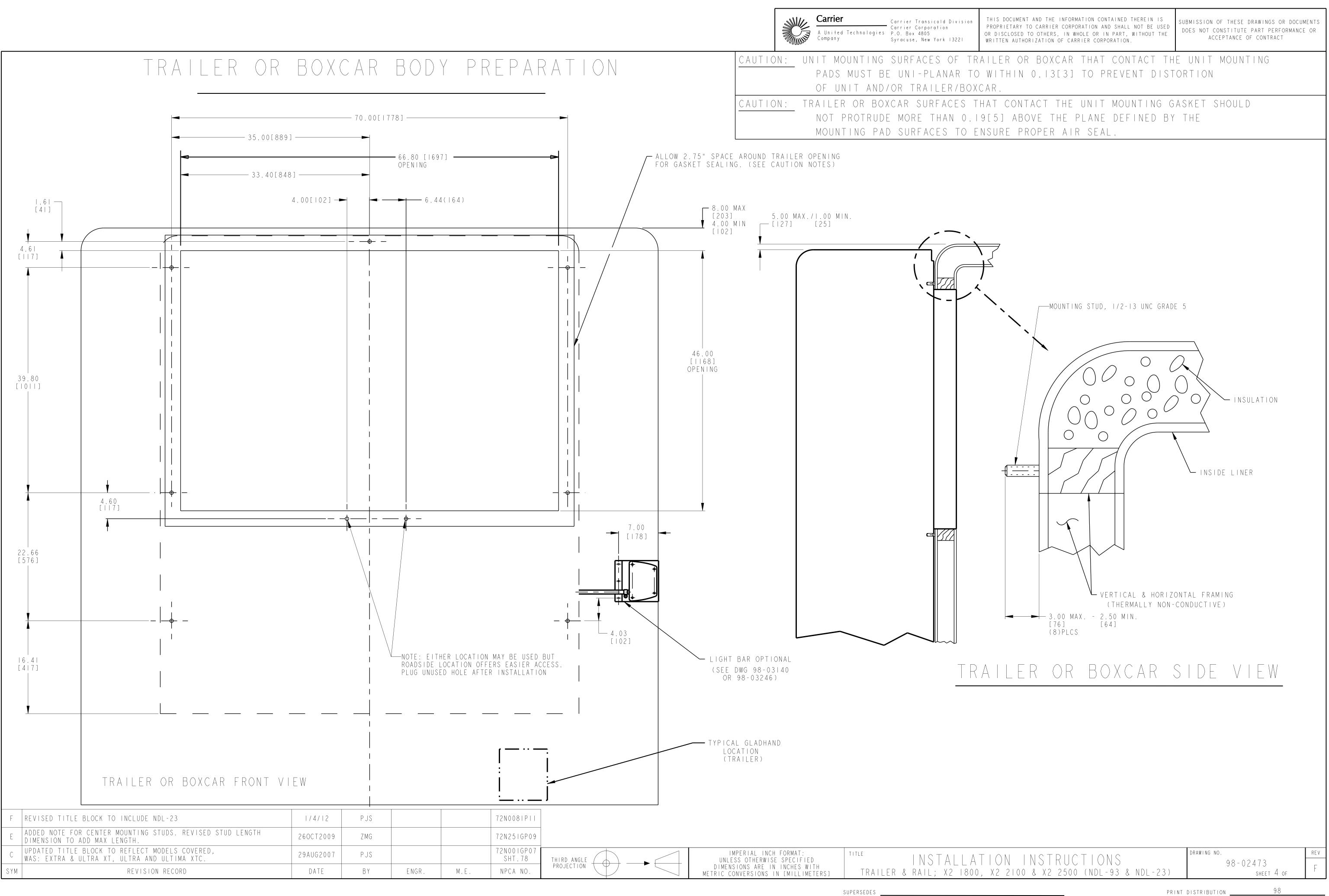


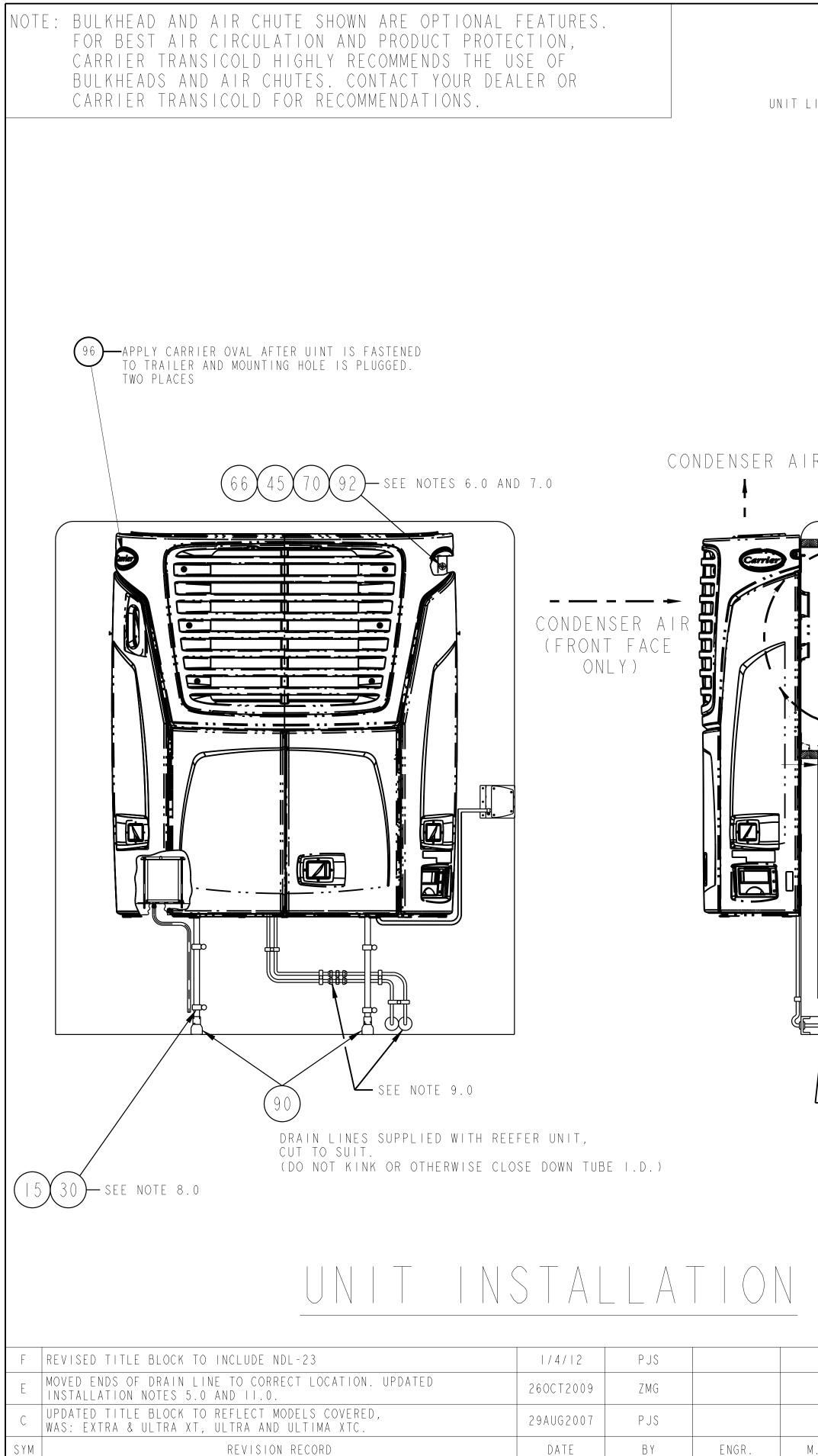
	Carrier Transicold Division A United Technologies Company P.O. Box 4805 Syracuse, New York 13221	THIS DOCUMENT AND THE INFORMATION CONTAINED THEREIN IS PROPRIETARY TO CARRIER CORPORATION AND SHALL NOT BE USED OR DISCLOSED TO OTHERS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF CARRIER CORPORATION.	SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT
		9.85 I 230.11 BETURN AIR OPENING	. 2]
REA	<u>ARVIEW FORRA</u>	il edition only	
FORMAT: SPECIFIEI INCHES WI N [MILLIME	TITLE INSTALLA TH TERSJ TRAILER & RAIL; X2 1800	TION INSTRUCTIONS , x2 2100 & x2 2500 (NDL-93 & NDL-23)	DRAWING NO. 98-02473 SHEET 3 OF F

	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
- 1.60 1.60 1.80 1.80 1.80 1.23.01 3.07 1.23.01 3.07 1.49.41 1.49.41 1.49.41 - 49.41 - 40.41 - 40			. 2]
BE USED BUT ROADSIDE ESS. PLUG UNUSED EE SHT 4)			
ION ONLY THIS	REAR VIEW FOR RA	LEDITION ONLY	
72N008IPII 72N00IGP07 SHT.78 72N2I7GP07 M.E. NPCA NO.	F SPECIFIED $ N > A A$	TION INSTRUCTIONS), x2 2100 & x2 2500 (NDL-93 & NDL-23)	DRAWING NO. 98-02473 SHEET 3 OF F

SUPERSEDES

PRINT DISTRIBUTION





T LIFTING LOCATION	
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	

 \bigcirc

A United Technologies Company Carrier Transicold Division Carrier Corporation P.O. Box 4805 Syracuse, New York 13221

PREPARE UNIT FOR INSTALLATION:

- I.O PREPARE THE BODY TO RECEIVE OPENING AND MOUNTING STUD L
- 2.0 REMOVE WIRE TIES HOLDING DE TUBE, AND FUEL LINES. PLACE BETWEEN THE UNIT FRAME AND
- 3.0 OPEN SIDE DOORS TO ALLOW AC
- 4.0 INSTALL BATTERY ACCORDING T BEEN SUPPLIED WITH BATTERY, THE INSTRUCTIONS ON SHEET 6
- 5.0 PREPARE THE UNIT FOR LIFTIN STANDING ON A LADDER OR WOR SPREADER BAR WITH SUFFICIEN THROUGH THE LIFTING EYES. L
- UNIT INSTALLATION:
- 6.0 RAISE THE UNIT AND INSTALL EIGHT STUDS ARE FULLY ENGAG 70) AND LOCK-NUT (ITEM 45) CENTER STUD MUST BE ACCESSE SNUG THE NUTS, THEN EVENLY TO 60 FT-LB/81.6 NM USING A
- 7.0 INSTALL BUTTON PLUGS (ITEM ARE LOCATED AND ADDITIONAL
- 8.0 ROUTE DEFROST DRAIN HOSES D TO FRONT WALL USING 2 CLAMP FORMING SCREWS (ITEM 30) FO LENGTH (APPROXIMATELY 3.00[AND INSTALL KAZOOS (ITEM 90
- 9.0 INSTRUCTIONS FOR FUEL LINE TANK KIT. INSTRUCTIONS FOR THE LIGHT BAR KIT.
- AFTER INSTALLATION
- 10.0 PERFORM PRE-DELIVERY INSPE CHECKLIST SHOULD BE SUPPLI
- II.0 OPERATE UNIT IN CONTINUOUS HOURS (I2 HOURS PREFERRED) INSPECTION ON UNIT.
- 12.0 IMPORTANT: PRIOR TO FINAL TION (ITEM 101) MUST BE CC THE CUSTOMER, ONE COPY TO SENT TO CARRIER TRANSICOLD UNIT IN THE PROPER LOCATIC WARRANTY COVERAGE.
- 13.0 OPTIONAL BULKHEAD CONFIGUR MUST TOTAL AT LEAST 2.75 F MUST BE RECESSED SO THAT C NOT OBSTRUCT AIR PASSAGE O REQUIREMENTS, MAY BE INSTA

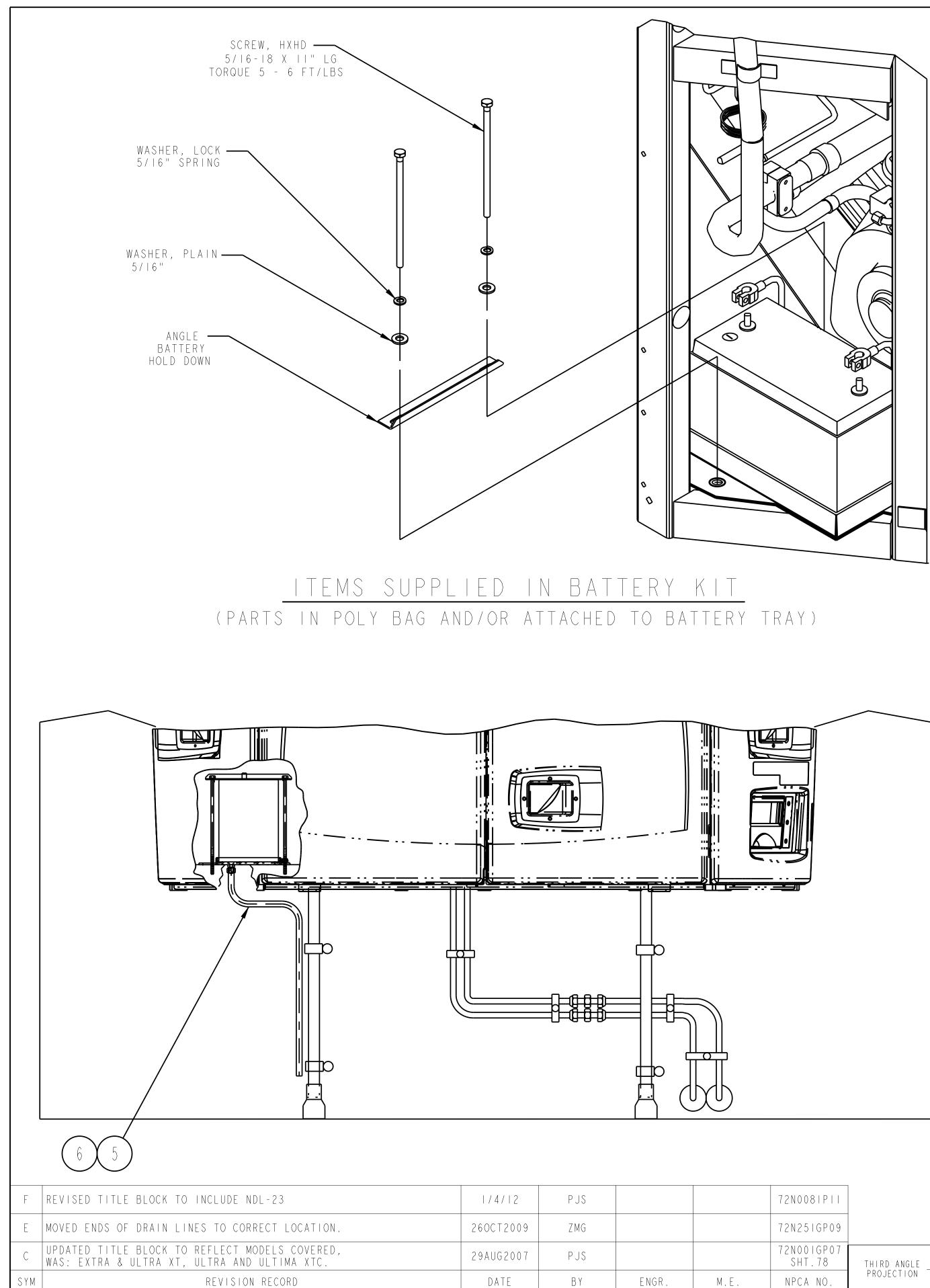
	72N008IPII				
	72N25IGP09				
М.Е.	72N00IGP07 SHT.78 NPCA NO.	THIRD ANGLE PROJECTION -	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE TRAILER &	INSTALLAT Rail; X2 1800,

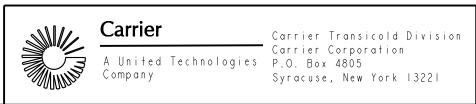
SUPERSEDES _____

	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	
	THE UNIT. DIMENSIONS FOR EVAPORATOR DCATIONS CAN BE FOUND ON SHEET 4 OF THIS DRAWING.	
E F	FROST DRAIN HOSES, COOLANT OVERFLOW LINES WHERE THEY WILL NOT BE CAUGHT THE MOUNTING SURFACE.	
⊤(, 6		
N	G: (-STAND, HOOK LIFTING APPARATUS (LIFTING T CAPACITY TO SUPPORT UNIT AND BATTERY) IFT POINT SHOULD BE CENTERED OVER THE UNIT.	
G E [A	IN THE BODY OPENING. ENSURE THAT ALL ED IN THE UNIT FRAME. PLACE WASHER (ITEM ON EACH OF THE 8 STUDS. (NOTE: THE LOWER O FROM THE FRONT OF THE UNIT.) TIGHTEN ALL EIGHT TORQUE WRENCH. REMOVE LIFTING APPARATUS. 92) IN UNIT FRAME WHERE MOUNTING STUDS	
D (P \$ O f	JNUSED HOLE (SEE SHT.2). DWN THE FRONT OF THE TRAILER OR BOXCAR AND CLAMP S (ITEM 15) AND 2 THREAD R EACH DRAIN HOSE. CUT HOSE TO PROPER 76.2] ABOVE 5th-WHEEL PLATE ON TRAILER)) ON THE HOSES.	
	CONNECTION ARE SUPPLIED WITH THE FUEL LIGHT BAR INSTALLATION ARE INCLUDED WITH	
l e S	CTION (ITEM 99). COPIES OF COMPLETED ED TO SELLING DEALER AND CUSTOMER. RUN (MANUAL) MODE FOR A MINIMUM OF 8 WITH REAR DOORS OPEN. PERFORM FINAL	
	DELIVERY TO CUSTOMER, WARRANTY REGISTRA- MPLETED. ONE COPY SHOULD BE PROVIDED TO THE SELLER, AND THE FINAL COPY MUST BE . IN-SERVICE DATE MUST BE STAMPED ON THE N (SERIAL NUMBER PLATE) TO ACTIVATE	
F C / O F	ATION: HOLE PATTERN OR OPEN AREA FOR RETURN AIR FLOU T ² OF AIR PASSAGE. HOLE PATTERN OR OPEN AREA ARGO LOADED AGAINST BULKHEAD WILL PENINGS. PERFORATED BULKHEADS, THAT MEET THESE LED TIGHT WITH FLOOR.	N
	FLON INSTRUCTIONS	V

	DRAWING NO.
ATION INSTRUCTIONS	98-02473
0, X2 2100 & X2 2500 (NDL-93 & NDL-23)	sheet 5 of

98





	72N008IPII			
	72N25IGP09			
	72N00IGP07 SHT.78	THIRD ANGLE	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED	INSTALLATION INSTRUCTIONS
Μ.Ε.	NPCA NO.	PROJECTION	DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TRAILER & RAIL; X2 1800, X2 2100 & X2 2500 (NDL-93 & NDL-23)

SUPERSEDES	

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.

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

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

UNITS SUPPLIED WITH BATTERY INSTALLED

AMPERAGE: MINIMUM 700 COLD CRANKING AMPS @ 0°F MINIMUM 545 COLD CRANKING AMPS @ -20°F

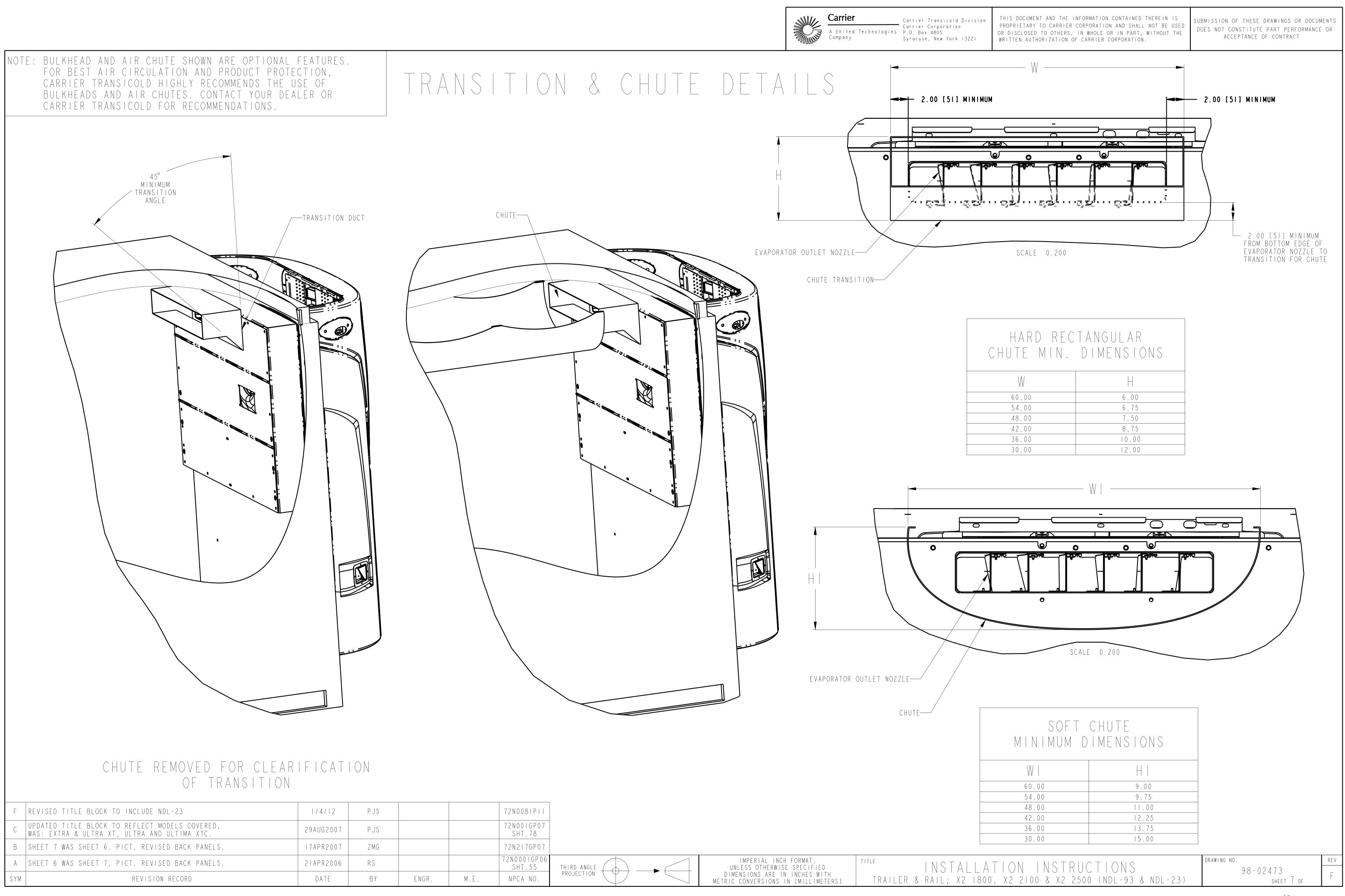
NOTE: WHEN SELECTING A SPECIFIC BRAND OF BATTERY, ALWAYS ENSURE THAT THE BATTERY CHOSEN IS RATED AT O°F (O DEGREES FAHRENHEIT) AND NOT O°C (O DEGREES CELSIUS). FAILURE TO USE THE PROPER BATTERY SIZE WILL RESULT IN REDUCED BATTERY LIFE AND A NO-START CONDITION.

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).



SUPERSEDES _____