PART NO.	DESCRIPTION	WEIGHT (WITH DOORS)
98-02698-00	VECTOR HE 19	805 KG [1774.72 LBS]
	VECTOR HE 19 MT 2 COMPT	815 KG [1796.76 LBS]
	VECTOR HE 19 MT 3 COMPT	825 KG [1818.81 LBS]

** ATTENTION INSTALLER **

READ ALL NOTES PRIOR TO INSTALLATION

NOTES:

TIME ESTIMATED FOR INSTALLATION OF UNIT ALONE: 3.0 HRS

1.0 THE TRAILER STRUCTURE MUST BE EVALUATED BY THE TRAILER MANUFACTURER TO DETERMINE ITS 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 STRUCTURAL INTEGRITY.

WEIGHT: SEE CHART (BATTERY INCLUDED)

2.0 UNIT MOUNTING SURFACES OF THE TRAILER THAT CONTACT THE UNIT MOUNTING PADS MUST BE UNI-PLANAR TO WITHIN $^{3mm}_{[0.12]}$ TO PREVENT DISTORTION OF THE UNIT AND/OR TRAILER.

3.0 TRAILER SURFACES THAT CONTACT THE UNIT MOUNTING GASKET SHOULD NOT PROTRUDE MORE THAN $^{5mm}_{[0.19]}$ ABOVE THE PLANE DEFINED BY THE MOUNTING PAD SURFACES TO ENSURE PROPER AIR SEAL.

4.0 ALL DIMENSIONS SHOWN ARE MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES].

5.0 APPLY SERVICE DECAL (ITEM 125) TO UNIT IN LOCATION THAT IS CONVENIENT FOR IT TO BE SEEN AND READ.

△ 6.0 EVAP FAN GRILL MUST STAY IN PLACE EVEN WHEN AIR DUCT COLLECTORS ARE MOUNTED BY THE BODYBUILDER.

7.0 WARNING: SPECIAL CARE IS REQUIRED WHEM RECLAIMING R452A PRIOR TO BRAZING WORK.REFER TO SERVICE PROCEDURE.

CONTENTS	SHEET

SEE SEPARATE PARTS LIST

SHEET INDEX									
	REV	B	B	B	-	A	-	-	B
	SHEET	1	2	3	4	5	6	7	8

SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
B	UODATE CHART DESCRIPTION	29 FEB 19	H.C			72E0056P18
A	ADDED VIEW SEE SHEET 5	12 JULY 18	H.C			72E0043P18
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			73N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698 SHEET 1 OF 8

REV B

SUPERSEDES: _____

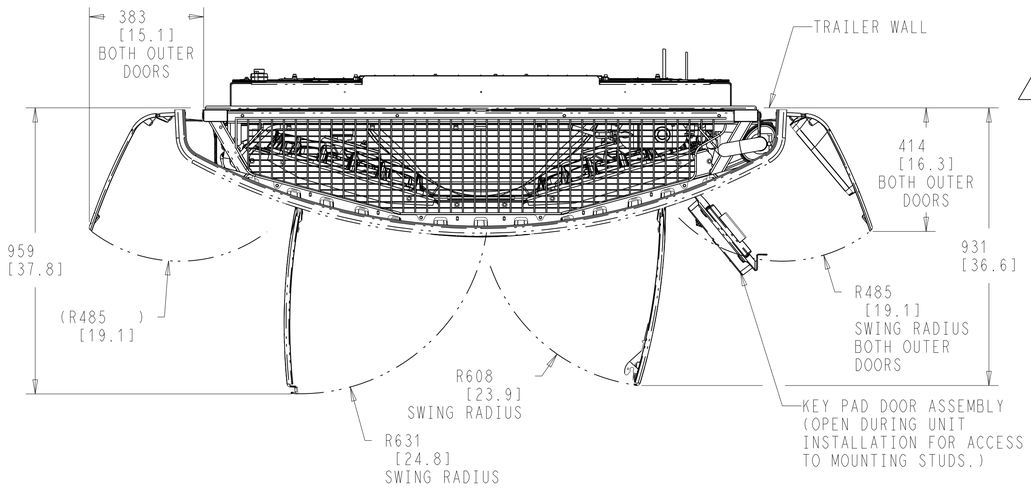
PART CLASSIFICATION: US EAR99 EAR99

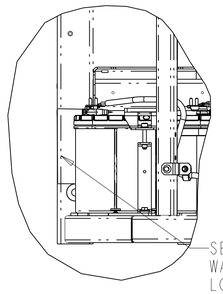
DRAWING CLASSIFICATION: US EAR99

UNIT DIMENSION INFORMATION

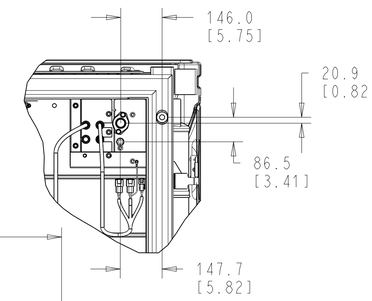
UNIT CENTER OF GRAVITY

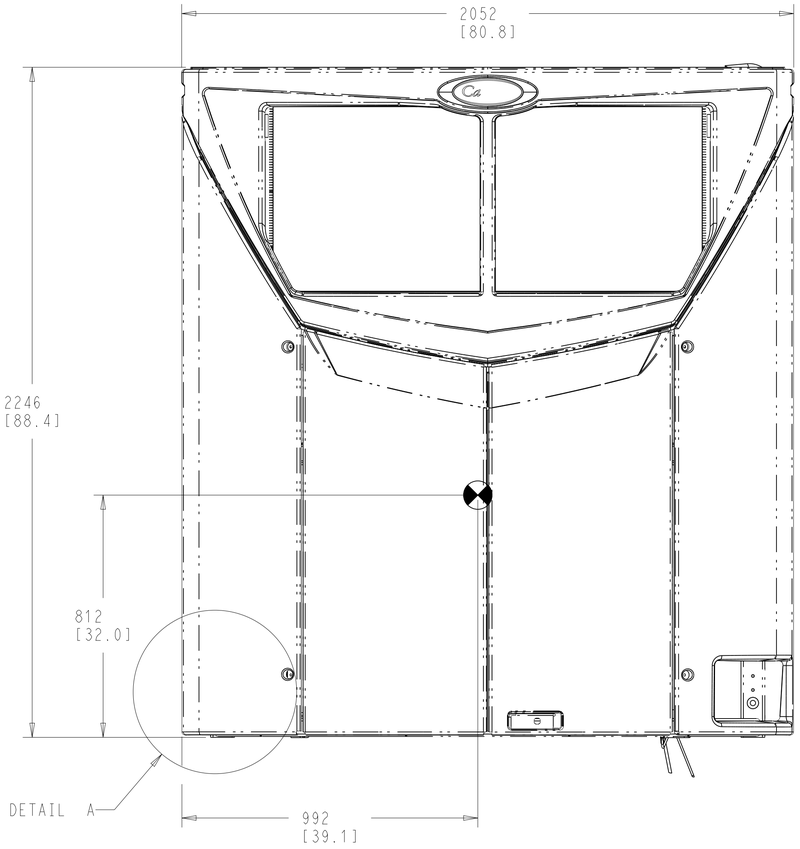
FOR SERVICE ACCESS, DO NOT LIMIT OPENING OF UPPER DOORS WITH BUMPER.

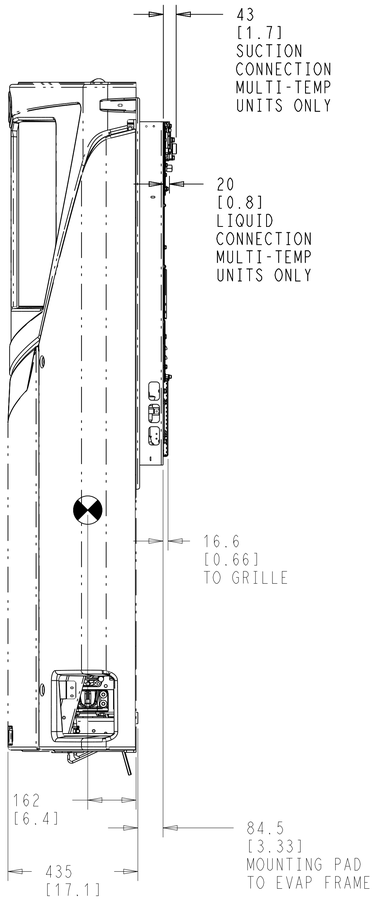


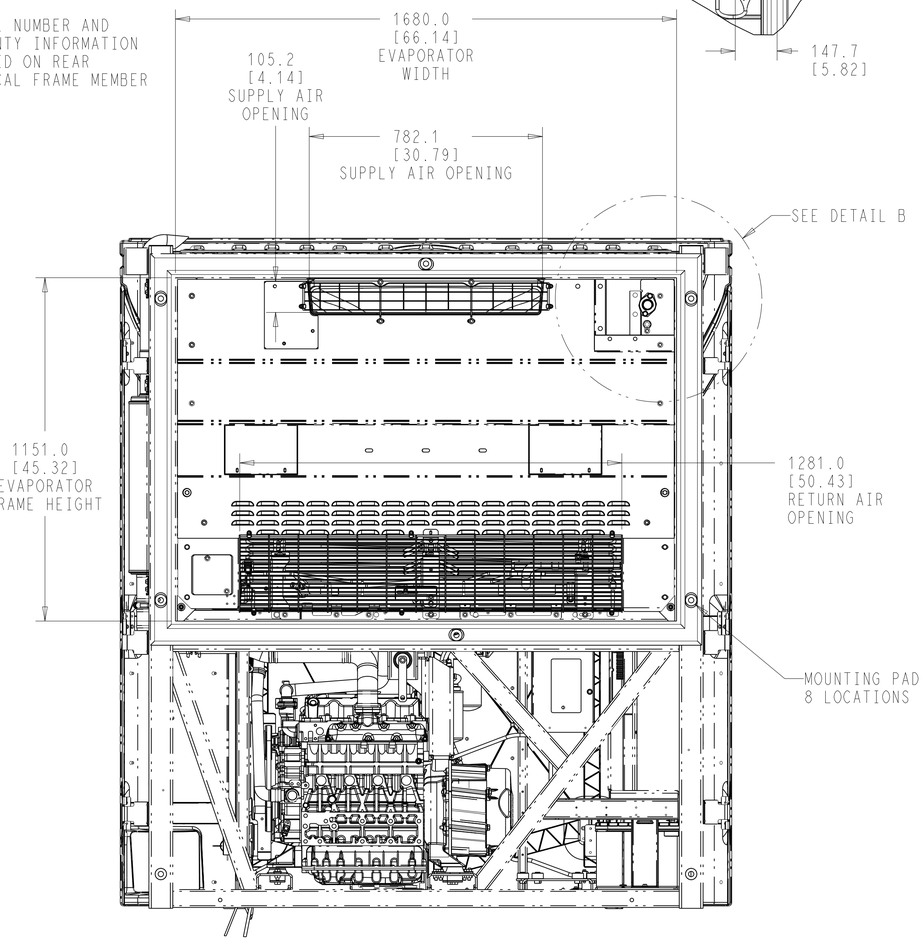


DETAIL A
SCALE 0.150









SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
B	ADDED VIEW FOR MULTI-TEMP FITTING CONNECTION	29 FEB 19	H.C			72E0056P18
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

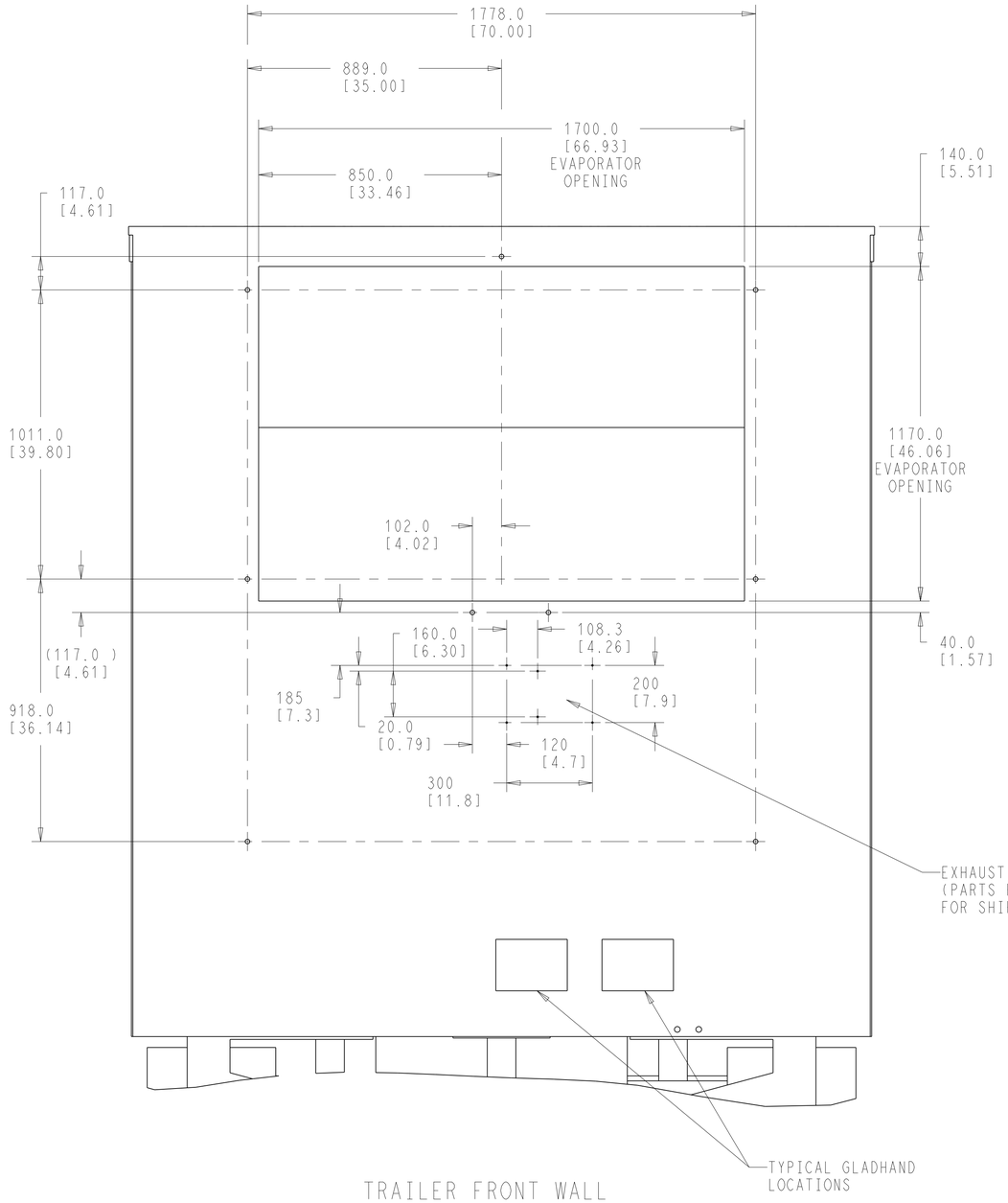
TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698
SHEET 2 OF
REV B

SUPERSEDES:

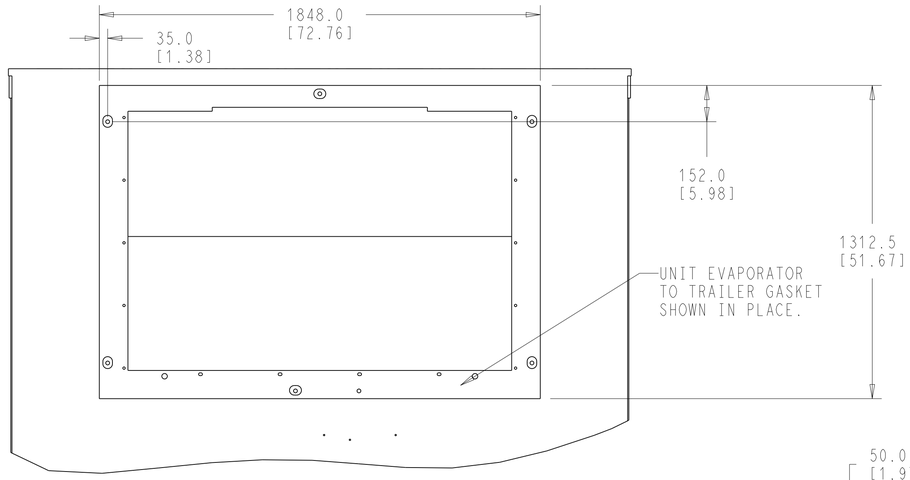
PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99



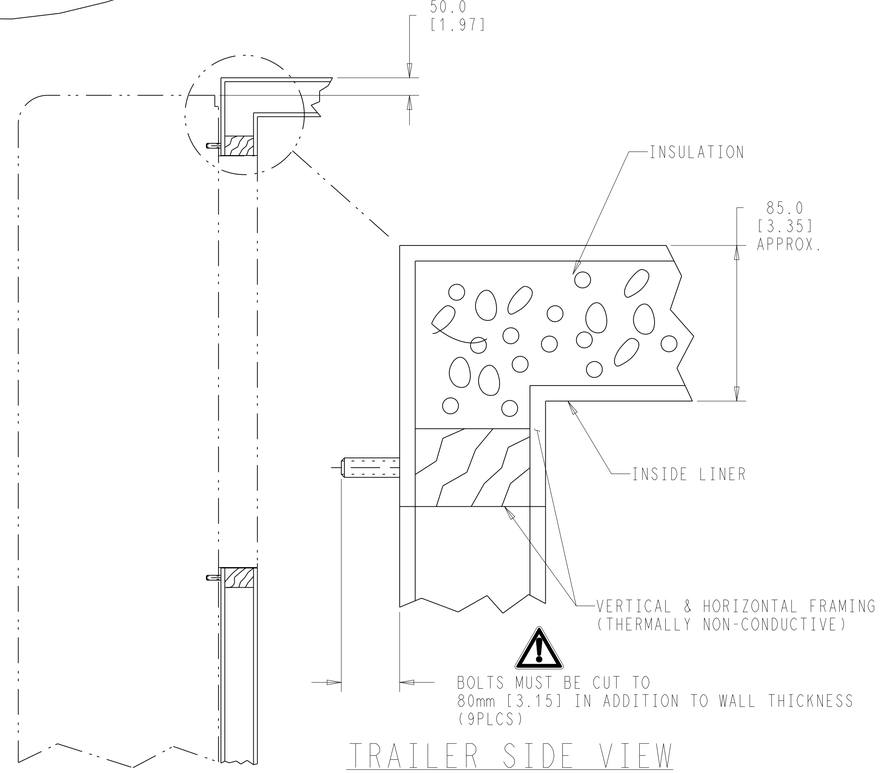
TRAILER FRONT WALL

SCALE 0.100



TRAILER FRONT WALL
WITH UNIT GASKET
IN PLACE.

SCALE 0.080



TRAILER SIDE VIEW

(NOT TO SCALE)

TRAILER BODY PREPARATION

CAUTION: UNIT MOUNTING SURFACES OF TRAILER THAT CONTACT THE UNIT MOUNTING PADS MUST BE UNI-PLANER TO WITHIN 3.0mm [0.12] TO PREVENT DISTORTION OF UNIT AND/OR TRAILER.

CAUTION: TRAILER SURFACES THAT CONTACT THE UNIT MOUNTING GASKET SHOULD NOT PROTRUDE MORE THAN 5.0mm [0.19] ABOVE THE PLANE DEFINED BY THE MOUNTING PAD SURFACES TO ENSURE PROPER AIR SEAL.

SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
B	ADDED NOTE "BOLT MUST BE CUT TO 80mm"	29 FEB 19	H.C			72E0056P18
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

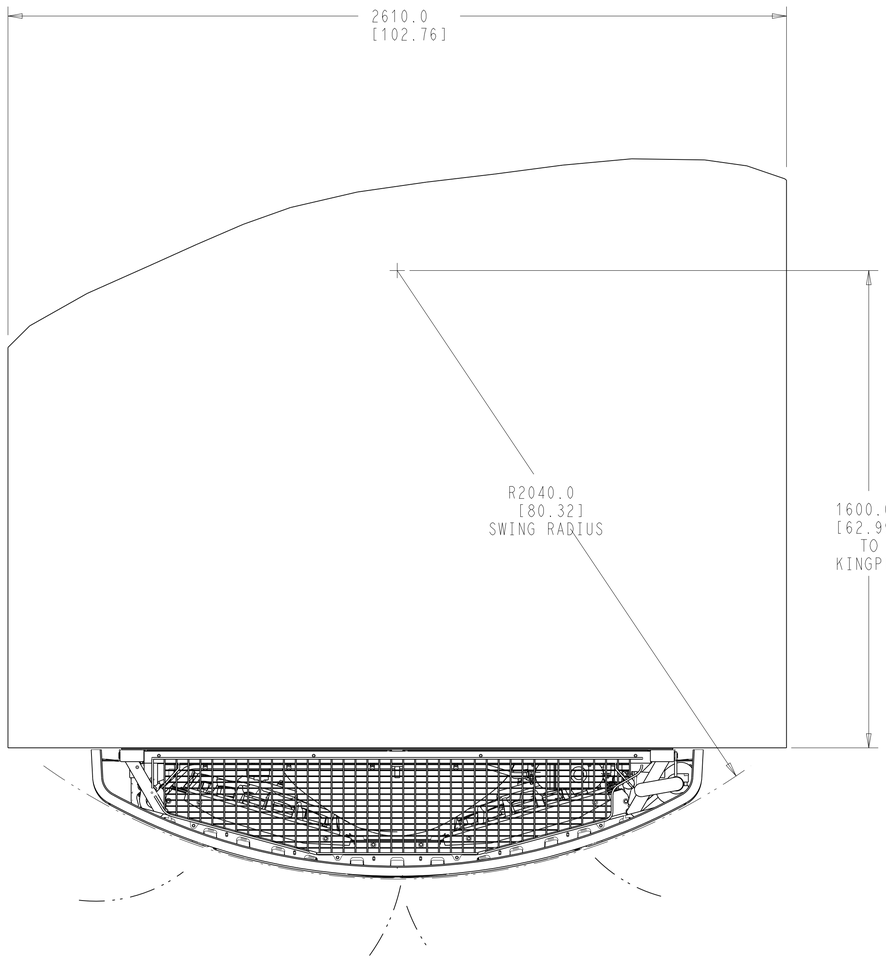
DRAWING NO. 98-02698 SHEET 3 OF

REV B

SUPERSEDES:

PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99



SWING RADIUS
SCALE 0.100

SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE
INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698
SHEET 4 OF

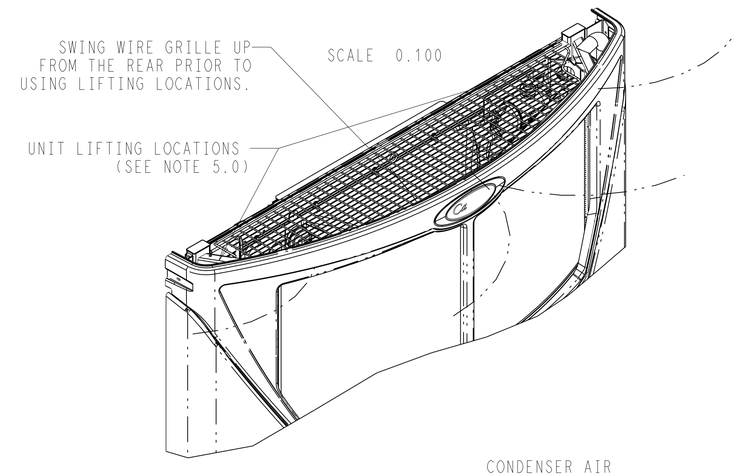
REV -

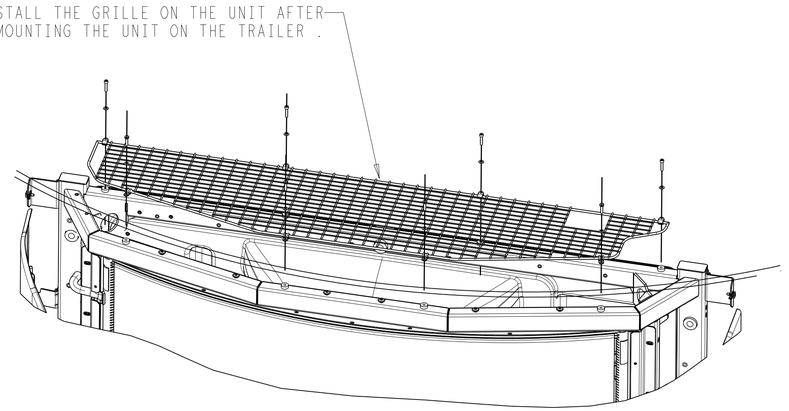
SUPERSEDES:

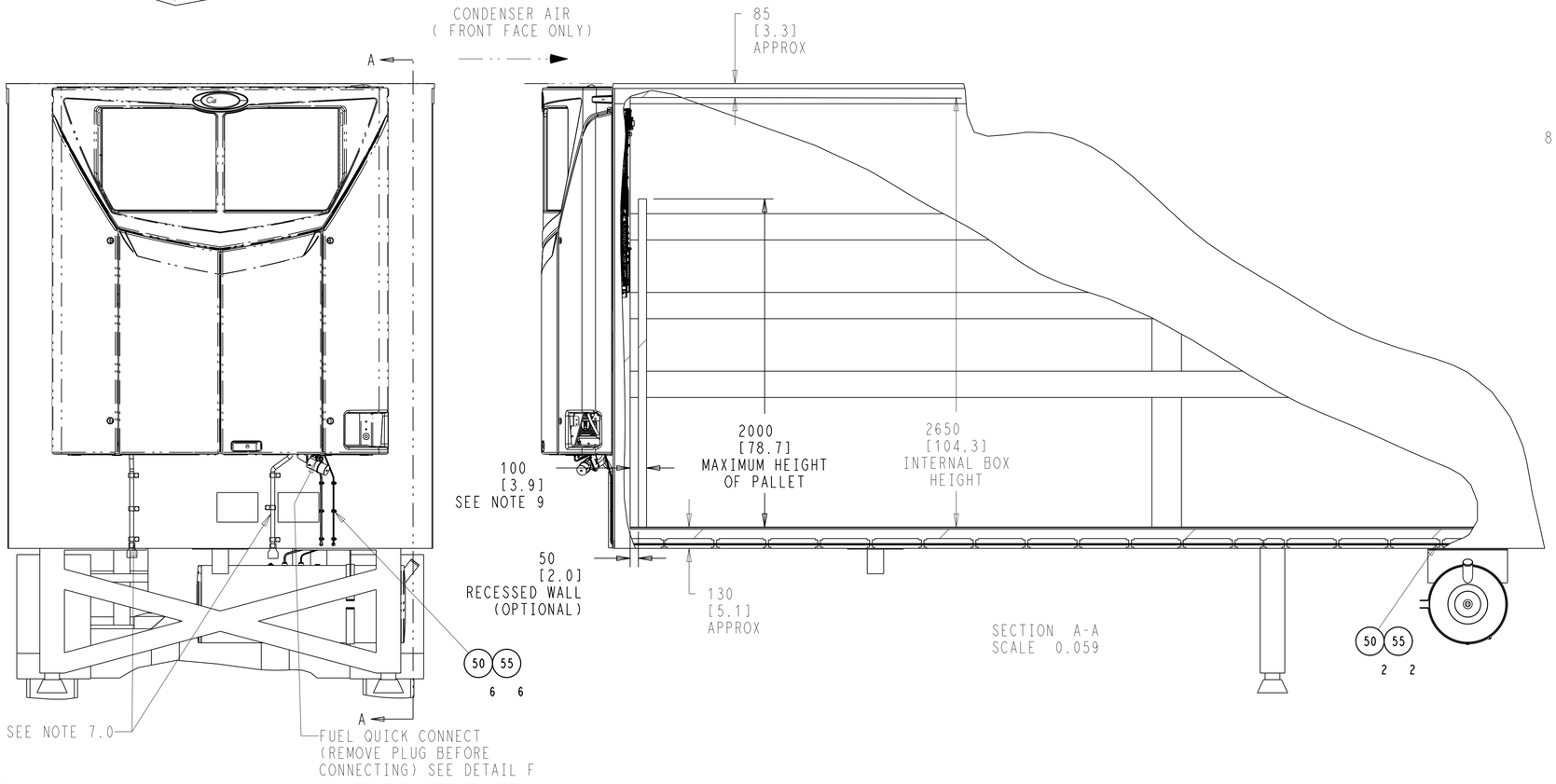
PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99

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







PREPARE UNIT FOR INSTALLATION:

1.0 PREPARE THE BODY TO RECEIVE THE UNIT. SEE SHEET 3 FOR DIMENSIONS OF EVAPORATOR OPENING AND MOUNTING STUD LOCATIONS. ENSURE THAT STUDS ARE CUT TO 80mm [3.15] IN ADDITION TO WALL THICKNESS.

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 TRAILER WALL.

3.0 TO ALLOW ACCESS TO MOUNTING STUD LOCATIONS ON UNIT, OPEN FRONT AND SIDE DOORS AND SWING OPEN KEY PAD DOOR ASSEMBLY.

4.0 INSTALL HEAT SHIELD ON FRONT OF TRAILER USING RIVETS AS SHOWN ON SHEET 3.

5.0 PREPARE THE UNIT FOR LIFTING: STANDING ON A LADDER OR WORK-STAND, HOOK LIFTING APPARATUS (USING LIFTING BAR ONLY 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 30) AND LOCK-NUT (ITEM 15) IN EACH OF THE 8 STUDS (NOTE: THE LOWER CENTER STUDS MUST BE ACCESSED FROM THE FRONT OF THE UNIT). SNUG THE NUTS, THEN EVENLY TIGHTEN ALL NINE TO 81.6Nm [60.0ftlb] USING A TORQUE WRENCH. REMOVE LIFTING APPARATUS.

7.0 DRAIN LINES SUPPLIED WITH REEFER UNIT, CUT TO SUIT (DO NOT KINK OR OTHERWISE CLOSE DOWN TUBE I.D.). ROUTE DEFROST DRAIN HOSES DOWN THE FRONT OF THE TRAILER AND CLAMP TO FRONT WALL OF TRAILER USING 3 CLAMPS AND 3 THREAD FORMING SCREWS FOR EACH DRAIN HOSE. CUT HOSE TO PROPER LENGTH APPROXIMATELY 76.0 [3.00] ABOVE 5th-WHEEL PLATE).

8.0 FOR BEST AIR CUIRCULATION AND PRODUCT PROTECTION, CARRIER TRANSICOLD HIGHLY RECOMMENDS THE USE OF BULKHEADS AND AIR CHUTES. 100mm [3.94"] CLEARANCE IS REQUIRED BETWEEN THE INSIDE FRONT WALL OF THE TRAILER AND THE INSIDE SURFACE OF THE BULKHEAD. WHEN INSTALLING AN AIR CHUTE, THE FOLLOWING STEPS ARE TO BE TAKEN: 1) CONSTRUCT A TRASITION DUCT, PER SHEETS 4 & 5. THIS TRANSITION DUCT SHOULD BE A MINIMUM OF 1700mm [66.9"] WIDE AND SHOULD BE SEALED TO THE OUTLET OF THE UNIT. THE OUTLET OF THE TRANSITION IS CONNECTED DIRECTLY CONNECTED TO THE AIR CHUTE WHICH SHOULD EXTEND THE ENTIRE WIDTH OF THE OUTLET. A SINGLE CHUTE APPLICATION IS RECOMMENDED.

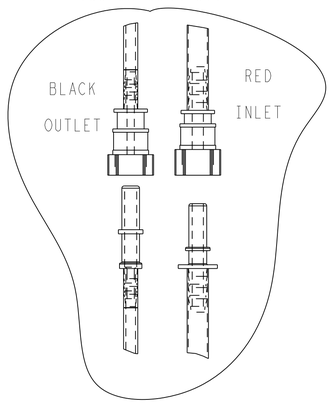
NOTES CONTINUED ON NEXT SHEET

A

A

SEE SHEET 6

DETAIL F
(QUICK-CONNECT)



SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
A	ADDED VIEW FOR GRILL MOUNTING	12 JULY 18	H.C			72E0043P18
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698 SHEET 5 OF

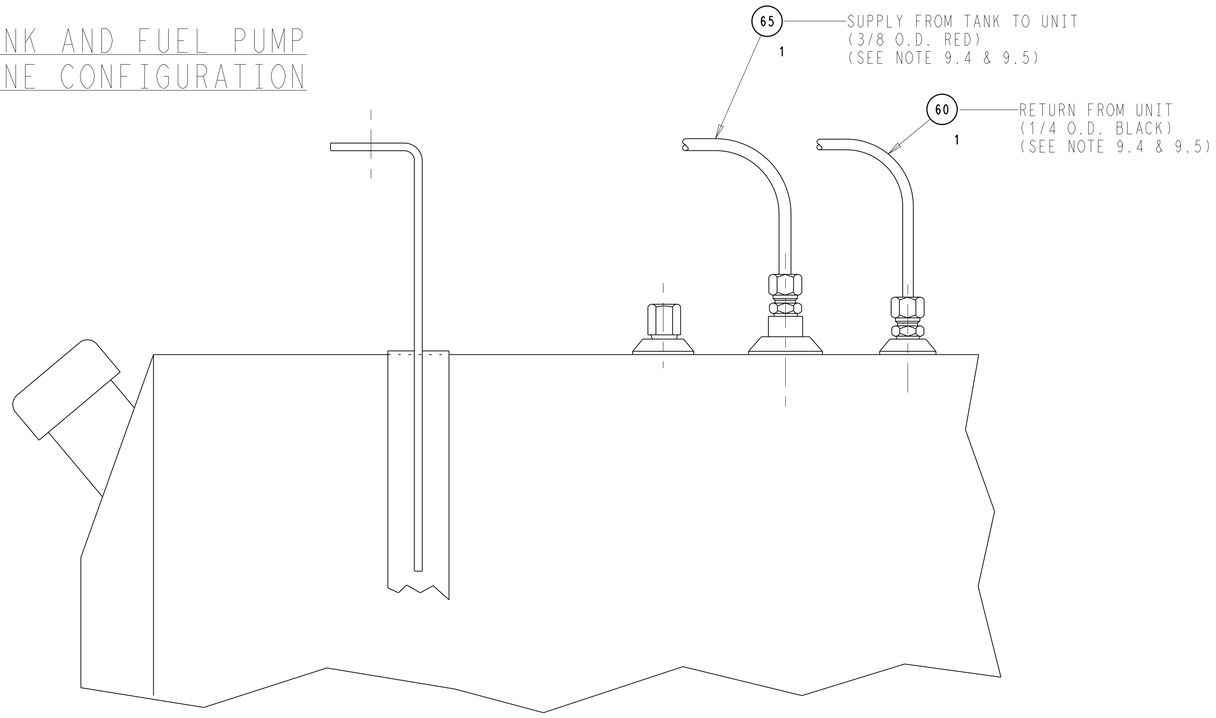
REV A

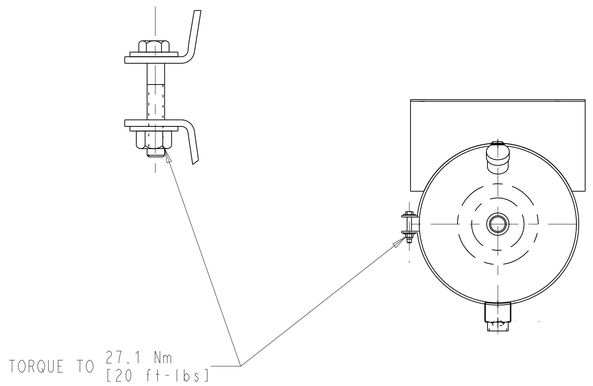
SUPERSEDES:

PART CLASSIFICATION: US EAR99

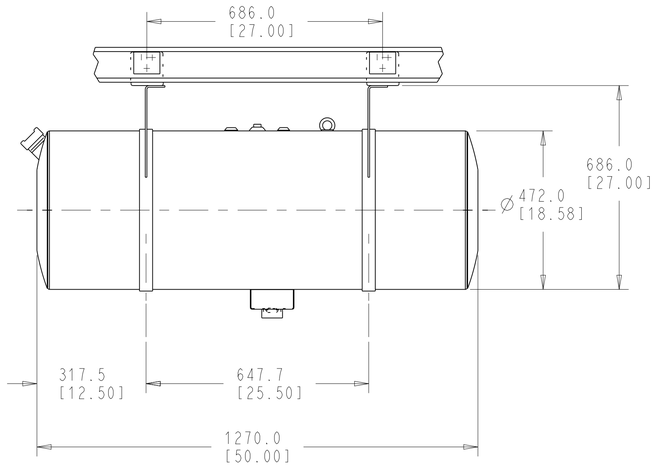
DRAWING CLASSIFICATION: US EAR99

TANK AND FUEL PUMP LINE CONFIGURATION





50 GALLON TANK



VIEW A-A
(NOT TO SCALE)
FROM SHEET 5

NOTES CONTINUED FROM PREVIOUS SHEET

FUEL TANK INSTALLATION:

9.0 FUEL TANKS INSTALLED IN ACCORDANCE WITH THESE GUIDELINES WILL PROVIDE ADEQUATE SUPPORT IN NORMAL SERVICE ENVIRONMENTS INCLUDING PIGGYBACK APPLICATIONS.

9.1 FUEL TANK SUPPORT STRAPS MUST ATTACH TO THREE CROSS MEMBERS.

9.2 FUEL TANK SUPPORT STRAPS WILL INTERFACE WITH THREE CROSS MEMBERS IF THEY ARE ON 12-INCH CENTERS. CROSS MEMBERS ON 15-INCH CENTERS WILL REQUIRE A STRUCTURAL STEEL CHANNEL TO SPAN THEM. THIS CHANNEL IS NOT SUPPLIED BY CARRIER TRANSICOLD.

9.3 FUEL TANK SHOULD BE CENTERED BETWEEN FUEL TANK STRAPS $\pm \underset{[1.50]}{38.1}$

9.4 FOR MAXIMUM MECHANICAL OR ELECTRICAL FUEL PUMP PERFORMANCE:
9.4.1 MINIMIZE FUEL LINE LENGTH.
9.4.2 MINIMIZE NUMBER OF CONNECTORS AND UNIONS.
9.4.3 NEVER USE ELBOW FITTINGS.

9.5 WHEN INSTALLING FLEXIBLE TUBE INTO THE TANK, PASS THE TUBES, BOTH SUPPLY & RETURN, THROUGH THE COMPRESSION FITTINGS AND PUSH TUBES TO THE BOTTOM OF THE TANK. WHEN THE TUBES REACH THE BOTTOM OF THE TANK, PULL THEM BACK UP APPROXIMATELY $\underset{[1.00]}{25.4}$, THEN TIGHTEN THE COMPRESSION NUT.

10.0 RECOMMENDED TORQUE VALUES FOR FURNISHED LOCK NUTS ARE AS FOLLOWS:

BOLT/THREAD	TORQUE (NEWTON-METER)	TORQUE (FT-LB)
1/4-20	12.2	9.03
3/8-24	40.8	30.09
1/2-13	81.6	60.19
	(EXCEPT AS NOTED)	(EXCEPT AS NOTED)

11.0 EACH INSTALLATION KIT CONTAINS SUFFICIENT CLAMPS FOR FUEL LINE ROUTING AND SECUREMENT. THE INSTALLER MAY ROUTE FUEL LINES THRU CONDUIT, $\underset{[0.75]}{19.1}$ MINIMUM, (CONDUIT NOT FURNISHED AS PART OF INSTALLATION KIT).

12.0 USE PIPE SEALANT ON ALL PIPE CONNECTIONS (NOT FURNISHED AS PART OF INSTALLATION KIT)

AFTER INSTALLATION:

13.0 PERFORM PRE-DELIVERY INSPECTION (ITEM 70). COPIES OF COMPLETED CHECKLIST SHOULD BE SUPPLIED TO SELLING DEALER & CUSTOMER.

14.0 OPERATE UNIT IN CONTINUOUS RUN (MANUAL) MODE FOR A MINIMUM OF 8 HOURS (12 HOURS PREFERRED). PERFORM FINAL INSPECTION ON UNIT.

UNITS SUPPLIED WITH BATTERY INSTALLED

15.0 CUT WIRE TIE(S) THAY HOLD CABLES TO UNIT FRAME.

16.0 CONNECT RED BATTERY CABLE TO THE POSITIVE (+) BATTERY TERMINAL; CONNECTOR BLACK CABLE TO NEGATIVE (-) BATTERY TERMINAL (USE OF CORROSION IN HIBITOR IS RECOMMENDED).

17.0 POSITION TERMINAL COVERS SUPPLIED WITH CABLES OVER TERMINALS.

SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698
SHEET 6 OF

REV -

SUPERSEDES:

PART CLASSIFICATION: US EAR99

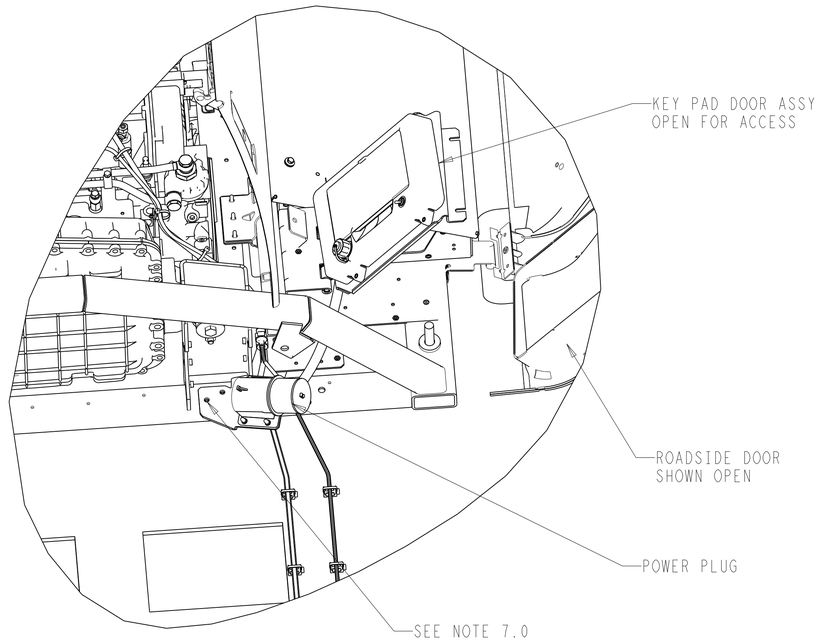
DRAWING CLASSIFICATION: US EAR99

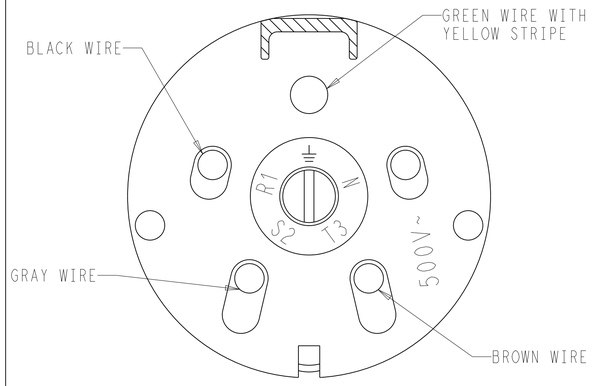
400/3/50 Hz	NORMALIZED EXTENSION LABEL H.07 RNF
30 A	400 Y 4 x 6 mm²

STANDBY PLUG INSTALLATION

SCALE 0.188

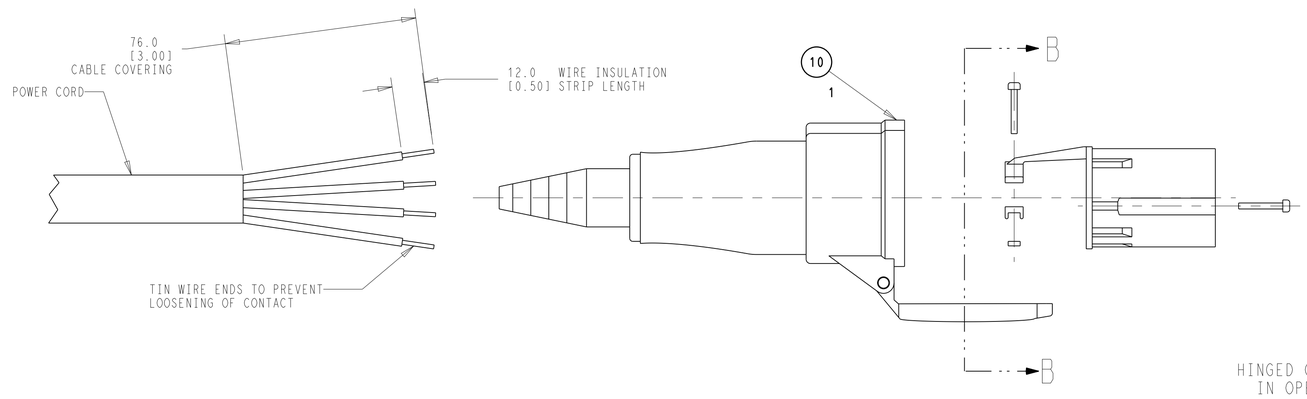
POWER PLUG IN THE INSTALLED POSITION





SECTION B-B
SCALE: NONE

PLUG IN VERTICAL POSITION



MAKE CONNECTIONS TO PLUG AS SHOWN

1. STRIP POWER CORD INSULATION BACK 76.0mm.
2. CUT AWAY ANY PROTECTION PACKING FROM WIRES.
3. STRIP INSULATION OF WIRES BACK APPROXIMATELY 12.0mm.
4. TIN ENDS OF WIRE WITH ROSIN CORE (ELECTRICAL) SOLDER TO PREVENT FRAYING AND LOOSENING OF CONNECTION.
5. INSERT WIRE ENDS INTO THE PLUG AS SHOWN IN DRAWING. IT IS IMPORTANT THAT THE GREEN WIRE IS CONNECTED TO THE SAFETY GROUND CONNECTION (MARKED GREEN) AT THE TOP OF THE PLUG.
6. TIGHTEN CONNECTORS SECURELY AND ASSEMBLE THE PLUG.
7. STANDBY PLUG WILL BE SECURED IN POSITION SHIPPING LOCATION BY FACTORY.RELOCATE PLUG ON THE REAR LOWER FRAME RAIL.PLUG AND PLATE ASSEMBLY WITH FACE DOWN AND TO THE ROAD SIDE. TIGHTEN (2) M6 BOLTS TO SECURE PLATE IN POSITION. BE SURE COVER IS IN PLACE WHEN PLUG IS NOT IN USE.
8. WHEN TESTING THE OPERATION OF THE UNIT IN STANDBY MODE, ENSURE THAT THE ROTATION OF THE MOTORS ARE CORRECT. IF THE ROTATION IS NOT CORRECT, REVERSE THE CONNECTION OF ANY TWO OF THE THREE PHASE WIRES. "DO NOT REVERSE ANY WIRE WITH THE GREEN SAFETY GROUND."

SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
-	INITIAL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698
SHEET 7 OF

REV -

SUPERSEDES:

PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99

CONNECTION OF ACCESSORIES

Carrier TRANSICOLD
United Technologies

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

OPTIONS SUCH AS TEMPERATURE RECORDER, GPS TRACKING SYSTEM, MAY DISCHARGE THE BATTERY WHEN THE UNIT IS OFF AND MUST NOT BE CONNECTED DIRECTLY TO THE BATTERY.

OPTIONS MUST BE CONNECTED TO THE 'RP' CONNECTION WHICH CAN BE FOUND BEHIND THE DISPLAY.

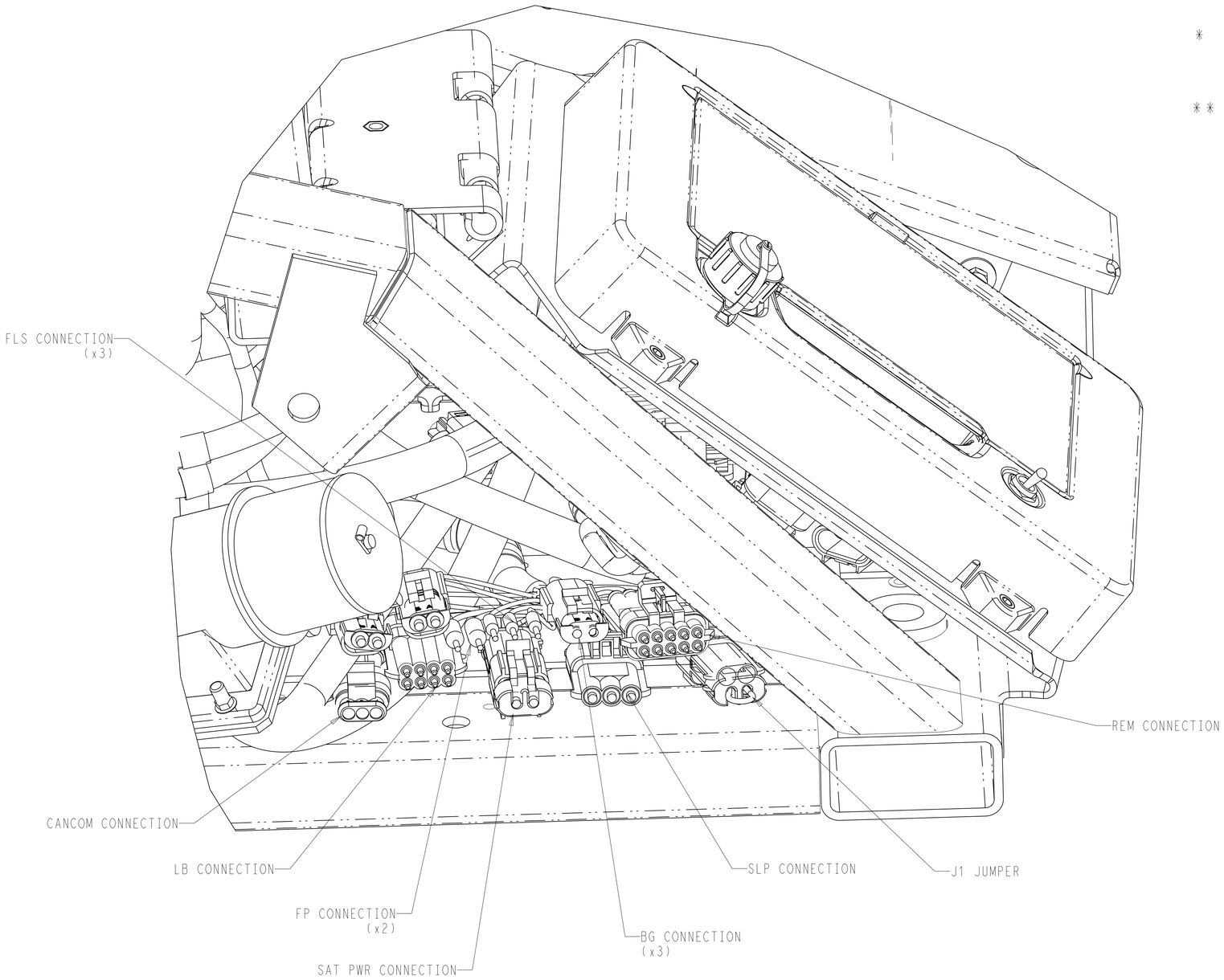
IMPORTANT : LE COURANT MAXI ADMISSIBLE POUR L'ENSEMBLE DES OPTIONS EST DE 2A.
TOUTES LES OPTIONS DOIVENT ETRE RACCORDEES AU MODULE DE PROTECTION BATTERIE AFIN DE PRESERVER LA BATTERIE CONTRE LES DECHARGES PROFONDES.
[IMPORTANT : THE MAX. ADMISSIBLE CURRENT FOR ALL THE OPTIONS IS 2A.
ALL OPTIONS MUST BE CONNECTED TO THE BATTERY GUARD OUTPUT TO PREVENT ANY DEEP DISCHARGE OF THE BATTERY.]

* ( ): LA VALEUR DU FUSIBLE EN SORTIE DEPEND DU COURANT MAX. DE L'OPTION ET DU DIAMETRE DE FIL
THE OUTPUT FUSE RATING DEPENDS ON THE MAX. CURRENT OF THE OPTION AND OF THE WIRE SECTION

** ( ) 0.75 mm² - VALEUR MAX DE FUSIBLE RECOMMENDEE: 3A
MAX. RECOMMENDED OUTPUT FUSE RATING: 3A

OPTION CONNECTIONS

SCALE 0.950



SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.
B	UPDATE VIEW	29 FEB 19	H.C			72E0056P18
-	INITIL RELEASE -00.	04 DEC 2017	BJM			72N0033P17

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]

TITLE: INSTALLATION INSTRUCTIONS
1950Z (HEV)

DRAWING NO. 98-02698 SHEET 8 OF

REV B

SUPERSEDES:

PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99