

INSTALLATION MANUAL

For

ARCTIC SAFE MARINE COLD STORAGE SPACE

Shipboard Cooler Space 7'w x 8' 6"d

***Cospolich Inc.
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Table of Contents

Installation Manual Preparing the Deck Fastening System Installation of the Floor Panels Installation of Wall Sections and Ceiling Sealing the Panels	3 - 6
Equipment Description	7
Operation Table 1 – Controls and Indicators Table 2 – Start up Procedure Table 3 – Start up Procedure (Refrigerated Storage) Table 4 – Shut Down Procedure Table 5 – Shut Down Procedure for an Extended Period Table 6 -- Troubleshooting	8 - 12
Scheduled Maintenance A. Monthly Inspection B. Annual Maintenance Table 7 – Preventative Maintenance Action Index Table 8 -- Cleaning	13 - 17
Parts List -- Table 9	18 - 19
Parts Diagrams Diagram 1 – Parts 17 Diagram 2 – Parts 6, 7, 14, 39, 48, 49 Diagram 3 – Parts 4, 15, 16, 20, 21, 22, 25, 26, 29, 30, 38, 44 Diagram 4 – Parts 6, 7, 14, 39, 48, 49 Diagram 5, Diagram 6 Diagram 7, Diagram 8	20 - 25
System Operating Particulars -- Table 10	26
Drawings List -- Table 11	27
Drawings A. Mechanical Piping B. Electrical Schematic C. Wiring Schematic D. Electrical schematic E. Cabinet F. Shelving G. Floor Grading Layout	27 - 34

INSTALLATION MANUAL

Equipment: Arctic Safe Marine Cold Storage Space

Foreword: The Cospolich Arctic Safe Cold Storage Room is engineered and built for the specific requirements of the marine environment. In its design special consideration has been given to compensate for and accommodate the vibrations, movements and rough duty which is normal in this application.

It was also important in the design that the Arctic Safe has the capability of being disassembled in the future with the ability of being reassembled.

Materials Furnished:

- ⇒ Silicone Caulking (Aluminum and clear)
- ⇒ Fastener Cap Screws
- ⇒ Cam Wrench (5/16")
- ⇒ Vinyl Caps (Gray)
- ⇒ Caulking Gun

Note: Caulking should be kept at between 75 to 90 degrees so that they can be more easily applied.

Panels Furnished:

- ⇒ Wall
- ⇒ Corner
- ⇒ Tee (in cooler/freezer applications)
- ⇒ Door Section
- ⇒ Floor
- ⇒ Ceiling

A. Preparing the Deck

1. Prior to installation, the deck must be inspected and determined free of obstructions. Even though the Arctic Safe can accommodate moderately untrue decks, those with excessive irregularities should be adjusted by either floating true or shimming.

Note: When installing the floor, it is necessary to begin at the highest point on the floor. This allows you to shim as required during installation.

B. Fastening System

Note: One important aspect of the design of the Arctic Safe System is the panel fasteners. These fasteners have individual locking capacities of 2,000 pounds.

1. A 5/16" hex wrench, which is provided with the installation tools, operates the panel fastener locks. Inserting the tool and turning the wrench in a clockwise direction will draw in and lock panel fastener. Should the lock not engage the pin, reset by first rotating in the counterclockwise direction until the cam tongue is fully extended. Then, repeat the clockwise rotation.
2. With the panels in place, you may now remove the protective plastic coating. Simply peel from the stainless.

C. Installation of the Floor Panels

1. All floor panels are identified by letters (Example F1) which relate to those on the installation drawing.
2. The first floor end panel should be placed into position. Apply the clear silicone sealer as described under "*Panel Sealing*".
3. Place the second panel into place and secure together with the panel fasteners. Follow the same process with the remaining panels.

D. Installation of Wall Sections and Ceiling

Reminder: It is necessary on each section to place a continuous bead of the clear silicone sealer.

1. Place the first panel in the appropriate position and then place the adjacent wall panel next to it. Fully lock only the center vertical panel fastener and only one of each panel fastener to the floor.

Make certain that the panels are aligned and even at the top and bottom. As little as 1/16" difference in height can create difficulty with follow up panels.

2. Proceed by placing wall sections in the assembly order marked on the panel, locking the middle panel fastener only and hooking only the top and bottom panel fasteners. Lay the first ceiling into place but do not lock it. Depending on how tight the working quarters are, sections of the ceiling may need to be assembled prior to completely installing the vertical wall sections.

Note: Special attention should be given to the door section to make certain that it is in proper alignment.

3. Once all panels have been installed and the unit is deemed to be in proper alignment, it is then necessary to proceed with locking all the panel fasteners.

E. Sealing the Panels

1. A seven step procedure has been developed in order to insure that the wall and ceiling panels are airtight and do not leak.

1st Step: Panel Rail – Place a continuous bead of the silicone in the groove of the female portion of the panel rail. When you come upon a camlock strike, continue around then come back and place a bead on the other side. This extra step isolates the mechanism from moisture.

Note: It is not necessary to have a bead of silicone greater than 1/4”.

2nd Step: Panel Flanges – Place a similar bead of silicone on the one inch metal flange.

3rd Step: Protective Plastic – With the panels in place, you should now remove the PVC plastic which protects the stainless steel surfaces. This is accomplished by simply peeling it from the stainless.

Note: Never use any type of scraper or tool to remove plastic coating as it may scratch the surface.

4th Step: Panels Seams (Optional) – For reasons of cosmetics, you may wish to apply the aluminum colored silicone to the finished panel seam. This is left to the installer’s discretion.

5th Step: Access Holes – Into each panel fastener wrench access, fill with the silicone. This insures that the mechanism will remain dry.

6th Step: Fastener Cap Screws – Neoprene gasketed cap screws are provided to seal the floor fastener access openings. Using a large blade standard screwdriver, install a fastener in each floor camlock hole.

7th Step: Vinyl Caps – Vinyl caps are provided for the walls and ceiling. In most instances you can apply by only pressing into place with your thumb. If required, a hammer may be used to tap the cap into place.

Equipment Description

The unit consists of the following parts:

A. Storage compartment –

The insulated food storage compartment is clear storage area. Included in this area are the adjustable shelves, an interior light (for refrigerators), and the cooling coil.

B. Doors –

Access to the storage compartment is through a hinge-mounted, insulated door(s). The door is fully “gasketed” to provide a tight seal.

C. Condensing Unit Compartment –

This area contains the condensing unit(s) along with the necessary controls and other components.

D. Evaporator Coil –

The evaporator coil is located in the storage compartment and is responsible for distributing the cold air associated with the refrigeration system.

E. Cabinet –

The cabinet is the enclosure in which all of the above mentioned items are housed.

Operation

Introduction

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

Design

Cooling is provided by two independent refrigeration systems each capable of providing 100% of the required capacity. During normal operation the systems will alternate run time. Each system operates for 84 hours before switching over to the other.

Diagnostics

Should either of the systems experience a failure the service prompt will display on the control panel indicating the system affected. The other system can then be placed on line. Additionally, a high temp alarm will prompt when the space temperature is not within the safe operating range.

Table 1 – Controls and Indicators
(see Figure 1 on page 10)

<u>Name</u>	<u>Type</u>	<u>Function</u>
High Pressure Switch	Contact Points	Safety Switch (automatic)
Low Pressure Switch	Contact Points	Safety Switch (automatic)
Suction Valve	Manual Plunger Valve	Isolate suction at the compressor
Discharge Valve	Manual Plunger Valve	Isolate discharge line at receiver
Power Control Switch (On/Off)	Contact Points	Terminates all of the electrical into and past the supply cord
Light Switch	Manual Rocker Type	Activates the interior lighting
Thermostat	Contact Points	Cycles the refrigerator system (automatic)
Defrost Timer ¹	Contact Points	Controls scheduled evaporator coil defrosting
Solenoid Valve ¹	Automatic Plunger	Shuts off refrigerant flow
Discharge Pressure Gauge	Analog Indicator	Provide high pressure reading
Suction Pressure Gauge	Analog Indicator	Provide low pressure reading
Hand Valve	Globe Valve	Isolates control(s)
Water Valve	Automatic Plunger	Controls head pressure
Sight Glass	Liquid indicator	Provides visual level of refrigerant
Running lights	-----	Appropriate system is on line
Service Lights	-----	System is experiencing a failure and requires Service
High Temp Alarm	-----	The temperature inside of the refrigerated space has risen past the safe zone.
Pressure Gauges	-----	There are both suction & discharge pressure gauges on each system.
¹ Freezers		

Figure 1:



Table 2 – Start-up Procedure

Step 1	Open the control panel
Step 2	Place the center selector switch to the “AUTO” position
Step 3	Locate the power switch on the left side of the enclosure and flip it up. This will energize the system and bring one of the units on line

Table 3 – Start-up Procedure (Refrigerated Storage)

<u>Operation</u>	<u>Results</u>
1. Connect refrigeration to cabinet and power to refrigeration. Turn on power.	Compressor(s) should immediately come on line along with the condenser fan(s) and the evaporator fan(s).
2. Locate liquid refrigerant indication glass mounted on the receiver.	Once the system has been operating for two minutes, the glass should appear clear and full of liquid refrigerant.
3. Wait 15 minutes	The temperature in the storage area should begin to approach the "green zone" on the thermometer indicating adequate operation.
4. Wait 3 hours	Once the operating temperature has been reached, stocking of the containment area can begin.

Table 4 – Shut Down Procedure

<u>Operation</u>	<u>Results</u>
Fully close discharge valve at the receiver	Compressor will pump liquid refrigerant from system to receiver
Fully close suction valve at the compressor	This will isolate the refrigerant between the two valves
3. Disconnect power supply	De-energizes the system
Clean and wipe dry the food storage compartment	This will reduce the odor buildup during shut down

NOTE: To shut down, disconnect the electrical and open the door(s) allowing the interior cabinet temperature to equalize with the room temperature. A mild detergent diluted in warm water should be used to wash down the interior and exterior surfaces of the cabinet.

Should you wish to clean the sub-floor begin by removing the floor grating. A drawing is provided to place each panel back in the original position.

WARNING:

Prior to any cleaning of the system involving placing hands in areas with moving parts, the system should be deactivated by disconnecting from power.

Preparation for an Extended Period of Inactivity

This unit is designed for continued use at automatically cycled intervals. However, in the event of an extended shut down, both the mechanical refrigeration system and the food storage compartment system must be serviced.

Table 5 – Shut Down Procedure for an Extended Period

<u>Operation</u>	<u>Results</u>
De-energize the system.	Once the system is de-energized, the condenser fan and the evaporator fan will cease operation.

Table 6 – Troubleshooting

Service Light	This indicates that there is an open control in the system.
High Temp Alarm	When the temperature alarm is activates this is an indication that there is a rise in temperature with the system on line at the time. Go to the system selector switch and move it to whichever unit is on stand-by. It will be necessary to troubleshoot the failed system.

Technical support:

Should you require technical assistance, you may contact Cospolich Inc. at 985/725-0222 or 800/423-7761. You may also fax at 985/725-1564, or email service@cospolich.com. Hours 6:30 am – 5:30 pm CST.

Scheduled Maintenance

Introduction

To ensure the longest and most trouble free operation of the unit, a thorough maintenance schedule is required to be adhered to periodically. The maintenance system should be designed to maximize the efficient use of maintenance personnel, reduce down time, and provide the orderly acquisition of spare parts support.

The Cospolich refrigeration cabinet will generally be in operation in a facility where scheduled maintenance is performed according to Maintenance Index Plans. Your unit is no exception to required maintenance. This chapter of the manual is intended as an alternative to any standard maintenance program that may pre-exist. The preventive maintenance schedule is based upon similar maintenance requirements for commercial refrigeration equipment.

Preventive Maintenance Action Index

If you do not have a Maintenance Index Plan, one is included for you in Table 5.

Preparation Maintenance

Since many areas affected by the maintenance schedule are electrically supplied, it is recommended that the system be de-energized prior to making the inspections.

Monthly Inspection

- A. Check the evaporator drain line(s) 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 of unstopping an obstructed drain is to use compressed air. Approximately 60 lbs. should be sufficient. Simply remove the drain line at the evaporator coil and attach an air-line to it.
- B. With the unit in a cooling cycle, use a flashlight and locate the refrigerant sight glass. If the compressor has been running for three minutes there should be no visible bubbles.
- C. If bubbles are present:
 - i. Determine if there is a leak by using a halide or electronic leak detector.
 - ii. Repair leak(s).

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

1. If a leak is found on a flared fitting, it can often be repaired by simply tightening the brass flare nut $\frac{1}{4}$ of a turn. If tightening does not repair the leak, it may be necessary to reflare the tubing.
 2. If a leak is found on a brazed joint, it will be necessary to pump down the system's refrigerant charge to remedy the problem.
 3. 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 system's valves to avoid contamination. Run the receiver (liquid or high pressure) valve all of 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 5 lbs. When it reaches 5 lbs., de-energize the system.
 4. Once pumped down, the necessary repairs can be made.
- D. 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 exterior.
- E. With the unit de-energized, check the condenser fan motor and make certain that it is not loose. Inspect the fan for cracks and make sure that it is tight on the motor.
- F. To inspect the evaporator motor, first turn the unit off. Then, remove the drain line from the evaporator pan. Loosen the four 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 fan for cracks or excessive play.
- G. Using a mild detergent and water, clean the gasket. Make certain to remove any mildew or residue.
- H. Using a mild, non-abrasive detergent and warm water, wipe the cabinet exterior. When cleaning always follow the grain of the stainless steel to prevent scratching or marring of the finish surface.

Annual Maintenance

- A. 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.
- B. 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.
- C. Visually inspect the outer panel and components of the cabinet. Check screws and bolts to make certain that they are tight. Also, make sure that the bolts that secure the base frame to the deck are tight.

Three-Year Frequency

- A. 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.
- B. Inspect all motors and shafts for both noise and wear. If they show age, replace them.
- C. With the main power off, remove the cover from the controls and check them to make certain that they are operational and do not show signs of wear.
- D. Inspect the operation of the door latch assembly. Look into the latch to make certain that the moving parts do not show any signs of wear. Make sure that the screws are tight on the latch and strike. To check the hinges, open the door at a 90-degree angle to the cabinet. With a little pressure, lift up the outer edge of the door. If there is an upward movement of ½ of an inch or more, replace the hinges.

Table 7 – Preventative Maintenance Action

1. Monthly	<ul style="list-style-type: none"> a. Inspect and clear drain line. b. Check the liquid refrigerant sight glass to make certain that the system is completely charged. c. Clean the interior of the cabinet with a mild soap and warm water solution. Be certain to dry thoroughly. d. Check both the condenser fan motorⁱ and the evaporator fan motor to make certain that they are operational and that the fans are tight and secure (evaporator motor on ADS models and forced air evaporator units only). e. Clean door gaskets and breaker strips with a damp cloth. f. Clean exterior of cabinet with mild soap and warm water. Dry thoroughly.
2. Annually	<ul style="list-style-type: none"> a. Check all joints and fittings for any signs of leaks or fatigue. b. Inspect electrical connections to confirm that there is good contact and that wires are neither weakened nor frayed. c. Check the integrity of the cabinet.
3. Three-year Frequency	<ul style="list-style-type: none"> a. Replace door gasket(s). b. Inspect motor shaftsⁱ for noise or wear. C. Inspect electrical controls and wiring. D. Inspect door latch(es) and hinges.

¹ Applicable on units with condensing unit included.

Table 8 – 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

*Applicable only on cabinets equipped with drawer assemblies.

Table 9 – Parts List

	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	FS126	FLASHER, FULL WAVE	1
2	RWTM04	FAH. THERMOMETER	1
3	2C0484SL-4SU	COMPRESSOR	2
4	2S1F	TRANSFORMER	1
5	3220-350	PRESSURE RELIEF VALVE	2
6	9001KS43B	SWITCH SELECTOR	1
7	DP30C2-P-1	CONTACTOR, 2 POLE, 120V, 20 AMP	4
8	DP30C3-P-1	CONTACTOR, 3 POLE, 120V, 20 AMP	2
9	FSE-1ZP	EXPANSION VALVE	2
10	RWIV13	BALL VALVE—1/2"	6
11	LET120BK	EVAPORATOR COIL, LET120BK, 460V, 1PH	2
12	LFDH02	DRAIN HEATER 115V	2
13	LRSK08	LAMP FIXTURE 1803LG W/ LEXON GLOBE	1
14	OBJY2	BUZZER, 120V; OBJY2	1
15	P2067-10	GAUGE, DISCHARGE PRESSURE, 0-500 PSI	2
16	P2567-05	GAUGE, SUCTION PRESSURE, 0-100 PSI, 2.5", S/S	2
17	RCTL60	LED CONTROL PANEL FOR ARCTIC SAFE	1
18	RWE5708L	EVAPORATOR HEATER LIMIT SWITCH	2
19	RWE5709L	EVAOPRATOR FAN & DEFROST TERM	2
20	RWFD08	FILTER DRYER	2
21	RW1V06	GLOBE VALVE	5
22	RWSC01	SOLENOID COIL; MKC-1 115V	2
23	RWSG02	SIGHT GLASS	2
24	RWSV02	SOLENOID VALVE, ME6S130	2
25	RWVC38	VALVE, CUT-OFF, PACKLESS 214-6S 3/8	3

26	RWVE02	VIBERSOLVER 7/8"	3
27	RWVE05	VIBRATION ABSORBER	2
28	S203-B16	BREAKER, 3 POLE, 16 AMP	2
29	SST75A	CONDENSOR	2
30	V48AB-2C	WATER VALVE, 3 WAY	2
31	402-SA606-3878	VINYL CURTAIN	1
32	64-410	HEATER, DRAIN LINE; 22"/115V	3
33	892-0060-01	HEATER, CRANKCASE, 60	2
34	AH15503	VALVE, PRESSURE RELIEF	2
35	PCCR37	RELAY, RH1B-UL120	3
36	LWSR01	LIGHTED SWITCH, CARLING	1
37	MIL72A-SWUZH-120	SWITCH TIMER; 7 DAY W/ OVERRIDE	2
38	011-1711	CONTROL, HIGH PRESSURE, W/36"	2
39	PCCC55	BREAKER, 15 AMP, 2 POLE; DIN RAIL	1
40	PCCR36	RELAY, RH2B-UL120	1
41	RWQF0068	QUICK CONNECT; 5500—6-8 3/8"	2
42	RWQF1412	QUICK CONNECT; 5500—14—12 7/8"	2
43	PSW11	BULB FOR APD199N-120V SWITCH	6
44	RWPL01	LOW PRESSURE CONTROL 1402	2
45	RWTD02	DELAY, TIME; 1 HR, TDUH3001A	1
46	RWTT01	TSTAT T6054A	2
47	RWDT01	DEFROST TIMER, 115V	2
48	PCTD01	TIME DELAY RELAY 3239	2

Diagram 1



Diagram 2



Diagram 3

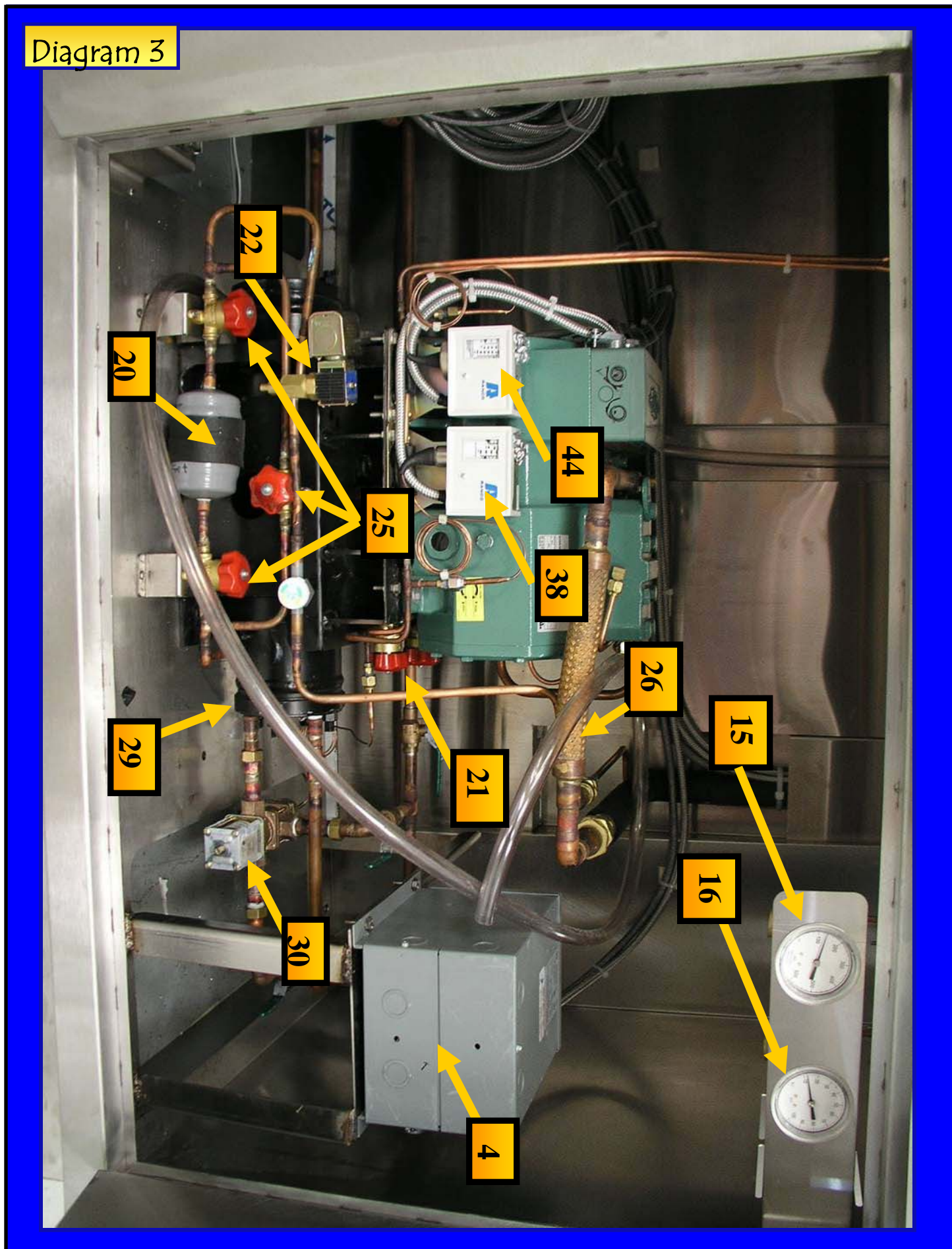


Diagram 4 — Shelving





Diagram 5 — Lamp Fixture (13)



Diagram 6 — Hinge

Diagram 7 — Latch



Diagram 8— Vinyl Curtain (31)

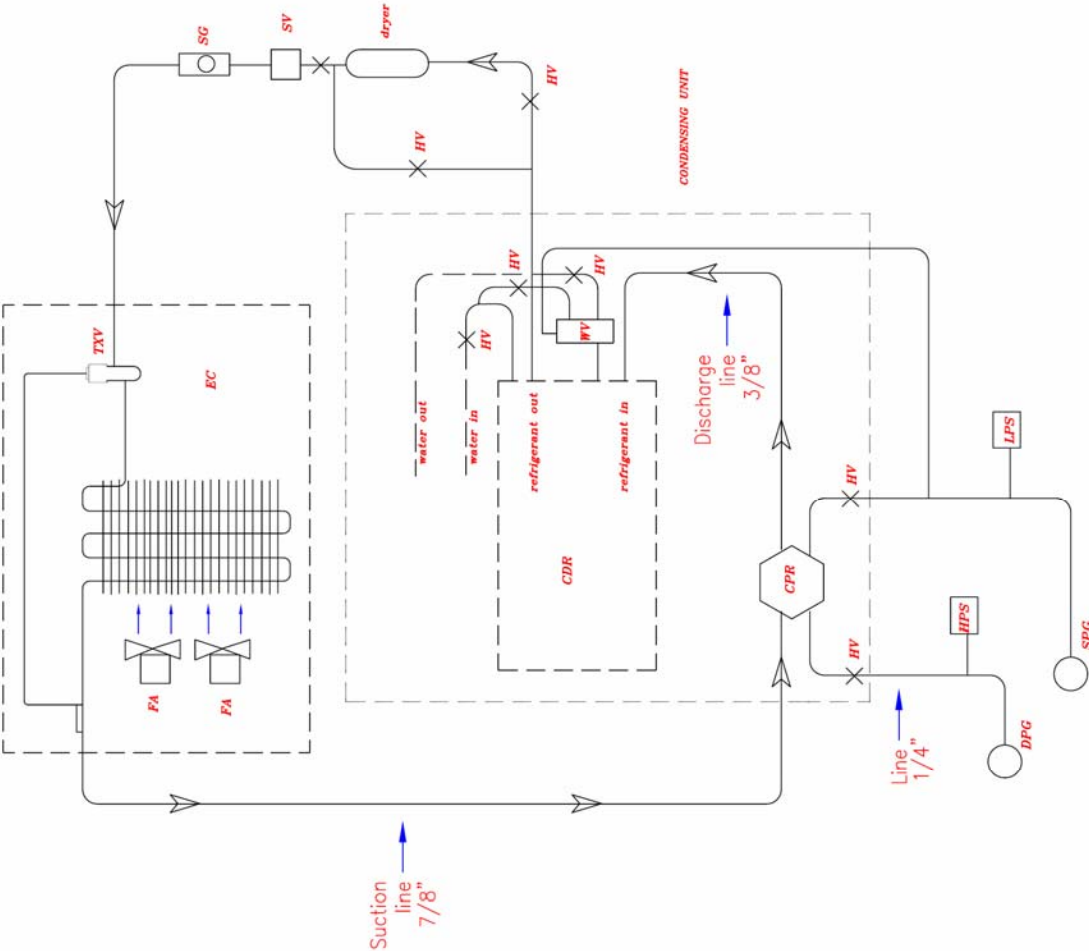


Table 10 – System Operating Particulars

COMPRESSOR START UP AMPS	2.0
COMPRESSOR RLA	1.9
EVAPORATOR FANS RLA	.74
DEFROST HEATERS AMPS	2.0
CRANKCASE HEATERS AMPS	.41
DRAIN LINE HEATER AMPS	.23
DOOR MULLION HEATER AMPS	.67
VENT FAN AMPS	.35
LIGHTING AMPS	.56
SUCTION PRESSURE	50 PSI AT 38 F
DISCHARGE PRESSURE	280 PSI
WATER TEMPTURE IN	79 F
WATER TEMPTURE OUT	91 F
CABINET TEMPERATURE	34 F - 40 F
SUPERHEAT	15 — 20
HIGH TEMPTURE ALARM SETTING	50 F
HIGH TEMPTURE ALARM DELAY TIME SETTING	1 hour
LOW PRESSURE SWITCH SETTING	2—15 PSI
HIGH PRESSURE SWITCH SETTING	375 PSI
WATER VALVE PRESSURE SETTING	280 PSI
COMPRESSOR DELAY SETTINGS	15 SECONDS

Table 11– Drawings List

	<u>Drawing Name</u>	<u>Drawing Number</u>
A	MECHANICAL PIPING DRAWING	70349
B	ELECTRICAL SCHEMATIC HI-VOLTAGE	80368A
C	ELECTRICAL SCHEMATIC LO-VOLTAGE	80370A
D	ELECTRICAL SCHEMATIC CONTROL CIRCUIT	80369
E	CABINET DRAWING COOLER	91440
F	SHELVING DRAWING	91440-4
G	GRATING LAYOUT	91440-5



ABBREVIATION	DESCRIPTION
CPR	COMPRESSOR
SG	SIGHT GLASS
FD	FILTER DRYER
HPS	HIGH PRESSURE CONTROL
LPS	LOW PRESSURE CONTROL
CDR	WATER COOLED CONDENSER
WV	WATER VALVE
SPG	SUCTION PRESSURE GAUGE
DPG	DISCHARGE PRESSURE GAUGE
HV	HAND VALVE
EC	EVAPORATOR COIL
TXV	EXPANSION VALVE
SV	SOLENOID VALVE
FA	FAN ASSEMBLY

MODEL .

ITEM REFRIGERATION MECHANICAL PIPING

PROJECT GILL/STENNIS

DATE 02/03/05

SCALE N.T.S.

DWG # 70349

DWN. BY CW

COSPOLICH

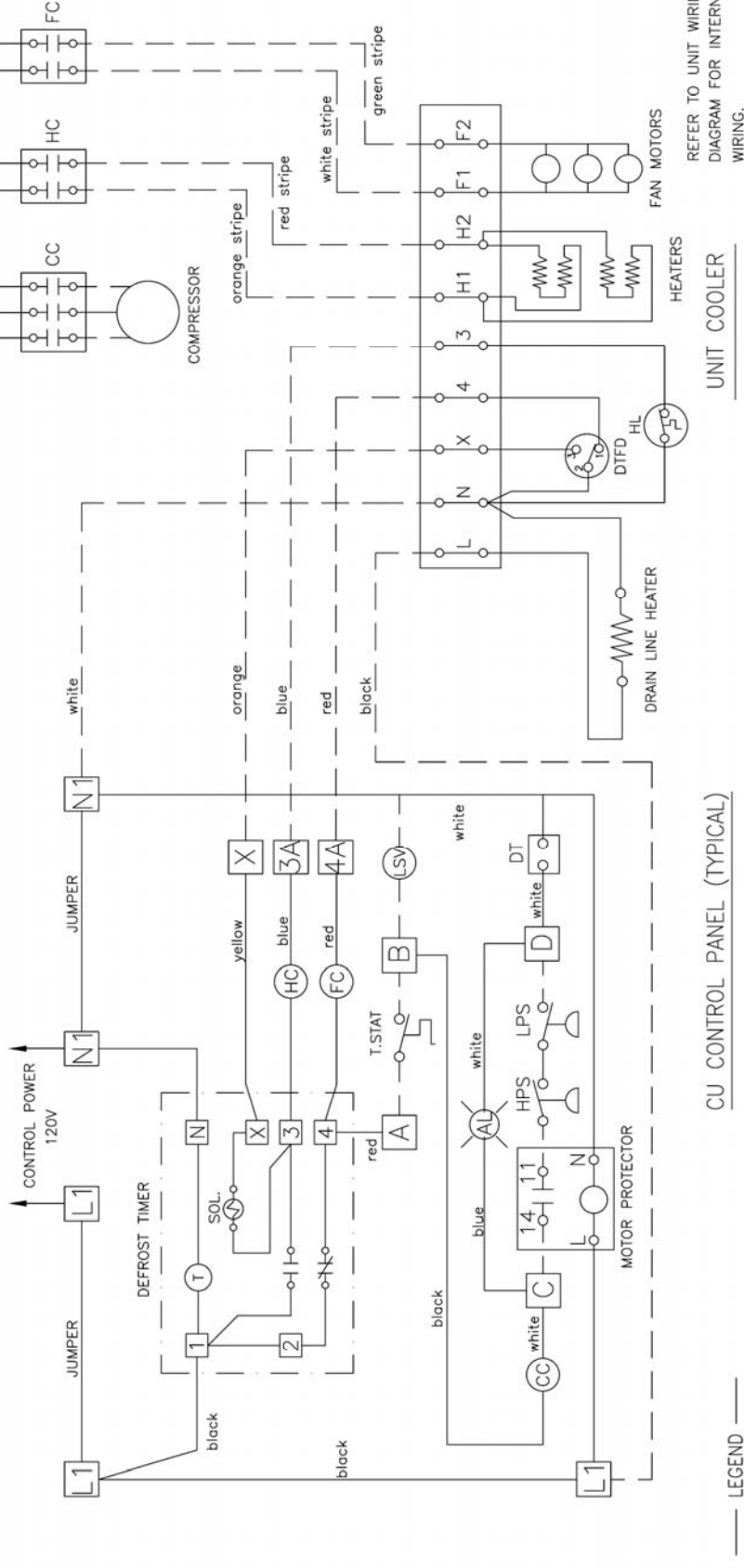
NORCO, LOUISIANA

B

TERMINAL BLOCK

L1	N1	A	B	C	D	3A	4A	X
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•

TO SHEET E-3 (LEAD/LAG CONTROL CIRCUIT)



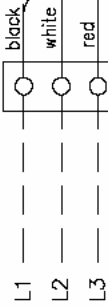
SHEET: E-2

ITEM	ELECTRICAL SCHEMATIC - FREEZER
PROJECT	USS STENNIS
DATE	11-19-04
SCALE	N.T.S.
DWN. BY	JV
COSPOLICH INC.	
NORCO, LA.	

HIGH VOLTAGE

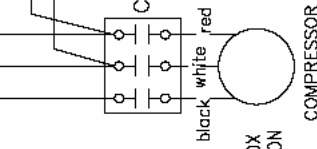


POWER SUPPLY
460V/3PH/60Hz



CIRCUIT #1

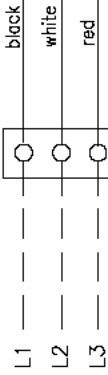
CIRCUIT BREAKER
15A



SEE COMPRESSOR ELECTRIC BOX
COVER FOR PROPER CONNECTION

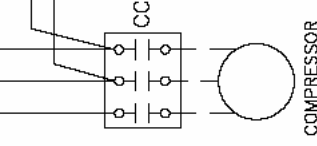
UNIT #1

POWER SUPPLY
460V/3PH/60Hz

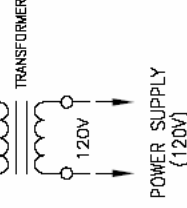
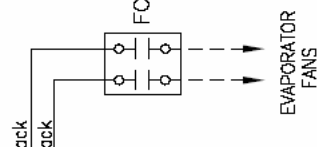


CIRCUIT #2

CIRCUIT BREAKER
15A



UNIT #2



LEGEND:

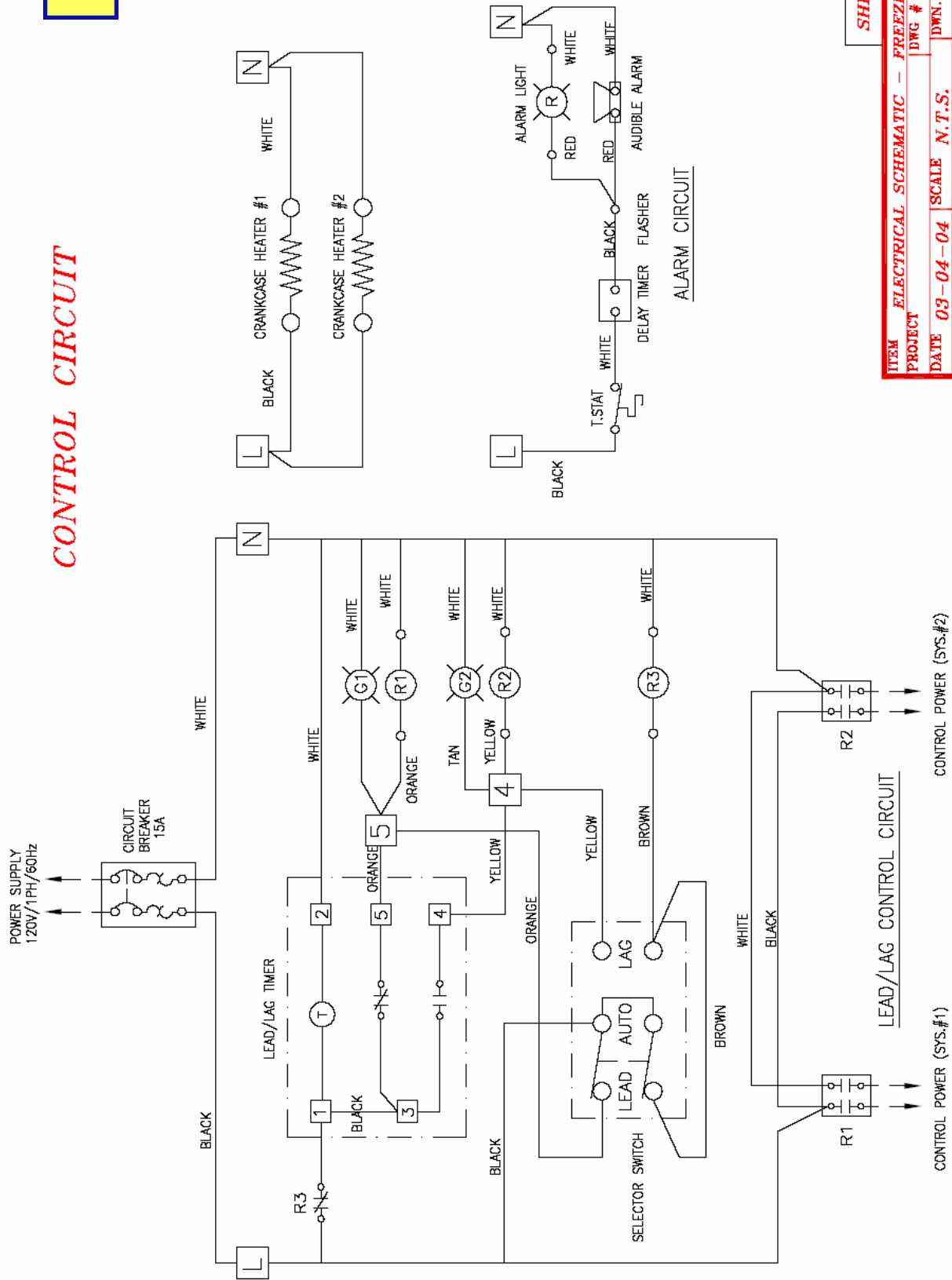
- CC----- COMPRESSOR CONTACTOR
- HC----- HEATER CONTACTOR
- FC----- FAN CONTACTOR
- F ----- FUSE

SHEET: E-1

ITEM	WIRING SCHEMATIC-POWER CIRCUIT
PROJECT	USS STENNIS
DATE	11-19-04
SCALE	N.T.S.
DWG #	80370A
DWN. BY	JV
COSPOLICH INC.	NORCO, LA.

CONTROL CIRCUIT

D



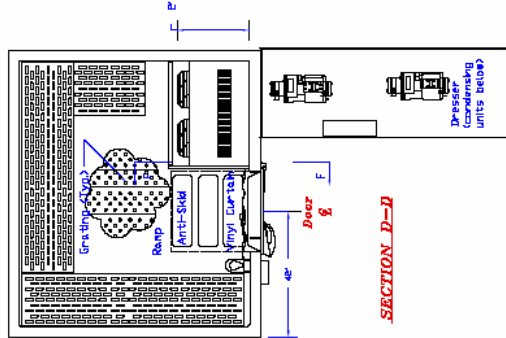
ITEM	ELECTRICAL SCHEMATIC - FREEZER		
PROJECT	DWG #	B0369	
DATE	03-04-04	SCALE	N.T.S.
		DWN. BY	JV
	COSPOLICH INC.		
	NORCO, LA.		

SHEET: E-3

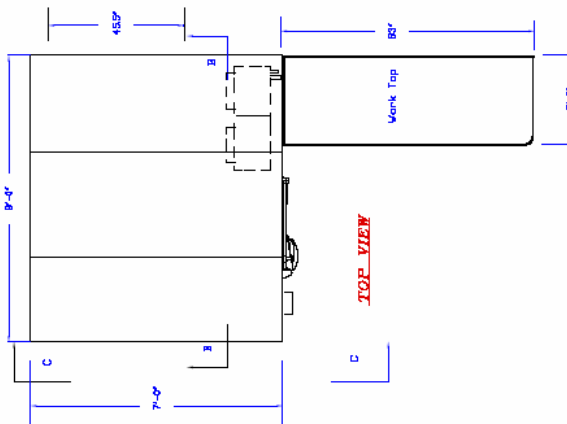


REV.	DESCRIPTION	REVISION	DATE APP.
A	Change condensing unit configuration		7/15/04
B	Change door and eliminate corner brackets		11/10/04
C	Add Section F-F		01/26/05

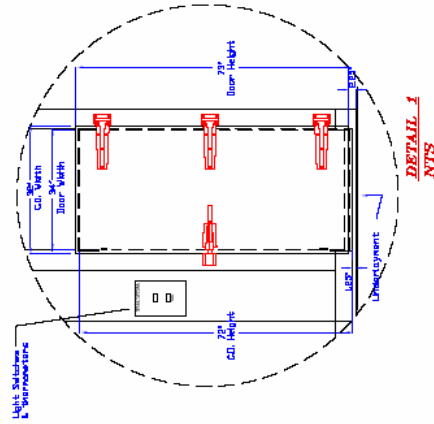
- NOTES:**
1. Interior floor is seamless with deck grating.
 2. Stainless steel shipboard shelving.
 3. Material is as follows:
Walls (interior): 16 ga. 304 SS
Walls (exterior): 16 ga. 304 SS
Door (int. & ext.): 16 ga. 304 SS
4. Evaporator coils not shown for clarity.



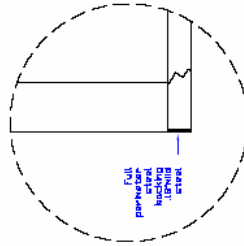
SECTION D-D



TOP VIEW

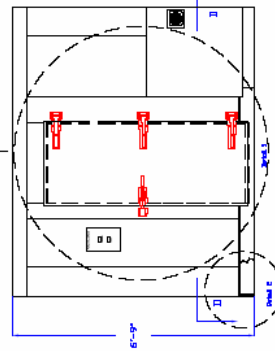


DETAIL 1

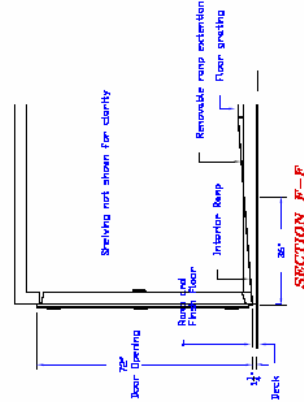


DETAIL 2

REEFER
+ SOF



ELEVATION



SECTION F-F

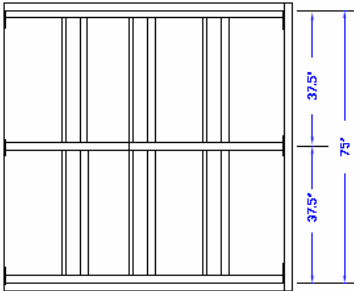
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ITEM	SHIPBOARD MODULAR WALK-IN COLD SPACE Area #2
PROJECT	USS STENNIS
DATE	04-15-04
SCALE	1:1
DWN. BY	CW
REV.	C
COSPOLICH INC.	
MOBILE, LOUISIANA	

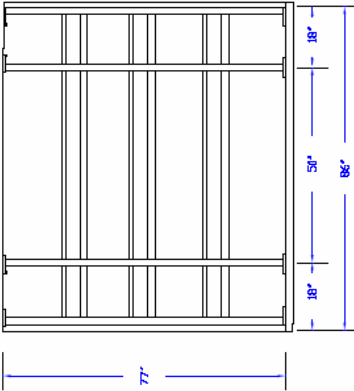
F

REV.	DESCRIPTION	REVISIONS	DATE APP.
A	Change configuration		5/24/03
-	-		
-	-		
-	-		

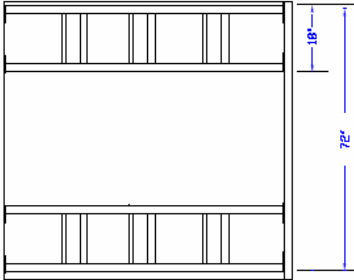
- NOTES:
1. Interior door is secondary with deck grating.
 2. Building steel shipboard shelving.
 3. Interior door is secondary with deck grating.
 4. Exterior door is secondary with deck grating.
 5. Floor (interior): 16 ga. 304 SS
 6. Walls & ceiling (int. & ext.): 20 ga. 304 SS
 7. Door (int. & ext.): 16 ga. 304 SS
 8. Refrigerator coils not shown



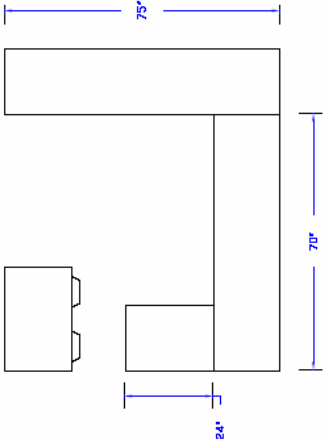
SECTION E-E



SECTION G-G



SECTION B-B



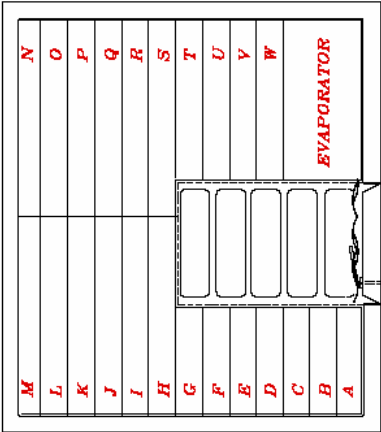
PLAN VIEW

ITEM: SHELVING for SHIPBOARD MODULAR WALK-IN COLD SPACE			
PROJECT	USS STENNIS	DWG	91440-4A
DATE	01-26-05	SCALE	1:1
DWN. BY	CW	REV.	
COSPOLICH INC.		NORCO, LOUISIANA	



REV		DESCRIPTION	REVISIONS	DATE	APP
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

- NOTES:-
1. Interior floor is seamless with deck grating.
 2. Stainless steel shipboard shelving
 3. Interior deck grating 1/8" x 1/8" x 3/16" SS
Floor (interior): 1/8" ga. 304 SS
Walls & ceiling (int. & ext.): 20 ga. 304 SS
Door (int. & ext.): 16 ga. 304 SS
 4. Evaporator coils not shown for clarity.



FLOOR GRATING LAYOUT

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ITEM		FLOOR GRATING	
PROJECT	USS STENNIS	DATE	04-15-04
SCALE	1:1	DWN. BY	CW
REV.			
COSPOLICH INC.		NORFOLK, LOUISIANA	

