



Modular Walk-In Cooler/Freezer
Technical Manual

Installation, Operation, and Maintenance Instructions

Models:

WICF

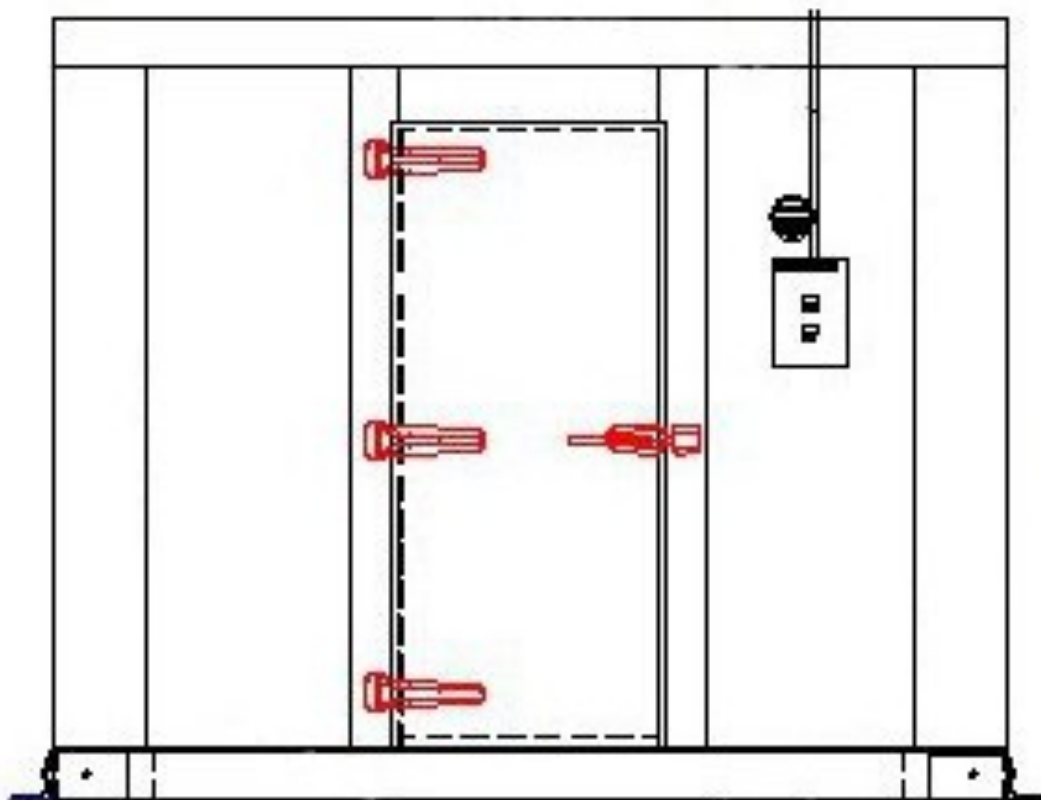


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Chapter 1 – General Information

1.1 Introduction

This technical manual provides information on the installation, operation, maintenance, and inspection of this unit manufactured by **Cospolich Inc.**, Destrehan, Louisiana. A complete parts breakdown is provided in Chapter 7.

1.2 Scope of the Manual

This technical manual provides information for installation, operating, preventative maintenance, and service instructions, including applicable drawings and figures of the equipment.

1.3 Equipment Description

The unit consists of the following parts:

- A. Storage Compartment - The storage compartment is clear storage area.
- B. Door(s) – Access to the storage compartment is through hinge mounted door(s).
- C. Condensing Unit — The condensing units are located remotely outside of the freezer space adjacent to the exterior wall
- D. Evaporator Coil Assembly– The evaporator coil assemblies are located in the storage compartment and is responsible for distributing the cold air associated with the refrigeration system.
- E. Controls & Breaker Assembly — The electronic controls, breaker panel, and transfer switch are located on the exterior back and sides of the freezer space.

1.4 Equipment Supplied

The unit is shipped from the factory disassembled, palletized and crated to minimize the possibility of damage in shipping and storage.

Table A—Leading Particulars

MANUFACTURER:	Cospolich Inc. Destrehan, Louisiana 70047
TYPE:	Modular Walk-In Cooler or Freezer
MODEL:	WICF
PURPOSE:	Storage of Refrigerated and/or Frozen Materials
ELECTRICAL REQUIREMENTS:	Power Supply - 440 Volt AC, 60 Hz, 3 Phase RLA - 3.9 RLA
REFRIGERANT:	404A
DRAIN:	Not Required
DIMENSIONS:	99" WIDE X 96" DEEP X 81" HIGH

NOTES -

1. Interior floor is seamless with deck grating.
2. Stainless steel shipboard shelving.
3. Material is as follows:
 Walls: 16 ga. 304 SS
 Top: 16 ga. 304 SS
 Door: 16 ga. 304 SS
 Door liner & gasket: 16 ga. 304 SS
 4. Evaporator coil not shown.

REV. DESCRIPTION REVISIONS DATE (APP)

A	Changed height from 7' to 6'-9"	10/24/03
B	Moved door to center of cabin	10/24/03
C	Corrected door height in Detail 1	10/24/03
B	Set to scale	10/24/03
C	Modified with floor 9' to 8'-3"	10/28/03
D	Added front and rear backing steel and angle.	10/28/04
E	Changed door hinge side from right to left	10/28/04

TOP VIEW

HORIZONTAL SECTION

ELEVATION

DETAIL 1
NTS

DETAIL 2
NTS

ITEM SHIPBOARD MODULAR WALK-IN FREEZER

PROJECT SMR DWG 91126

DATE 9/01/02 SCALE 1:1 DWN. BY TW

COSPOLICH INC.

REV. F

NORCO, LOUISIANA

Chapter 2—Operation

2.1 Introduction

This model is a heavy-duty piece of cold storage equipment designed for continuous use. It incorporates electronic controls to regulate the cycling and temperature of the refrigeration system.

2.2 Table B—Controls and Indicators

Name	Type	Function
High Pressure Switch	Contact Points	Safety Switch (Automatic)
Low Pressure Switch	Contact Points	Safety Switch (Automatic)
Electronic Controller	Push Button Electronic, Digital Display	Cycles Refrigeration System (Automatic)
Light Switch	Manual Rocker Type	Activates interior lighting
Sight Glass	Liquid Indicator	Visual level of refrigerant
Power Indicator Light	Halogen Bulb	Indicates system in operation

Illustrations 2.A, 2.B, 2.C, 2.D—Condensing Unit Assembly, Electronic Controls, Digital Temperature Read-Out, & Power Interrupt Switch

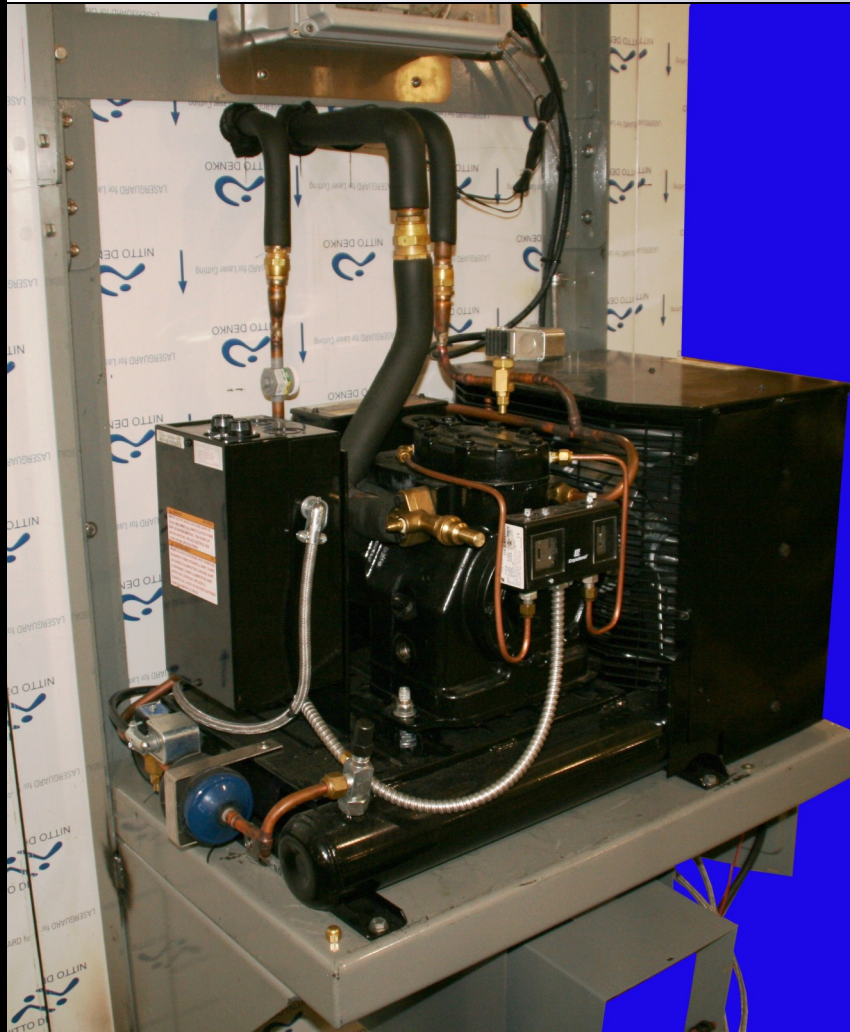


Illustration 2.A-Condensing Unit Assembly



Illustration 2.C-LED Digital Temperature Read-out and Light Switch



Illustration 2.B-Electronic Controls



Illustration 2.D-Power-Interrupt Switch

2.3 Start-Up Procedures

1. Prior to start up, using a voltage meter, confirm that the correct 440V 3-Phase electrical supply voltage is present.
2. Make sure all electrical connections are properly installed and secure.
3. When connecting the refrigeration quick connect fittings, make sure they are sealed/connected tightly and properly insulated.
4. To prevent excessive noise and vibration, see that the condensing unit skid is installed securely to the stand.
5. Check all bolts fastening the refrigeration stand to the cooler. Confirm that they are installed properly and fastened tightly.
6. Energize the unit, start up the condensing unit, and let the freezer pull down to the proper temperature and cycle for 24 hours prior to loading any product.
7. If at any time the unit does not perform to specification, please call the Cospolich support team at (985) 725-0222 for assistance.

2.4 Shutdown Procedures

1. De-energize the system by flipping the power supply disconnect switch to the "OFF" position.
2. Open main door to allow the interior of the cooler/freezer to equalize with the room temperature. This will prevent any unnecessary condensation or odors from forming within the space.
3. A mild detergent, diluted with water, may be used to clean the interior surfaces of the cooler/freezer.
4. For extended periods of inactivity, turn the main breaker to the unit to the "OFF" position.

Chapter 3—Functional Description

3.1 System Description

The unit is a self-contained, automatically controlled, continuous duty perishable product storage system. It is designed with the intent and purpose of storing refrigerated and/or frozen items.

The operating temperature is automatically monitored by the electronic controls that are factory set to maintain a predetermined adequate storage condition.

The equipment is comprised of the following three basic compartment assemblies:

1. Controls Assembly—This area contains the electronic controller assembly with breaker.
2. Storage Compartment—The insulated storage area is a temperature controlled refrigerated area. Included in this compartment is the evaporator coil assembly.
3. Condensing Unit Assembly & Transformer—This area contains the condensing unit assembly and the transformer with the interrupt switch.

3.2 System Operation

The design of the cooler/freezer unit focuses primarily on the safe storage of products requiring refrigeration. In engineering, considerable attention was placed on not only its functionality, but also serviceability.

The refrigeration system is a closed loop system. Barring a leak in the system, the addition of refrigerant will not be necessary. A periodic check of the refrigerant level, however, is recommended to insure that the system operates at the optimum level at which it was designed.

Chapter 4—Scheduled Maintenance

4.1 Introduction

To insure the longest and most trouble free operation, a thorough periodic maintenance schedule is required. The maintenance system should be aimed at maximizing the efficient utilization of maintenance personnel, minimizing down time, and providing the orderly acquisition of spare parts support.

The Cospolich Arctic Safe Cooler/Freezer will generally be in operation in a facility where scheduled maintenance is performed according to Maintenance Index Plans. This unit requires regular maintenance. This chapter is intended as an alternative to any standard maintenance program that may pre-exist. The preventative maintenance schedule is based upon similar maintenance requirements for commercial refrigeration equipment.

4.2 Preventive Maintenance Action Index

If there is not a maintenance index plan, we have formulated our schedule for periodic maintenance in Table G.

4.3 Preparation for Maintenance

Since many areas affected in the maintenance schedule are electrically supplies, it may be necessary to de-energize the system when making these inspections.

4.4 Maintenance

A. Monthly Maintenance

1. The unit should first be de-energized by switching the main breaker and power interrupt switch to the "OFF" position.
2. After accessing the condensing unit, using a vacuum or soft brush/broom, brush the condenser fins in a vertical motion to remove dust or debris.

B. Bi-Monthly Maintenance

1. Check the drain line at both the inlet and outlet ends to make certain that there are no obstructions (forced air evaporator models only). It is not recommended to use any chemicals in clearing a clogged drain. The preferred method is to use compressed air, with approximately 60 psi being sufficient to free most clogs or obstructions. To do so, simply remove the drain line at the evaporator coil and attach an air line to it.
2. With the unit in a cooling cycle, use a flashlight and locate the refrigerant sight glass. If the compressor has been running for 3 or more minutes, there should be no visible bubbles.

A. If bubbles are present:

- Determine if there is a leak by using a halide or electronic leak detector.
- Repair any/all leak(s).

Warning: *The system should be de-energized when checking for leaks*

B. To repair leaks:

1. Flared Fitting: Can often be repaired by simply tightening the brass flare nut 1/4 of a turn. If tightening does not repair the leak, it may be necessary to re-flare the tubing.
2. Brazed Joint: It is necessary to pump down the system's refrigerant charge to remedy the problem. To pump the refrigerant into the receiver, you must first connect service gauges to the system at the suction valve on the compressor and the liquid valve on the receiver. Purge the gauges before opening the systems valves to avoid contamination. Run the receiver (liquid or high pressure) valve all the way in to stop the refrigerant from exiting the receiver. Start the unit and allow it to run until the suction or low pressure gauge reads 5lbs., de-energize the system. Once pumped down, the necessary repairs can be made.

3. Using a mild non-abrasive detergent and soft cloth, wipe the interior lining beginning with the top and working down. Also, wipe the gasket and where it sits on the cabinet interior.
4. With the condensing unit de-energized, check the condenser fan motor and make certain that it is secure and not loose. Inspect the fan blade for cracks and make sure it is tight on the motor.
5. To inspect the evaporator motor, de-energize the unit. Loosen the drain line from the evaporator pan. Loosen the screws that hold the shroud. Lower the shroud and disconnect the polarized electrical connection. With the shroud out of the cabinet, proceed to inspect the motor mounting bolts and the fans for cracks or excessive play.
6. Using a mild detergent and water, wipe the vinyl gasket. Make certain to clean under the gasket to remove any mildew or residue that may have accumulated.
7. Using a mild, non-abrasive detergent and water, wipe the cabinet exterior, paying careful attention to wipe the cabinet in the direction of the stainless steel grain texture.

C. Annual Maintenance

1. Check all refrigerant lines for leaks or fatigue. Make certain that no exposed copper tubing is in contact with any other metal surface. If there is contact, install an insulating material between the two metal components.
2. With the breaker at the main panel "OFF", inspect the system's wiring. Look for a tight fit of all connections and make certain that the wire restraining devices are tight. Inspect all wires and cords, paying particular attention to nicks or age cracks in the insulation.
3. Visually inspect the outer panels, seams, and components of the cabinet. Check screws, bolts, and all camlocks to make certain that they are tight and properly secured.

D. Three Year Frequency Maintenance

1. Replace the door gasket(s). Remove the original gasket and all leftover glue residue. Clean as much as possible. Install new gasket by removing paper backing and adhering to door perimeter. It may be necessary to add additional glue to reinforce the adhesion.
2. Inspect all motors and shafts for noise & wear, replace if necessary.
3. With the unit de-energized, locate the condensing unit and inspect all wiring for signs of fatigue or wear.
4. Inspect the operation of the door latch assembly (when applicable). Check for signs of wear, loose screws, or mechanical failure.
5. Inspect the operation of the door hinges. To do so, open the door at a 90° angle to the cabinet and lift on the outer edge of the door. If there is upward movement of 1/2" or more, replace the hinges. On spring-mount hinges, when the doors no longer close properly, replace the hinges.

Table C—Preventive Maintenance Action Index

	Frequency	Description
1.	Monthly	A. Inspect condenser coil to make certain air flow is not obstructed and that it is clear of dust and debris.
2.	Bi-Monthly	A. Inspect and clear drain line. B. Check the liquid refrigerant sight glass for proper refrigerant charge C. Clean interior and exterior of cabinet with mild detergent and water, dry thoroughly D. Check both condenser fan motor and evaporator motor(s) for proper function and that they are mounted securely E. Clean door gaskets and breaker strips with a damp cloth
3.	Annually	A. Slide out condensing unit, check all joints and fittings for signs of wear, leaks, or fatigue B. Inspect electrical connections to make certain that there is a good contact and that wires are neither weakened or frayed. C. Check the integrity of the cabinet
4.	Three-Year	A. Replace all door gaskets B. Inspect motor shafts for noise or wear C. Inspect electrical controls and wiring D. Inspect door latch (when applicable) and hinges.

4.5 Cleaning

Refer to Table D for proper cleaning protocols for the Arctic Safe Freezer.

Table D – Cleaning

NOTE: It is highly recommended that the unit be turned off and disconnected from power prior to all cleaning.

Detail	Solution	Frequency
Spills - Clean all spills promptly to avoid staining and odors.	Warm, soapy water	Immediately
Cabinet - Remove all contents. Wipe cabinet interior, exterior, and doors (drawers) with solution.	1-2 tablespoons of baking soda per 1 quart of warm water	Weekly
Gasket(s) - Clean gasket(s) thoroughly with solution. Clean sealing surface and the surface behind the flap.	1-2 tablespoons of baking soda per 1 quart of warm water	Weekly
Shelving/*Drawers - Remove from cabinet. Clean thoroughly.	1-2 tablespoons of baking soda per 1 quart of warm water OR hot water at high pressure	Monthly
Fan blades - Wipe evaporator and condensing unit fan blades clean.	Warm water	Monthly
Drain lines - Clean all drain lines (evaporator, cabinet).	Warm water and bleach	Monthly

Chapter 5—Troubleshooting

This chapter will assist in a systematic check of components in determining any cause of equipment failure.

It will be necessary that the individual involved in the troubleshooting operation be familiar with the function of the equipment as described in Chapter 3.

The following table lists the most common symptoms that may be experienced and the recommended corrective action. The tables are separated into electrical maintenance, mechanical maintenance, and operators' actions.

Table E—Mechanical and Electrical Troubleshooting Guide

Symptom	Possible Failure	Remedy
Unit does not operate	A. Control failure B. Incorrect voltage C. Failed compressor	A. Adjust control or replace B. Correct C. Replace
Unit runs continuously	A. Control failure B. Bad connection at TXV expansion valve C. Restricted air flow D. Bad condenser fan motor E. TXV valve stuck open F. Ineffective door seal G. Restricted air flow in storage compartment	A. Adjust control or replace B. Check and secure sensor bulb to suction line C. Clear obstruction and clean condenser D. Check and replace E. Replace F. Adjust door latch and hinges G. Redistribute food for even air flow
Low Head Pressure	A. Defective Compressor B. Low refrigerant C. Ambient temp too low	A. Replace B. Leak check & recharge C. Raise room temperature
High Head Pressure	A. Dirty condenser B. System contains air C. Refrigerant overcharge D. Condenser fan bad	A. Clean condenser B. Evacuate, change filter dryer, recharge C. Reduce qty of refrigerant D. Replace
Short Cycling	A. Maladjusted control	A. Adjust control

Chapter 6—Parts List

6.1 Introduction

This section of the manual contains lists of replaceable parts. Each of the tables contain a list of removable parts associated with an assembly of the cabinet . No parts identification has been provided for details of permanently assembled items or those items that are not suitable for field repair.

6.2 Source Codes

The sources for some items are shown in the part tabulation. Where no individual source code is listed, the part is available through Cospolich Inc. , PO Box 1206, Destrehan, LA 70047 (Fed. Mfg. Code #66682).

Table F—Source Codes

Code Number	Name	Address
14852	Bohn Heat Transfer	Danville, IL 61834
32761	Kason Industries	Newnan, GA 30265
50992	Ranco Controls	Plain City, OH 43064
78462	Sporlan Valve	Washington, MO 63090
14569	Copeland Corporation	Sidney, OH 45365
17529	Oasis	Vacaville, CA 95687
59431	Tecumseh Products	Ann Arbor, MI 48108
49048	Miljoco Corporation	Mt. Clemens, MI 48043
42020	Nashville Wire Products	White Bluff, TN 37187
79264	Jean's Extrusions, Inc.	Salem, IN 47167
2K223	Refrigeration Hardware	Grand Junction, CO 81505
09966	Instrument Systems Corp.	Jericho, NY 11753
60886	Idec Corporation	Sunnyvale, CA 94089
19220	Eberhard, Inc.	Strongsville, OH 44149
66682	Cospolich, Inc.	Destrehan, LA 70047

Table G—Parts List for WICF

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
1	CONTROL/JUNCTION BOX "A"	RCTLM-A	RCTLM-A	COSPOLICH	1	EA
2	PLASTIC ELECTRICAL ENCLOSURE, 8"X6"X4"	LENC09	HFFM-A864CHQRFG	NULITE	3	EA
3	ELECTRICAL ENCLOSURE BACK PLATE, 8"X6"	LENC09B	MP806S (HFFM-A8P6)	NULITE	3	EA
4	PLASTIC ELECTRICAL ENCLOSURE, 12" X10"	LENC14	A12106CHSCFGW	NULITE	1	EA
5	ELECTRICAL ENCLOSURE BACK PLATE, 12" X10"	LENC14B	A12P10	NULITE	1	EA
6	CONTROL/JUNCTION BOX "B"	RCTLM-B	RCTLM-B	COSPOLICH	1	EA
7	CONTROL/JUNCTION BOX "C"	RCTLM-C	RCTLM-C	COSPOLICH	1	EA
8	CONTROL PANEL-ELECTRONIC CONTROLS	RCTLM1	RCTLM1	COSPOLICH	1	EA
9	ELECTRONIC CONTROLLER, 115V	RWTT40-PM	RWTT40-PM	COSPOLICH	1	EA
10	MAIN FRONT CONTROL PANEL (DIGITAL THERMOMETER & LIGHT SWITCH)	RCTL61	RCTL61	COSPOLICH	1	EA
11	PREPPED EVAPORATOR COIL ASSEMBLY, 115V, 404A	MODEVAP1	MODEVAP1	COSPOLICH	1	EA
12	PREPPED CONDENSING UNIT ASSEMBLY, 440V, 3 PH, 404A	RUW210-PM	RUW210-PM	COSPOLICH	1	EA
13	3/8" PLASTIC STRAIGHT LIQUID TIGHT CONNECTOR	LLTC11	9106K41	MCMaster	13	EA
14	3/8" 90 DEGREE PLASTIC LIQUID TIGHT CONNECTOR	LLTC12	9106K51	MCMaster	4	EA
15	LAMP FIXTURE WITH LEXAN GLOBE	LRSK08	11803LG0000	KASON	1	EA
16	TRANSFORMER, 460/120V, 1PH	PCPT65	5S1F	NULITE	1	EA
17	FUSE; 25 AMP, TIME DELAY, 600V	RWIE31	TRS25RID	NULITE	3	EA
18	POWER INTERRUPT/QUICK DISCONNECT SWITCH, 440/3/30	RWQDCH361	H361	NULITE	1	EA
19	SOLENOID COIL, 115V	RWSC01	MKC-1	SPORLAN	2	EA
20	SOLENOID VALVE	RWSV06	ME6S140	SPORLAN	2	EA
21	VINYL CURTAIN	VINCUR01	402-SA606-3878	KASON	1	EA
22	VENTILATOR, HEATED, 115V, 4" WALL	WIV1183	1830000004	KASON	1	EA
23	DOOR HINGE	HXHE03	1251	KASON	3	EA
24	DOOR LATCH	HXLH03	0055000028	KASON	1	EA

Table G – Parts List for WICF

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
25	DOOR HOLD BACK HOOK SET; CHROME*	HXLH09	15101000004	KASON	1	EA
26	HEATER WIRE, 212", ALUMI-NUM BRAID	L1HA212H	64-250	RHS	1	EA
27	DRAIN HEATER, 110V, LONG W/ ADAPTERS	LFDH01	25251	SPRINGFIELD WIRE	1	EA
28	LIGHTED ROCKER SWITCH	LWSR01	G31-441	JOHNSTONE	1	EA
29	4-POSITION BARRIER STRIP	PCBS01	274-658	MG AUTOMATION	1	EA
30	6-POSITION BARRIER STRIP	PCBS02	274-659	MG AUTOMATION	1	EA
31	BREAKER, 20 AMP, 2 POLE	PCCC56	S202-K20	NULITE	1	EA
32	TRANSFORMER 115V-25.2V AC	PCPT56	273-1366	RADIO-SHACK	1	EA
33	GROUND TERMINAL BLOCK	PCTT008	57.506.9055.0	MG AUTOMATION	2	EA
34	TERMINAL DIVIDER	PCTTW2,5-6	07.311.1255.0	MC AUTOMATION	2	EA
35	TERMINAL SECTION	PCTWK6/U	57.506.0055.0	MG AUTOMATION	6	EA
36	PLASTIC STRAIN RELIEF, STRAIGHT, 1/2"	PLSR02	5D885	GRAINGER	10	EA
37	PLASTIC STRAIN RELIEF, STRAIGHT, 3/8"	PLSR01	5D884	GRAINGER	5	EA
38	CONDENSATE EVAPORATOR BRACKET*	RWCB01	T12-3390	COMPONENT HDW	1	EA
39	CONDENSATE EVAPORATOR, 115V*	RWCE01	T12-0370	COMPONENT HDW	1	EA
40	FAHRENHEIT LED THERMOME-TER	RWMT04	175-9603	MILJOCO	1	EA
41	CONDENSING UNIT ONLY	RUW210	CJAL-0200-TAD-001	EMERSON	1	EA
42	FILTER DRYER	RWFD12	013-7000-15	EMERSON	1	EA
43	QUICK DISCONNECT, 1/2"	RWQF0088	5500-08-08	PARKER-HANNIFAN	3	EA
44	QUICK DISCONNECT, 7/8"	RWQF1412	5500-14-12	PARKER-HANNIFAN	2	EA
45	SIGHT GLASS	RWSG07	SA14S	SPORLAN	1	EA
46	EXPANSION VALVE*	RWEV38	FSE-1-ZP	SPORLAN	1	EA
47	DRAIN PAN HEATER, 115V*	RWE463	24752102	HEATCRAFT	1	EA
48	EVAPORATOR COIL ONLY, 115V*	RWE065	HGT065AEK	HEATCRAFT	1	EA
49	DRAIN FITTING KIT	RWDFK01	26925101	HEATCRAFT	1	EA

Table G – Parts List for WICF

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
50	EVAPORATOR FAN MOTOR	RWEM47	25317801	HEATCRAFT	2	EA
51	EVAPORATOR FAN BLADE	RWE5140C	5140C	HEATCRAFT	2	EA
52	EVAPORATOR FAN COVER, PLASTIC	RWE37000701	37000701	HEATCRAFT	2	EA
53	COMPRESSOR	RUW211	CJAL-0200-TAD-001	EMERSON	1	EA
54	COMPRESSOR FAN MOTOR	RWCM69	050-0250-01	EMERSON	1	EA
55	COMPRESSOR FAN BLADE	RWFB44	083-0056-00	EMERSON	1	EA
56	DUAL PRESSURE CONTROL	RWPL11	985-CP2M-7A	EMERSON	1	EA
57	AIR SENSOR CABLE, 10 FT	RWTT26	952898	SPORLAN	1	EA
58	LATCH STRIKE	HXLH03-S	0055000112	KASON	1	EA
59	DOOR GASKET	GX4215EU	4215EU	ATLAS	20	FT

*NOT SHOWN IN ILLUSTRATIONS

Illustration 6.A – RUX210 Condensing Unit Assembly (12)

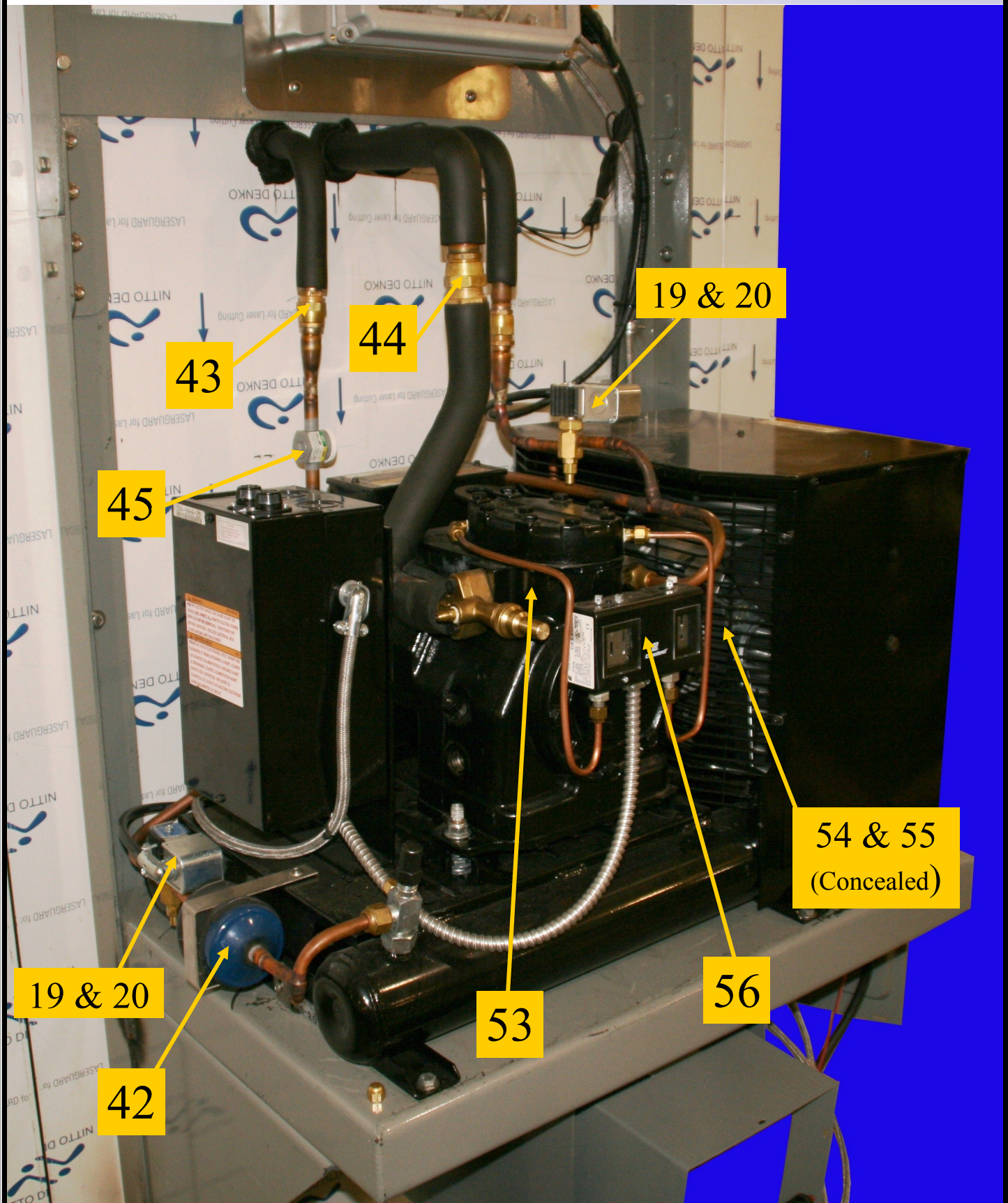


Illustration 6.A

Illustrations 6.B, 6.C – MODEVAP1 Evaporator Coil Assembly (11)

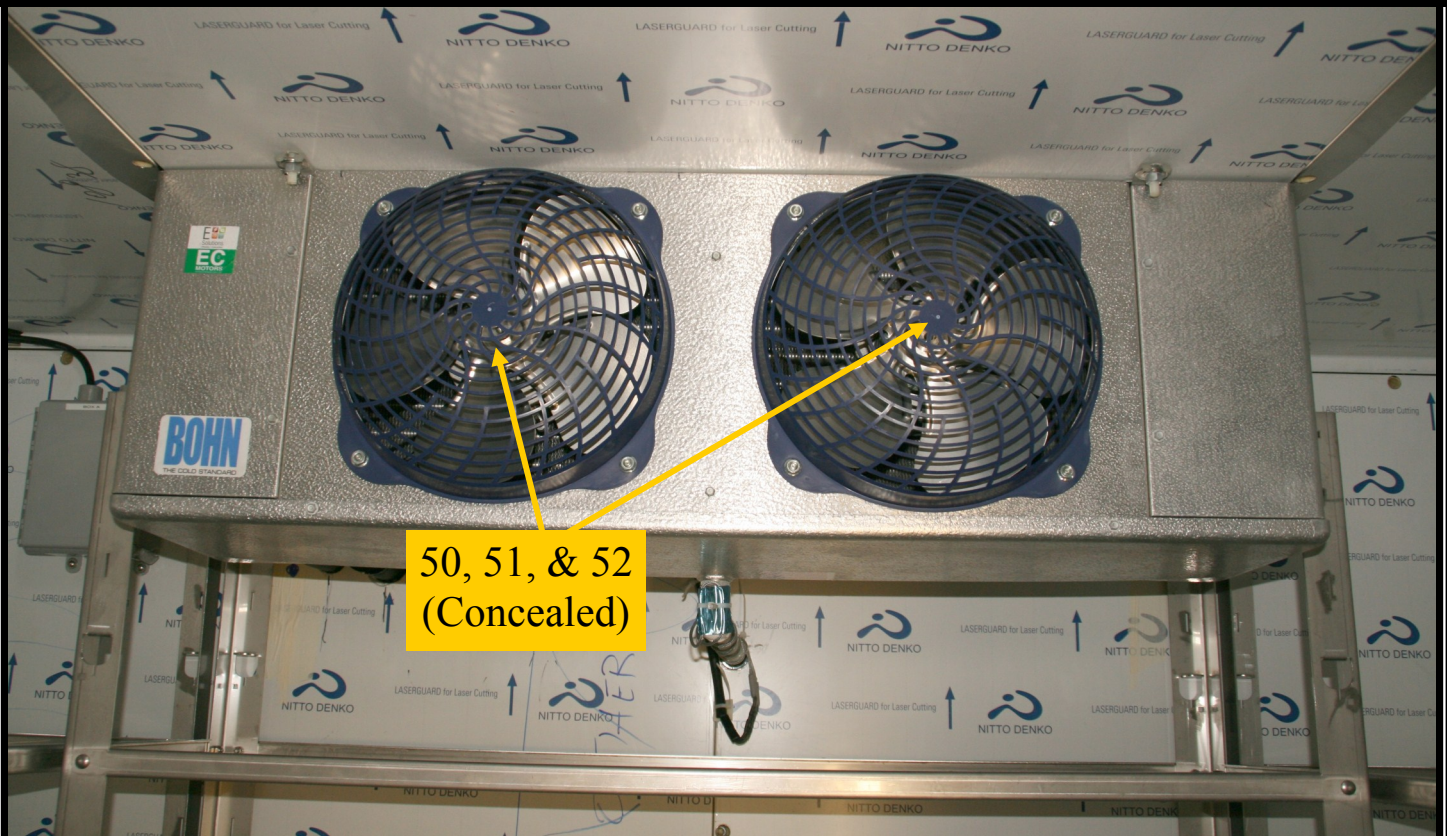


Illustration 6.B

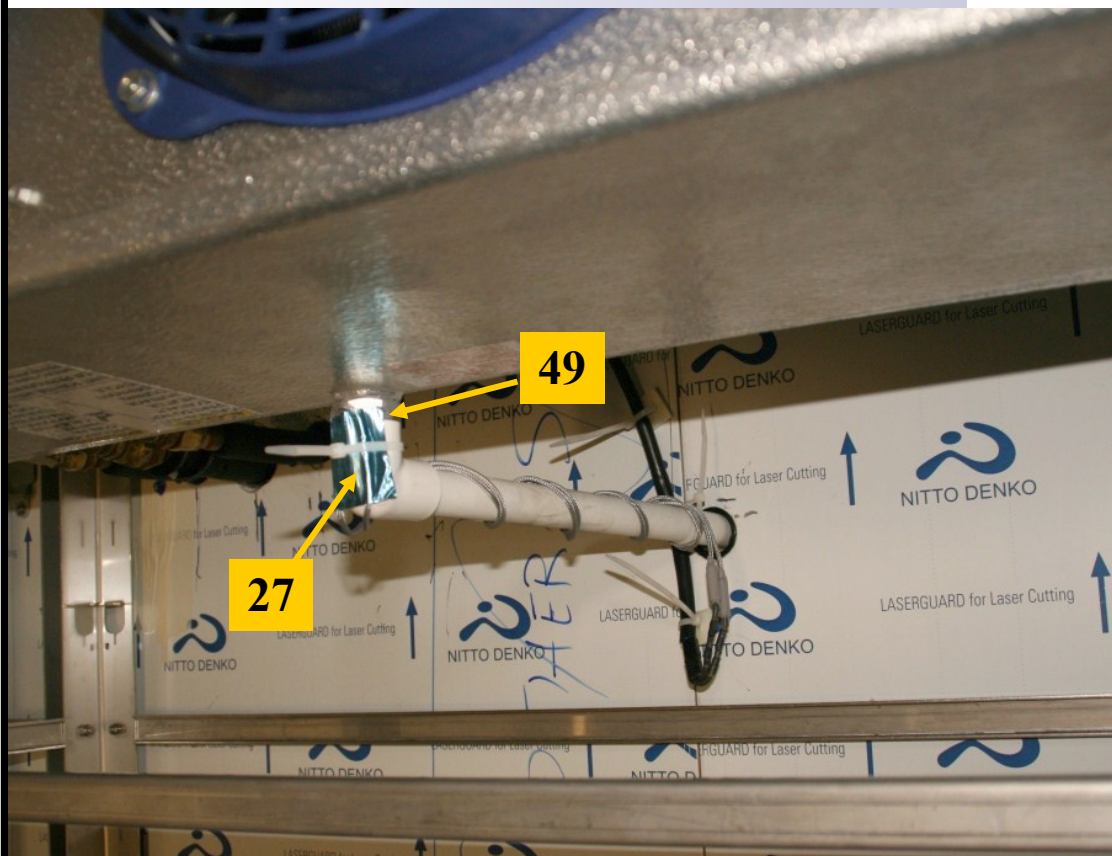


Illustration 6.C

Illustrations 6.D, 6.E – RCTLM-A Junction Box Assembly “A” (1)

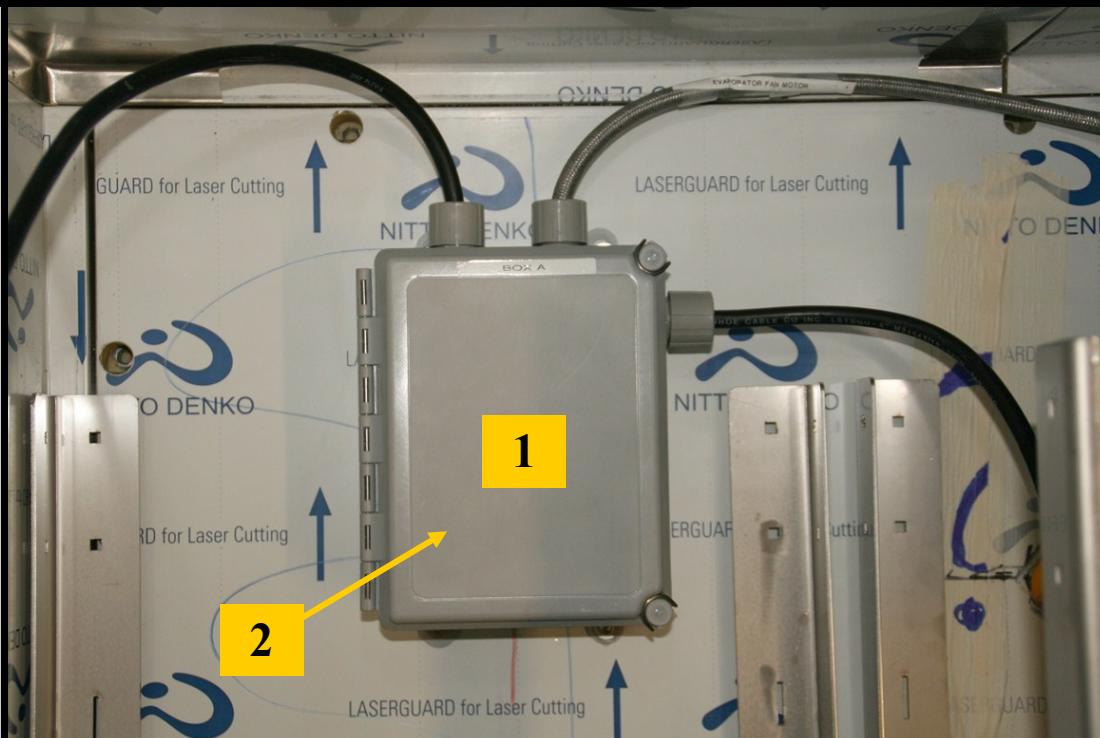


Illustration 6.D

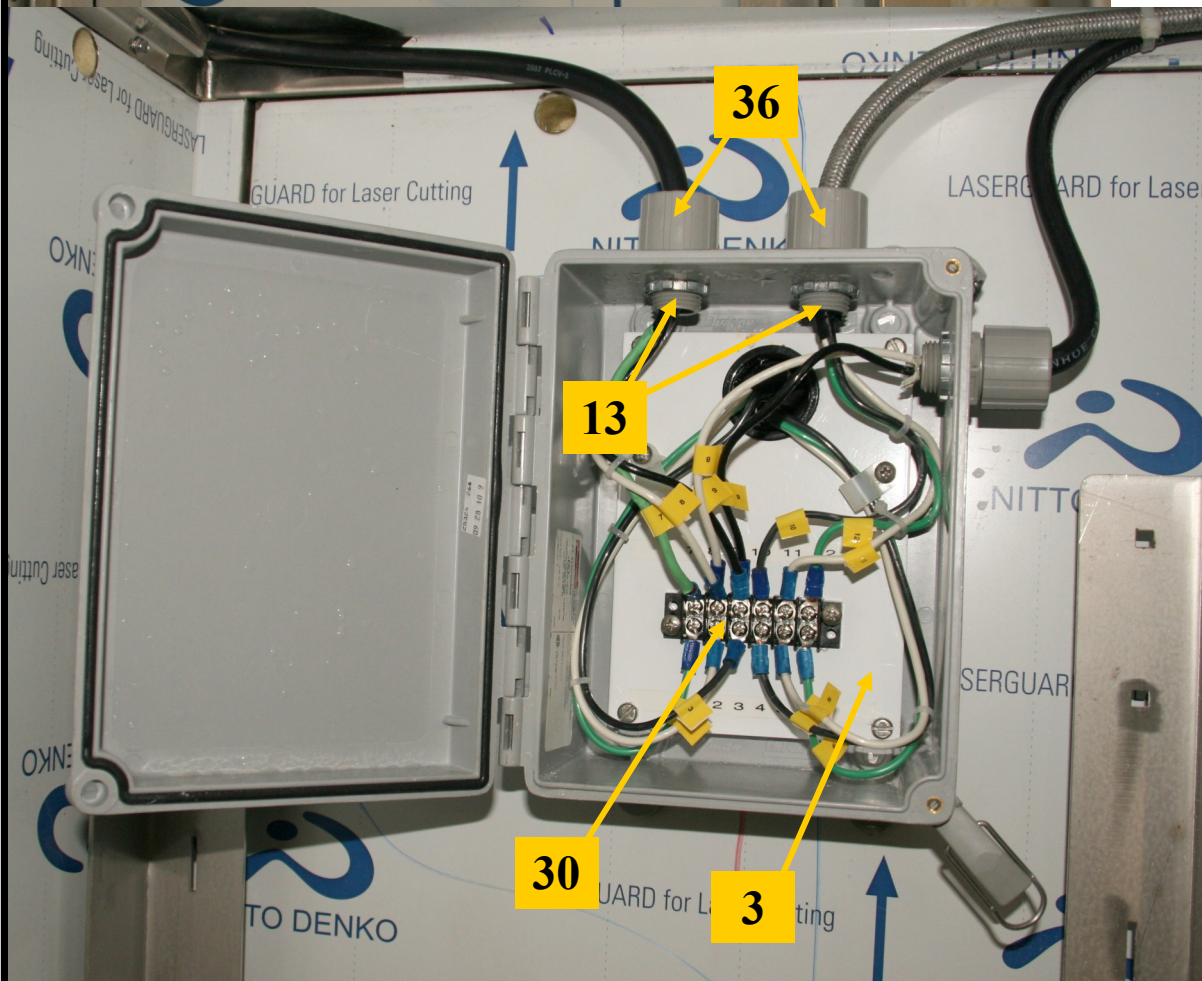


Illustration 6.E

Illustrations 6.F, 6.G— RCTLM-B Junction Box Assembly “B” (6)

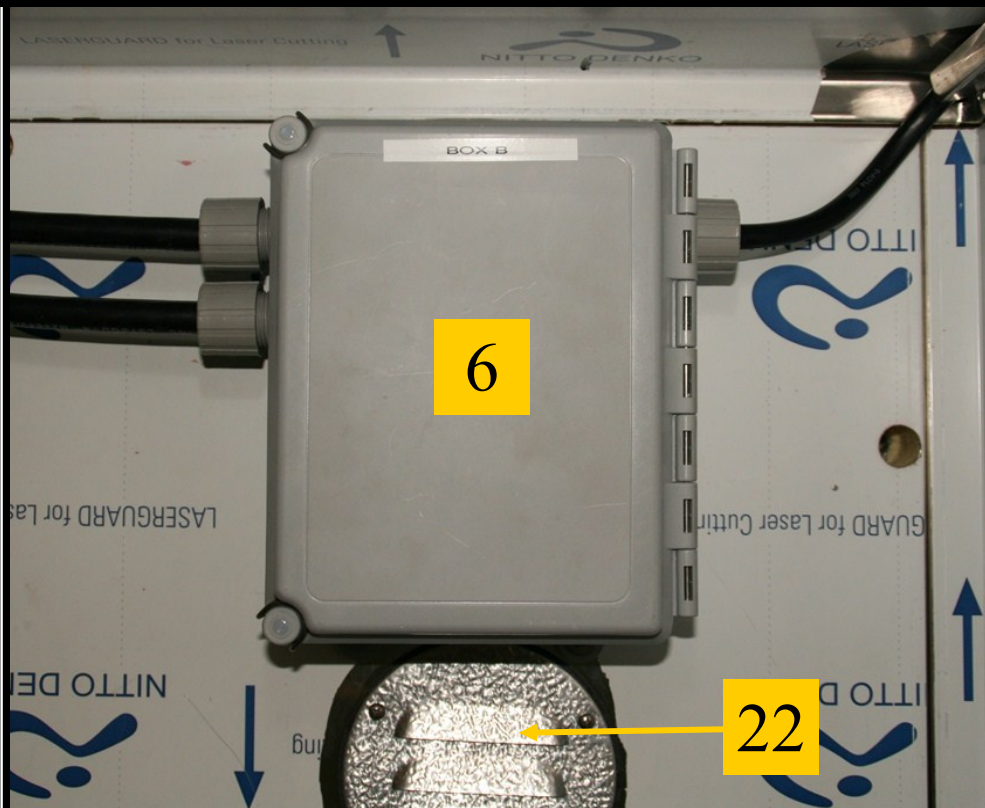


Illustration 6.F

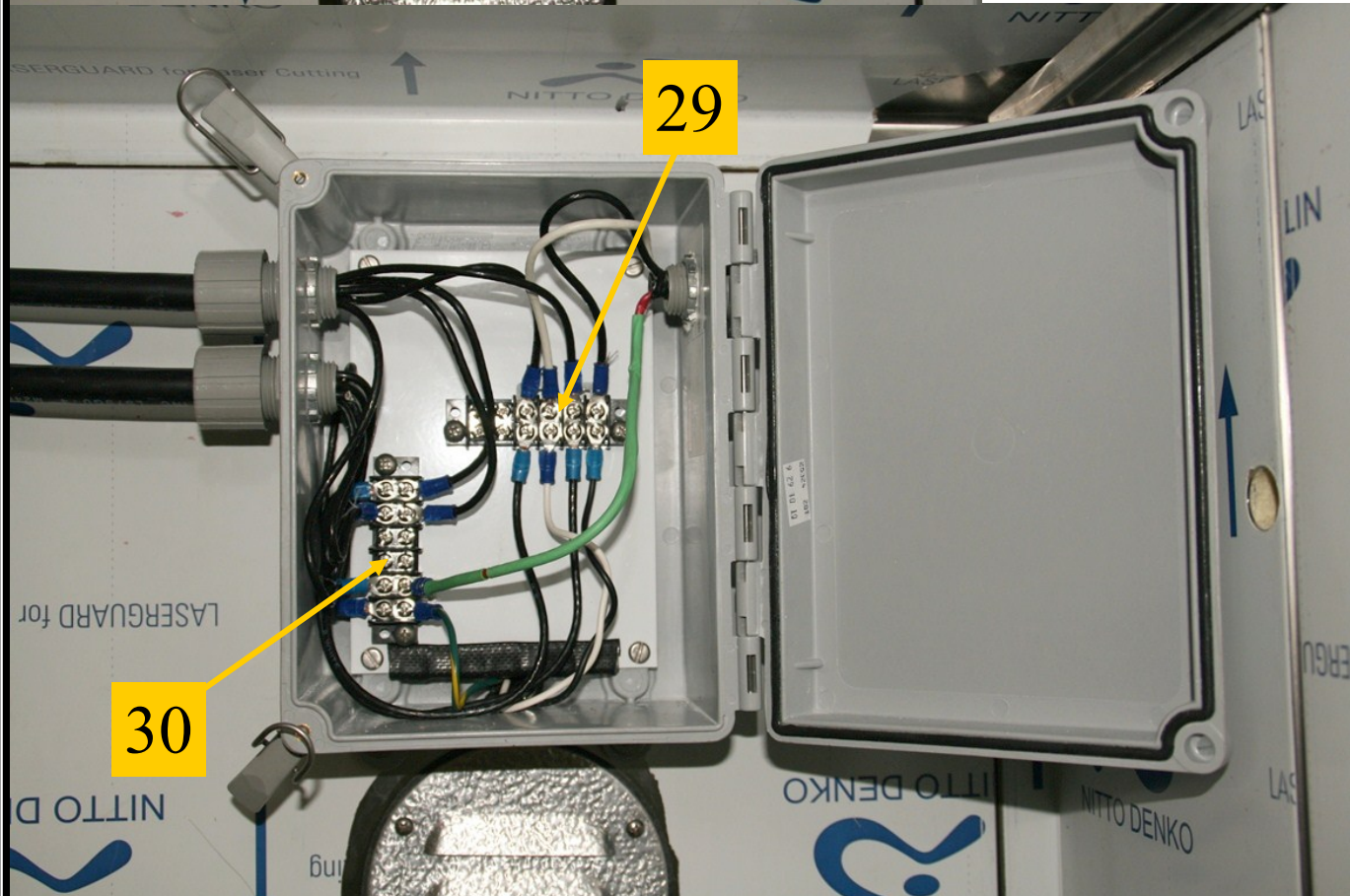


Illustration 6.G

Illustrations 6.H, 6.I— RCTLM-C Junction Box Assembly “C” (7)

Illustration 6.H

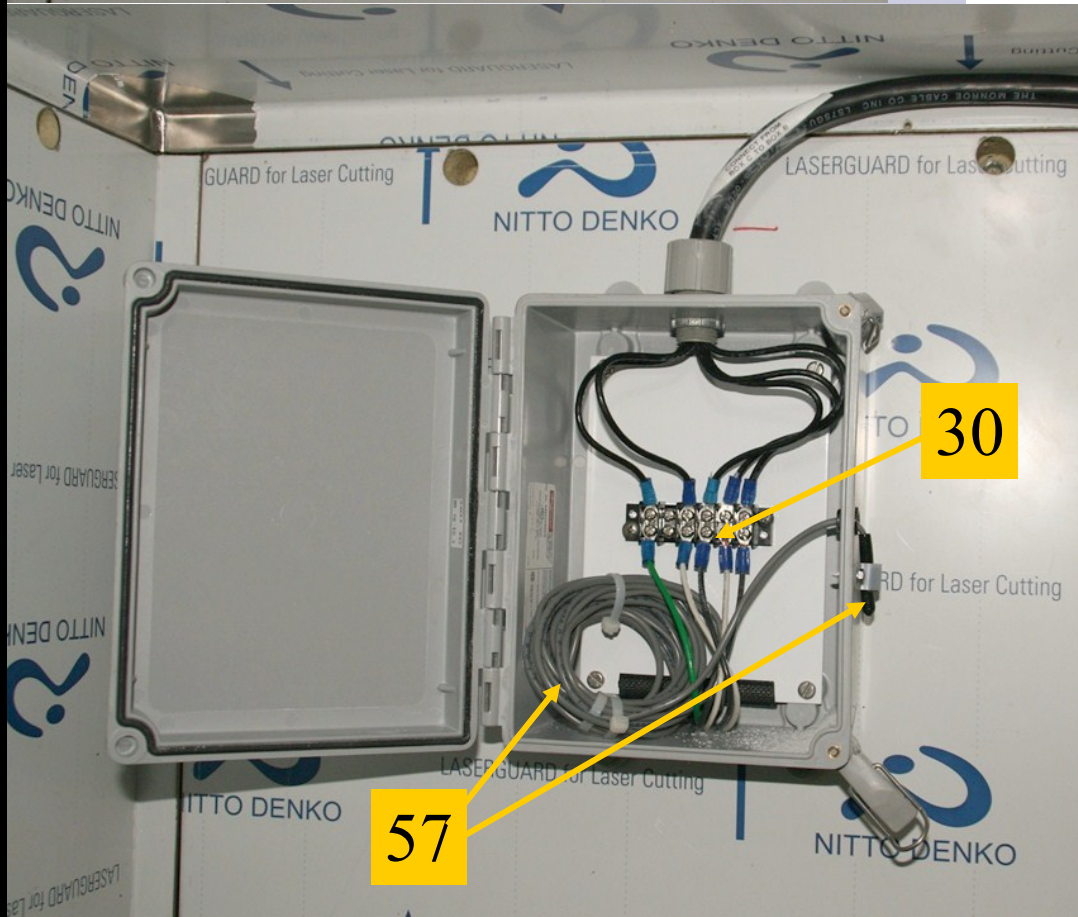


Illustration 6.I

Illustrations 6.J, 6.K— RCTLM1 Electronic Control Panel (8)

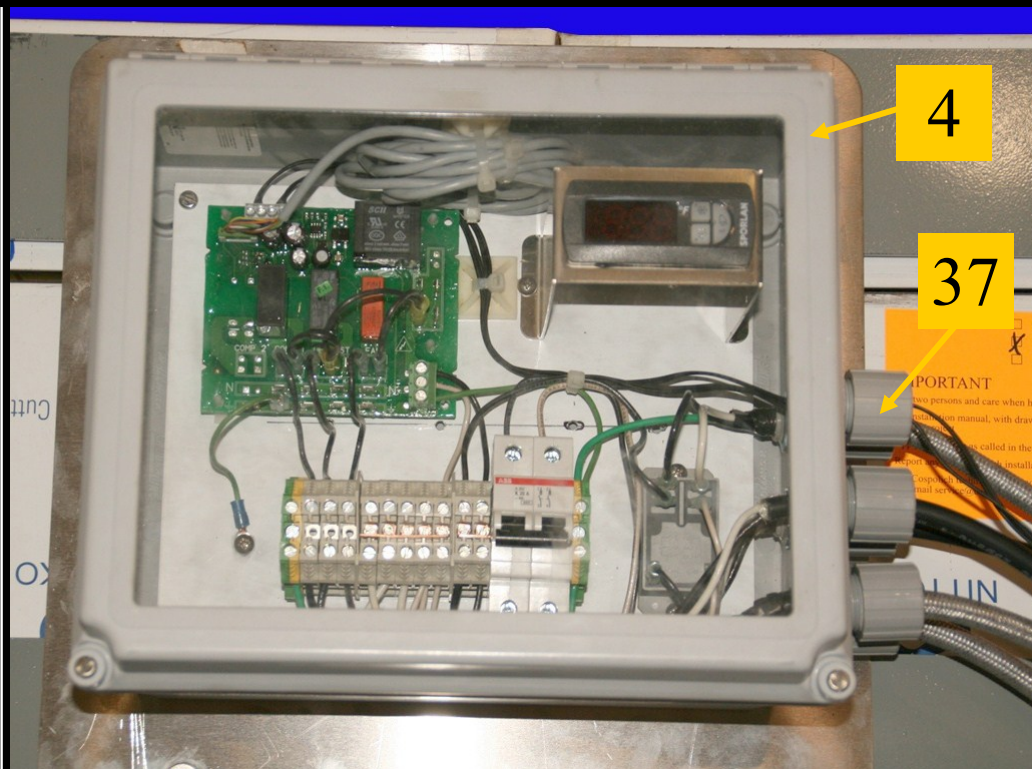


Illustration 6.J

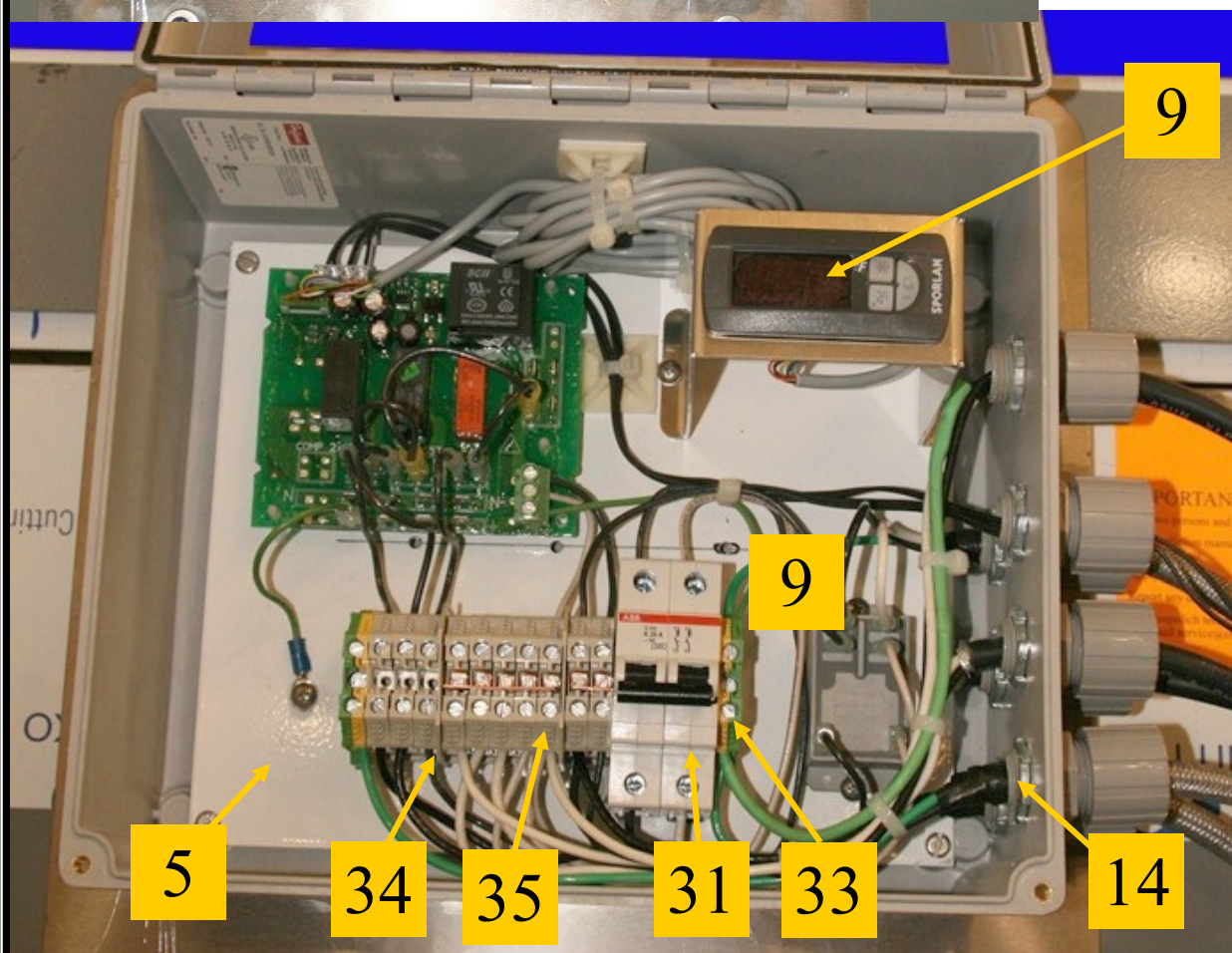


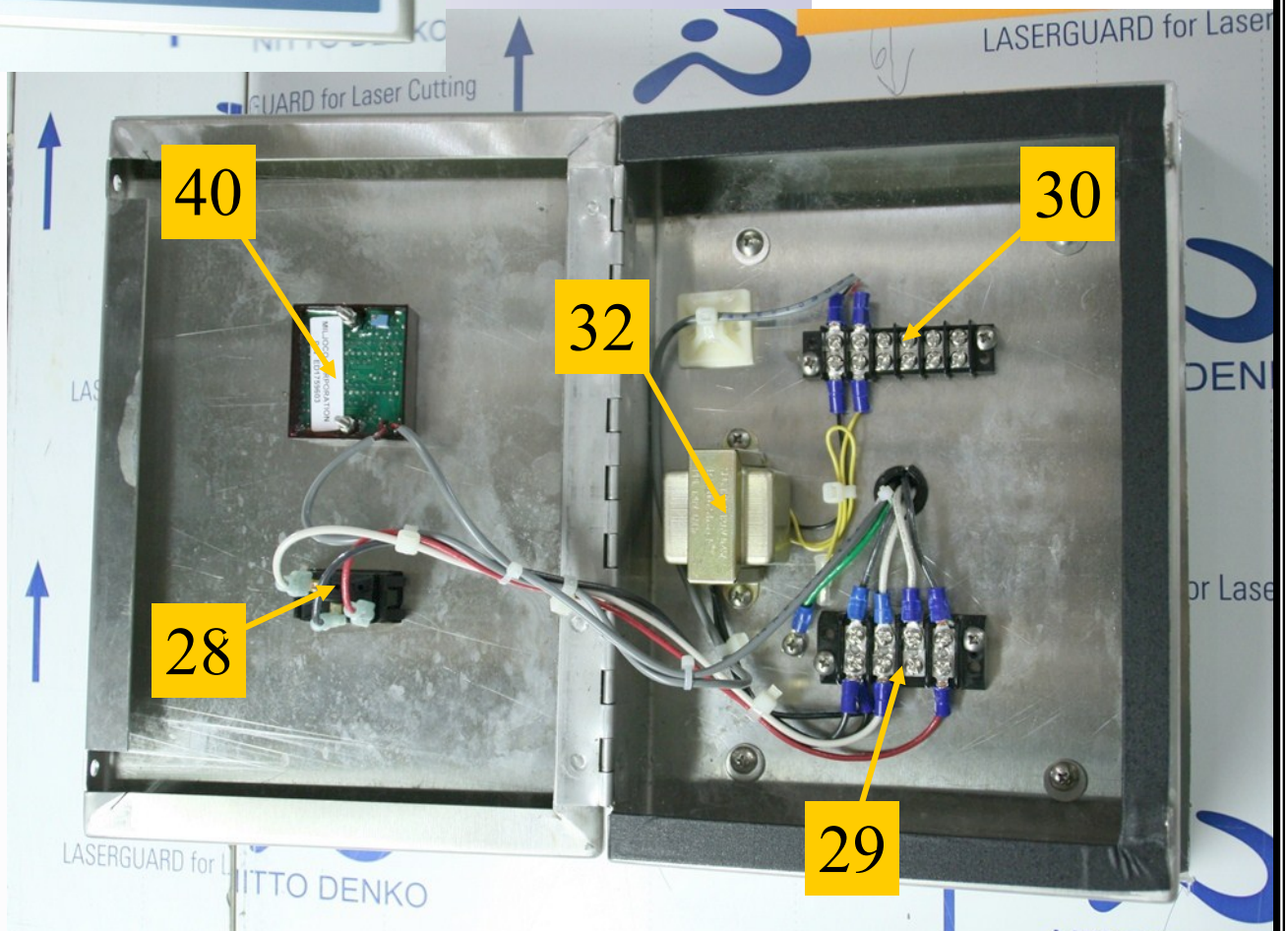
Illustration 6.K

Illustrations 6.L, 6.M— RCTL61 Electronic Control Panel (10)

Illustration 6.L



Illustration 6.M



Illustrations 6.N, 6.O – Power Interrupt Switch Detail Panel (18)



Illustration 6.N



Illustration 6.O

Illustrations 6.P, 6.Q— Door Frame, & Vinyl Curtain Detail

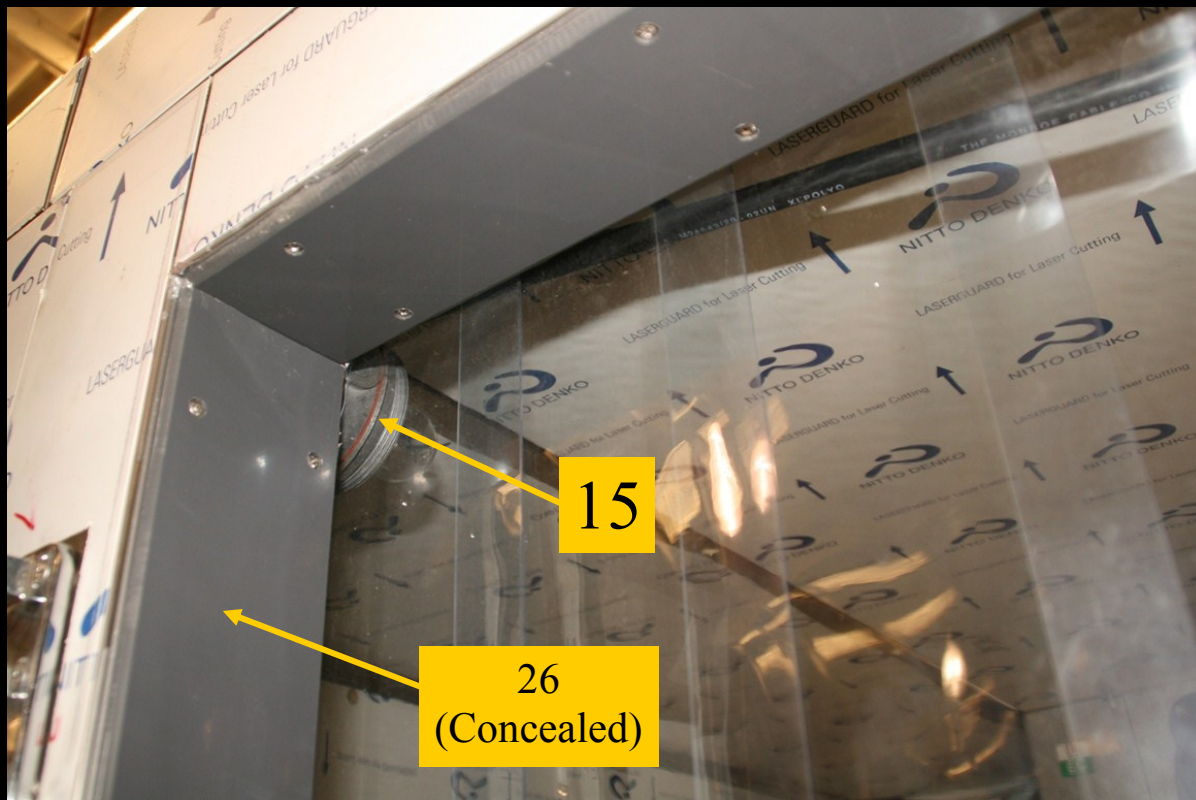


Illustration 6.P

Illustration 6.Q



Illustrations 6.R, 6.S – Door Detail



Illustration 6.R



Illustration 6.S

Chapter 7—Installation

7.1 *Installation*

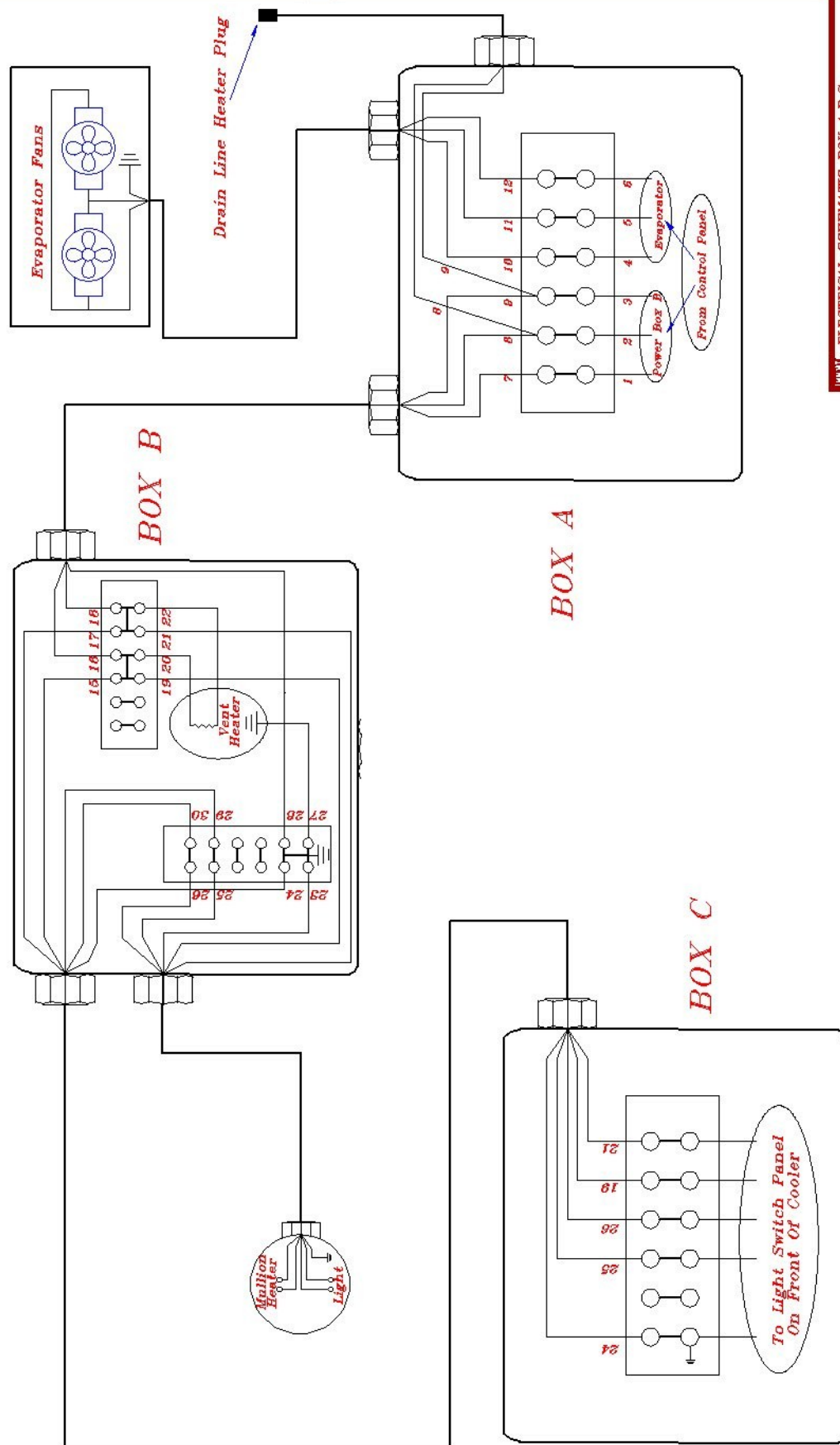
Any questions/inquiries regarding settings or parts installation can be referred to the Cospolich Installation and Technical Assistance staff at (985) 725-0222.

Chapter 8—Electrical and Mechanical

8.1 Introduction

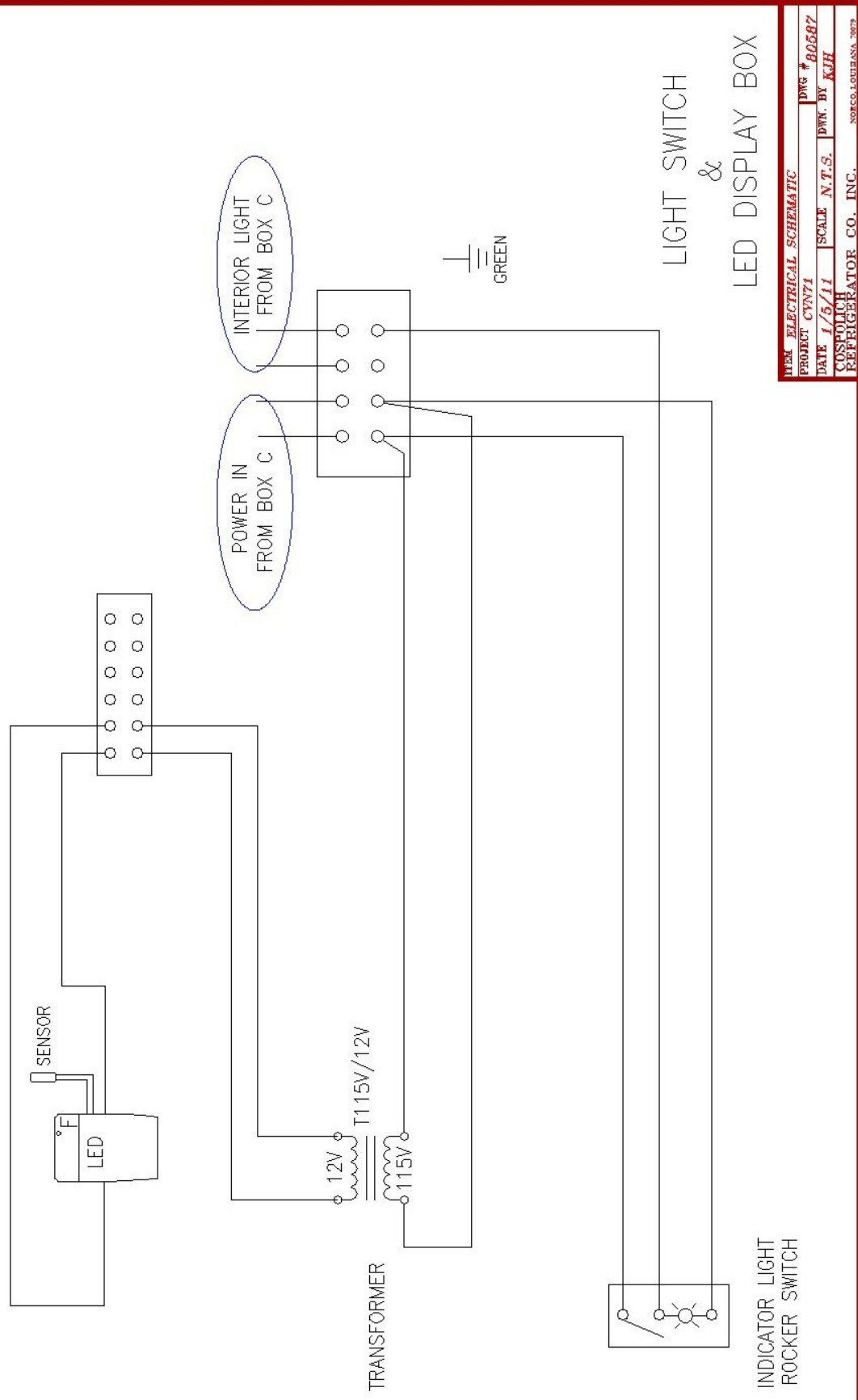
This section of the manual contains drawings and schematics of the electrical and piping systems.

Illustration 8.A—Electrical Schematic, Boxes A, B, C



ITEM ELECTRICAL SCHEMATIC BOX A,B,C
 PROJECT CYN71 DWG # 80583
 DATE 1/11/11 SCALE N.T.S. DWN. BY KJH
 COSPOLICH
 REFRIGERATOR CO. INC. NORCO, LOUISIANA 70679

Illustration 8.B—Main Front Control Panel (Lights & Thermometer)



ITEM ELECTRICAL SCHEMATIC				DWG #	80587
PROJECT CYN71				DWN BY	KJH
DATE 1/5/11				SCALE	N.T.S.
COSPOLICH REFRIGERATOR CO., INC.				NORCO, LOUISIANA, 70753	

Illustration 8.C—Electrical Schematic, Electronic Controls

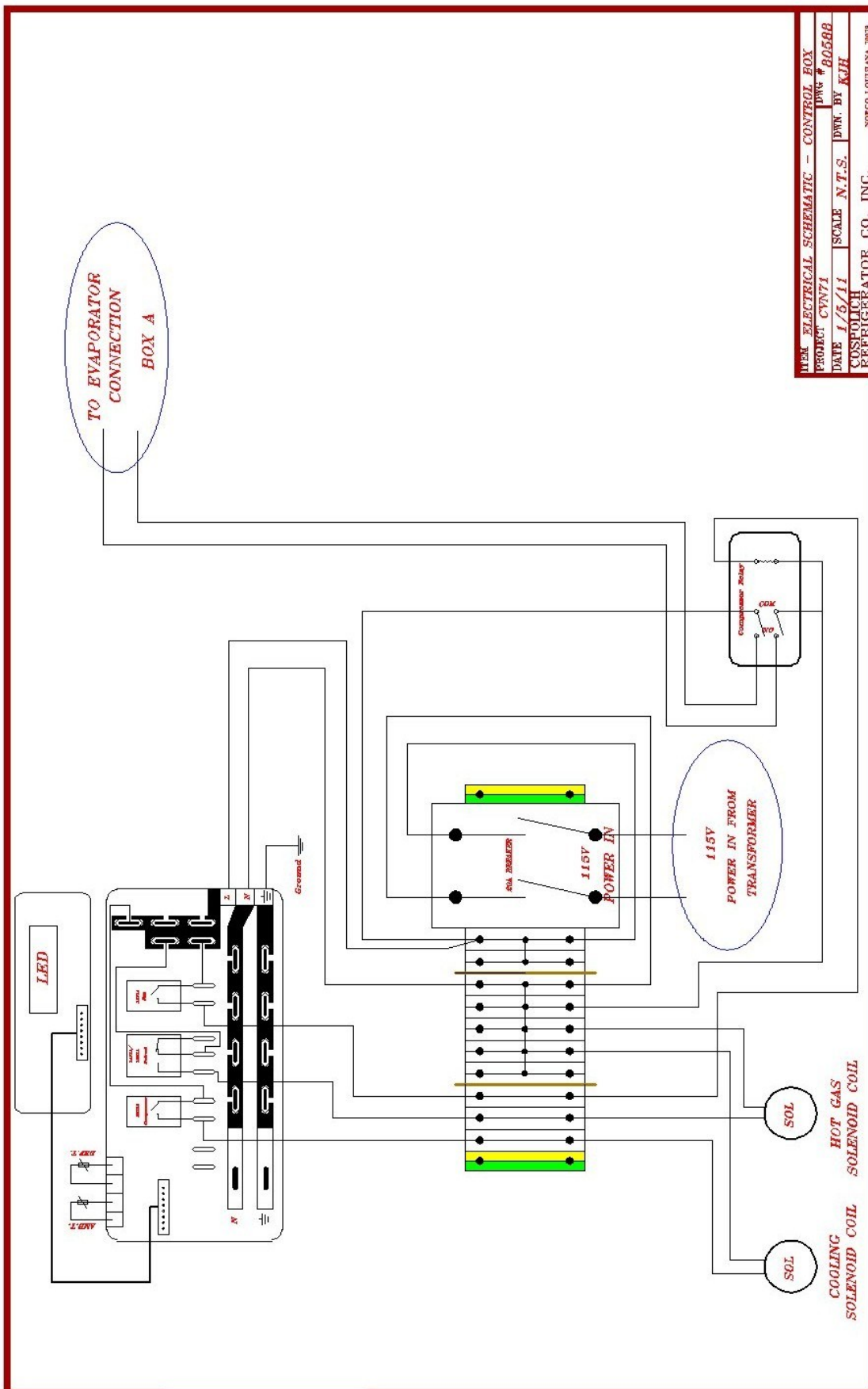


Illustration 8.E – Electrical Schematic, Refrigerator

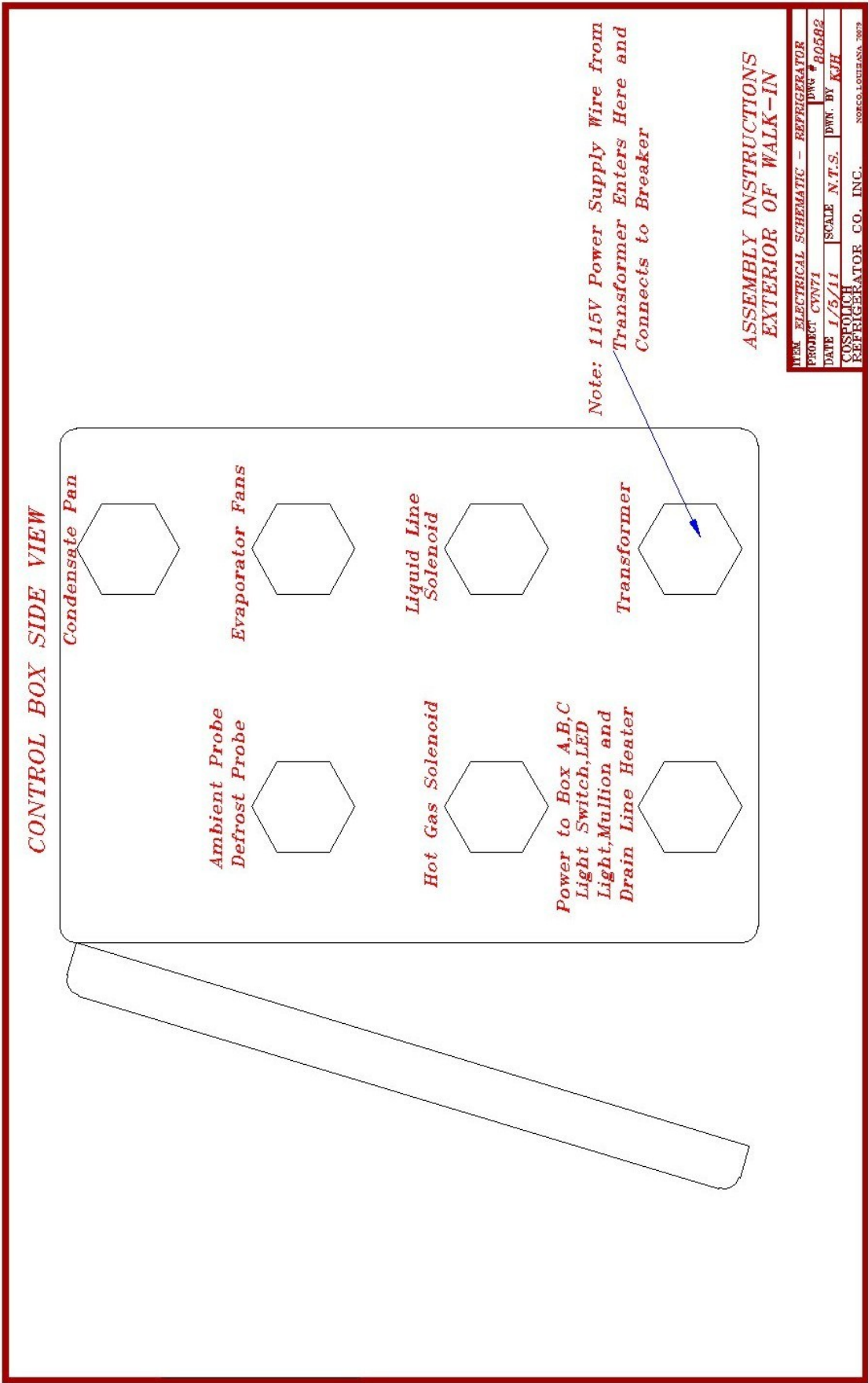
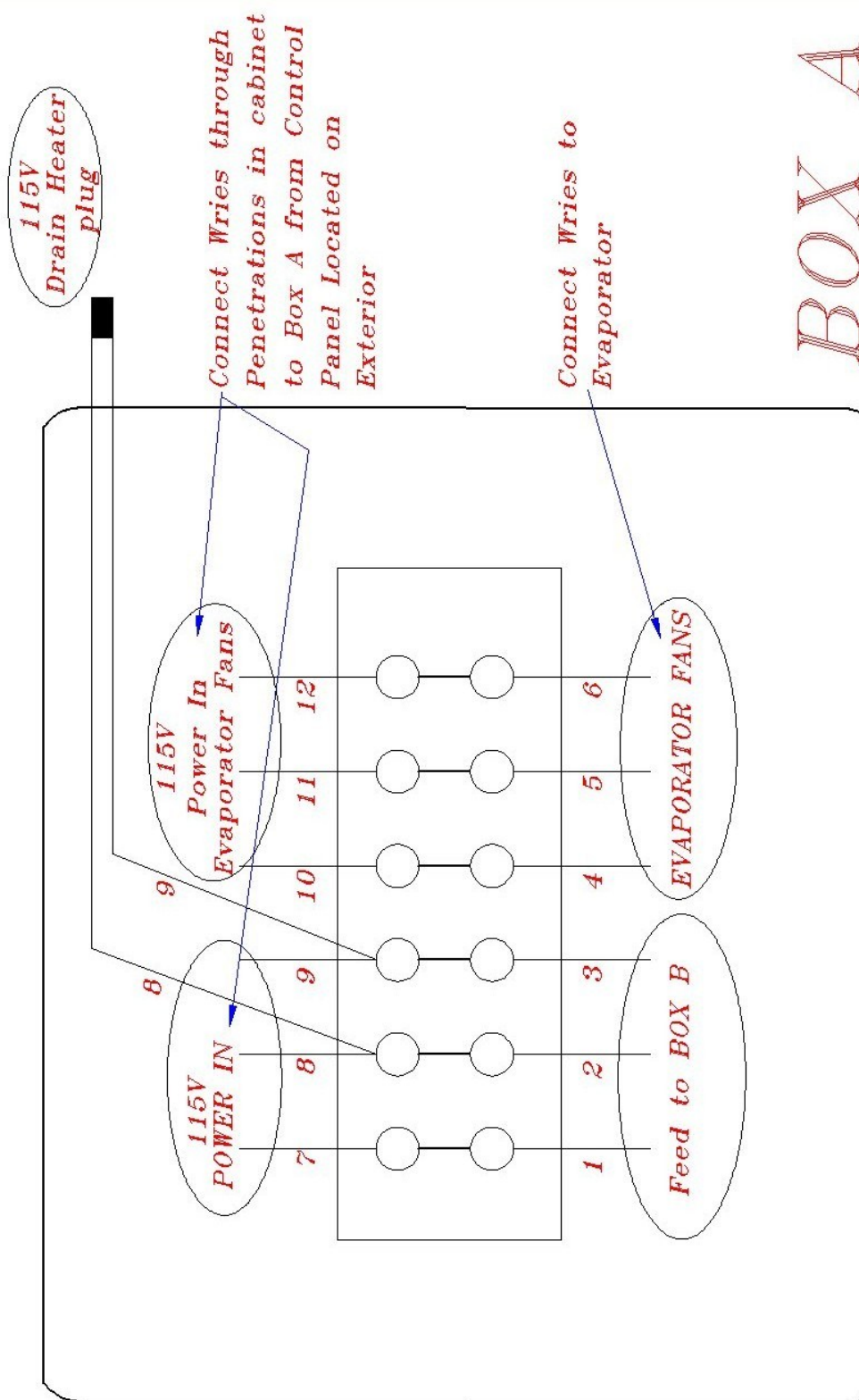


Illustration 8.F—Electrical Schematic, Box “A”

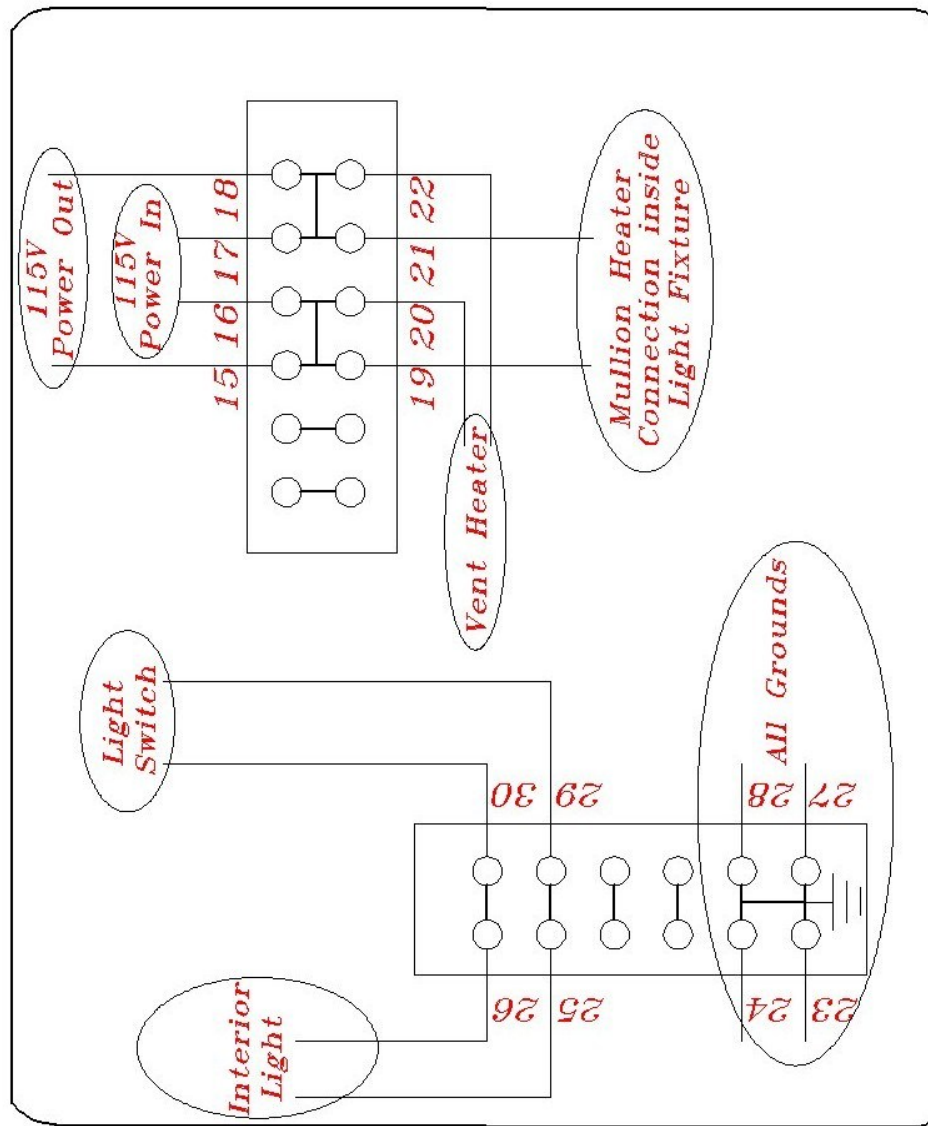


BOX A

BOX A (LOCATION; Interior Back Wall Next to Evaporator)

MEN ELECTRICAL SCHEMATIC - REFRIGERATOR
 PROJECT CYN 71 DWG #80584
 DATE 1/6/11 SCALE N.T.S. DWN. BY KJH
 COSPOLICH REFRIGERATOR CO., INC. NORCO, LOUISIANA 70373

Illustration 8.G – Electrical Schematic, Box “B”



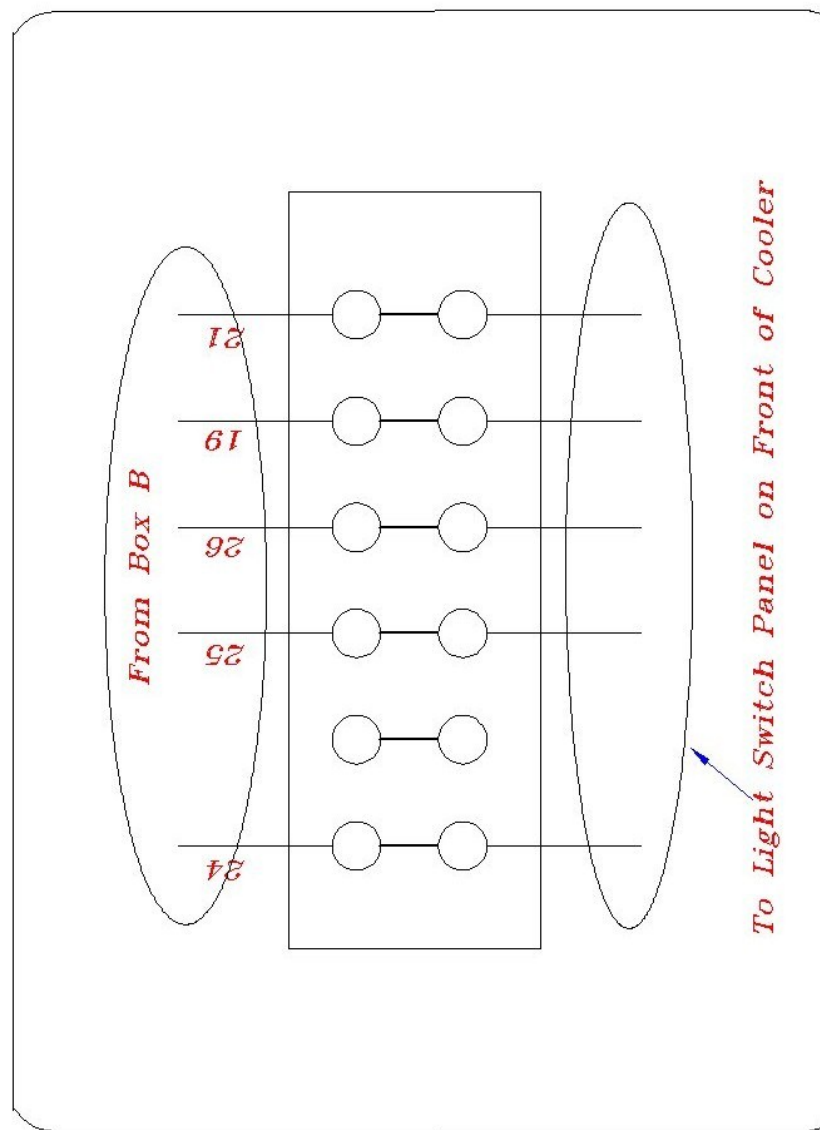
BOX B

REF. ELECTRICAL SCHEMATIC - REFRIGERATOR
 PROJECT CVN71 DWG #80585
 DATE 1/8/11 SCALE N.T.S. DWN. BY KJH
 COSPOUCH REFRIGERATOR CO., INC. NORCO, LOUISIANA 70757

BOX B (LOCATION; Interior Wall Next to Light)

Illustration 8.H—Electrical Schematic, Box “C”

JUNCTION BOX C



BOX C

HEX ELECTRICAL SCHEMATIC BOX C	DWG # 80588
PROJECT CYN71	DWN. BY KJH
DATE 1/1/11	SCALE N.T.S.
CUSTOMER	REFRIGERATOR CO. INC.
NORCO, LOUISIANA 70079	

Chapter 9—Limited Warranty

Cospolich Inc. warrants their cabinets to consumers against defects in material or workmanship under normal use and service for a period of one year from the date of the shipment. We will repair or replace at our option, any part, assembly or portion thereof which Cospolich's examination discloses to be defective. Cospolich will pay the labor costs for the repair up to twelve (12) months from date of shipment.

In instances where the purchaser is not the owner in possession and the acceptance of Cospolich equipment is closely tied to the completion and delivery of the project, our warranty will begin on the acceptance date and will extend for one year.

Terms

Exclusions

Cospolich's obligations under this warranty shall not extend to any malfunction or other problem caused by unreasonable use, such as but not limited to, improper setting of controls, improper installation, improper voltage supply, loose electrical connections or blown fuses, and damage not attributable to a defect in workmanship. This warranty shall not apply to any cabinet or component part that has been suspect to any accident, alteration, abuse, misuse to any damage caused in fire, flood, or other acts of God and to any product that has been serviced by an unauthorized service person or company.

To secure Warranty Service

If you claim a defect under this warranty, direct your claim to whom you purchased the product, giving model, serial and code numbers with a description of the problem. Telephone calls should be directed to the service department at (800) 423-7761 or (985)725-0222 with fax request going to (985) 725-1564.

If the above procedure fails to satisfy your claim, you may write directly to the following address including the above identifying information.

**DIRECTOR of CUSTOMER RELATIONS
COSPOLICH INC.
P.O. BOX 1206
DESTREHAN, LA 70047**

There is not other express warranty on the Cospolich units except the terms stated herein. Any implied warrants of fitness and merchantability are limited in duration to the duration of this Warranty. The liabilities of Cospolich are limited solely and exclusively to replacement as stated herein and do not include any liability for any incidental, consequential or other damages of any kind whatsoever, whether any claim is based upon theories of contract negligence or tort. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitations of incidental or consequential damages. So the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Appendix I—RUW210 Condensing Unit Product Specs

RUW210

CJAL-0200-TAD-001

HFC, R-404A, 60Hz, 3- Phase, 460 V

Copeland
brand products

Availability : Standard US Wholesaler

Mechanical

Unit Height (in):	19.1
Unit Length (in):	33.4
Unit Width (in):	20.0
Ship Weight (lbs):	298.0
Condensor Type:	Air
Copevap Water Storage:	NA
Liquid Connection Size (in)/Type:	1/2 F
Suction Connection Size (in)/Type:	7/8 S
Discharge Line Size (in):	0.500
Water Inlet (in):	
Water Outlet (in):	
Oil Type:	POE
Oil Recharge Amount (oz):	60

Electrical

Max Fuse Size:	15
Min Circuit Ampacity:	6.1
Compressor:	EAVA-021E-TAD-100
Compressor LRA - Low:	
Compressor LRA - High:	26.6
Compressor LRA - Half winding:	
Compressor RLA:	3.9
UL:	Listed
UL File #:	SA633
UL Guide Card:	LZFE
UL Fan Motor FLA Rating Per Motor:	0.9
Fan Motor Quantity:	1

Air Cooled Unit Performance

Release Date:	27-Feb-2001	Return Gas Temp. (°F):	65
Compressor:	EAVA-021E-TAD-100 x 1	Subcooling (°F):	5
Performance No:	3391	Air Flow Rate (CFM)	1510

90°F Ambient Air Temperature

Evap Temp (°F)	Unit Capacity (Btu/hr)	Cond. Temp. (°F)	Temp. Diff. (°F)	EER (Btu/Wh):
-20	8,340	108.1	18.1	4.0
-15	9,630	110.2	20.2	4.3
-10	11,000	112.4	22.4	4.5
-5	12,410	114.7	24.7	4.7
0	13,750	117.4	27.4	4.9
-40	4,180	101.5	11.5	2.8
-35	5,020	102.9	12.9	3.1
-30	6,010	104.4	14.4	3.4
-25	7,120	106.2	16.2	3.7

Appendix II—Revision History

[illegible]