



Dual Temperature Serving Module
Technical Manual

Installation, Operation, and Maintenance Instructions

Models:

DFM-N



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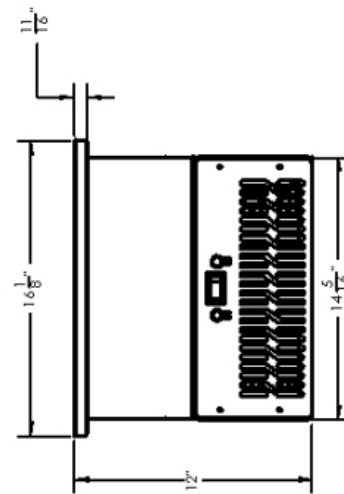
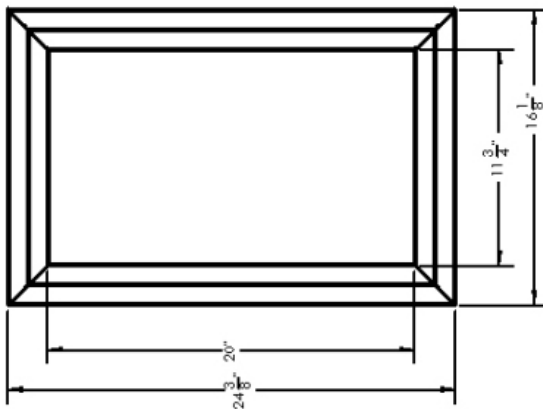
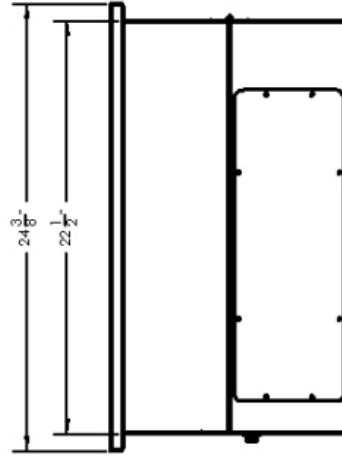
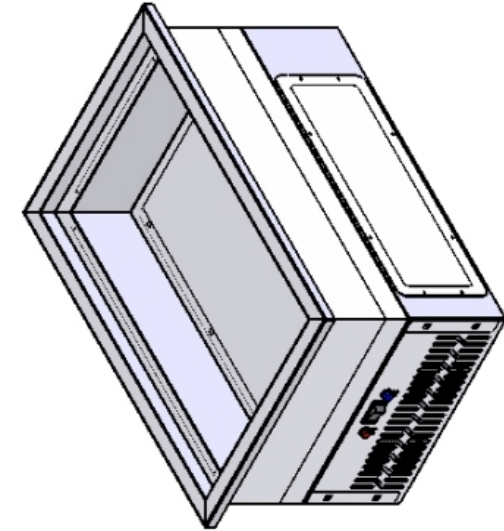
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Table A – Leading Particulars

MANUFACTURER:	Cospolich Inc. Destrehan, Louisiana 70047
TYPE:	Dual Temperature Serving Module
MODEL:	DFM-N
PURPOSE:	Hot/Cold Holding/Serving of Food Items/ Perishables
ELECTRICAL REQUIREMENTS:	Breaker Required: 15 Amp
CHILL MODE:	Power Supply - 115 Volt AC, 60 Hz, 1 Phase Amp draw - Maximum Power Demand: 2 Amps Watts - 230 Watts
HEAT MODE:	Power Supply - 115 Volt AC, 60 Hz, 1 Phase Amp draw - Maximum Power Demand: 7.2 Amps Watts - 900 Watts
REFRIGERANT:	134A
CHARGE:	1 lb., 1 oz.
DRAIN:	Not Required
DIMENSIONS:	16 1/8" WIDE X 24 3/8" LONG X 12" HIGH

General Arrangement/Dimensional Drawing



ITEM: DSFM 02	Process: Presentation
PROJECT: Dual Service Food Module	DWG # DSFM PR_01
DATE: 2/9/2011	SCALE: 1:6
BY: JLS	BY: JLS
NORCO, LOUISIANA	
SHEET 1 of 1	

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Chapter 1 – General Information

1.1 Features

The temperature of the Dual Temperature Serving Module is pre-set at the factory and does not require adjustment.

The Heat/ON/OFF/Chill mode switch is located on the same end panel as the electrical power cord.



Illustration 1.A: ON/OFF Mode Switch

Two function lights, on the opposite end from the ON/OFF mode switch, indicate the mode that has been selected. **RED** denotes **Heat Mode** and **WHITE** represents **Chill Mode**.

The heater is located on the underside of the horizontal flat pan, which acts as the heating surface. The static coils are located along the interior surface of the vertical walls of the pan and act as the chilling surface of the module.

1.2 Operating Instructions

Depressing the left-hand portion of the ON/OFF mode switch causes the unit to operate in the **Heat Mode**, and depressing the right-hand portion of the switch causes the unit to operate in the **Chill Mode**. The middle position turns the unit OFF.

Chapter 1 – General Information

The Heating Mode is designed to function properly **with water** in the well and it is recommended clean, fresh water be used for optimum performance. When in Heat Mode, it is advised that 32 ounces of water be placed in the well. This increases the reaction time and more evenly distributes the heat to the serving pan. Allow 20 minute preheat prior to placing any food product in the well. This ensures the well is heated to the optimum holding temperature of 190°F.

For ideal operation of the unit, a 15 minute delay should be allowed when switching between Heat and Chill modes.

The Chill Mode is designed to function properly **without water** in the well. Any water remaining from Heating Mode should be removed prior to changing over to Chill Mode.

NOTE: *The dual temperature serving module is designed to operate covered and with a full size food pan in place. In order to achieve proper operating temperatures, the module must remain covered.*

NOTE: *The water level can fluctuate due to evaporation, especially at higher temperatures during heating mode. The water level should be checked periodically and refilled to the marked “**fill line**” (32 oz.) with water to ensure optimum performance. Do not overfill the well as it can adversely affect performance.*

NOTE: *It is suggested that the unit be turned off whenever out of service or if it is to be left unattended for an extended period of time.*

Chapter 2 – Safety Precautions

2.1 Safety Precautions

- The Dual Temperature Module unit is an electronic device and thus possesses all hazards that accompany any electrical appliance. **NOTE:** *Extreme caution should be used when connecting and disconnecting the Dual Temperature Module to its power source.*
- All Dual Temperature Module users should be fully trained on its operation and use and cautioned about its associated hazards.
- When in the Heat Mode, the surface of the pan can reach very high temperatures. **NOTE:** *Caution should be used when adding water and inserting or removing food/product pans.*
- Avoid splashing or excessively wetting the control panel. Doing so may create an electrical short or can cause the controls to malfunction.
- The Dual Temperature Module is designed and manufactured to maintain product at a specified temperature suitable for human consumption.
- Opening the lower portion of the Dual Temperature Module should only be done by properly trained maintenance staff. Tampering with the components of the unit will void the manufacturers warranty.

Chapter 3 – Installation Instructions

3.1 Unpacking and Inspection

All Cospolich products are fully tested, inspected, and packaged by qualified individuals to ensure that the end user receives the highest quality product possible.

Unpack the module from its packaging by using a razor knife to cut the packing tape. **NOTE:** *Use caution when cutting the tape securing the carton. Be mindful not to cut deeper than 1/8" into the cardboard carton to avoid damaging the stainless steel surface of the unit.*

Carefully inspect all outer surfaces of the Dual Temperature Module for any dents or other visible damage. If there is damage sustained to the product, however, please contact Cospolich Customer Service or an authorized Cospolich dealer to report the damage. A shipping damage claim may have to be filed with the original product carrier.

3.2 Installation

The DFM-N Dual Temperature Module is a free-standing, self-contained unit which must be placed on a flat, sturdy surface and plugged into a power source meeting the requirements set forth in the Leading Particulars on page 6 of this manual.

DFM-N modules intake air from the front (end with the red/white indicator lights) and discharge from the rear (end with ON/OFF mode switch). During operation of either mode, the ventilation area should not be blocked nor should air flow be restricted in any way.

Modules should never be installed or set up end to end, in close proximity to one another. **NOTE:** *For proper operation and maximum unit lifespan, DFM-N modules should be placed or installed side by side only.*

3.3 Unit Storage

The DFM-N module contains a refrigeration unit with oils and refrigerant gas and thus should be stored in a flat, horizontal position only.

Chapter 4 – Maintenance & Cleaning

4.1 Maintenance

The DFM-N Dual Temperature Module requires very little maintenance. A periodic check of the structural integrity of the pan, ON/OFF mode switch, and power supply cord is all that is necessary to ensure optimal operation of the unit.

Any further maintenance questions can be referred to the Cospolich Customer Service Department at (985) 725-0222.

4.2 Cleaning

The stainless steel surfaces of the DFM-N should be properly cleaned using an approved cleaner after every use.

A solution of warm, soapy water should be a sufficient cleaning solution for routine spills and daily surface maintenance. A mixture of warm water and bleach, however, can be used to clean and disinfect stubborn stains or heavy spills.

The controls should be free of moisture, dust, and debris at all times.

A can of compressed air may be used to blow out the lower compartment containing the refrigeration and mechanical components.

4.3 Troubleshooting

To troubleshoot the DFM-N module, first verify that the unit is plugged in properly and that the power source is the proper voltage and electrically active.

Next, move the front toggle switch to the **HEAT** position and verify that the mode/power indicator light comes on. If so, move the front toggle switch to the **Chill Mode** and verify that the mode/power indicator light comes on.

If all of the above function properly but the unit still does not function properly, then it will need to be returned to Cospolich for evaluation and repair.

Any further troubleshooting questions can be referred to the Cospolich Customer Service Department at (985) 725-0222.

Chapter 5 – Parts List

5.1 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.

5.2 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., P.O. Box 1206, Destrehan, LA 70047 (Fed. Mfg. Code #66682).

Table A – Source Codes

Code Number	Name	Address
14852	Bohn Heat Transfer	Danville, IL 61932
32761	Kason Industries	Shenandoah, GA 30265
50992	Ranco Controls	St. Louis, MO 63143
78462	Sporlan Valve	St. Louis, MO 63143
14569	Copeland Corporation	Sidney, OH 45365
17529	Watsco	Hialeah, FL 33010
59431	Tecumseh Products	Tecumseh, MI 49286
49048	Miljoco Corporation	Eastpointe, MI 48021
45020	Nashville Wire Products	Nashville, TN 37202
79264	Jean's Extrusions, Inc.	Salem, IN 47167
2K223	Refrigeration Hardware	Sun Valley, CA 91353
87518	Standard Keil, Inc.	Allenwood, NJ 08720
60886	Idec Corporation	Sunnyvale, CA 94089
19220	Eberhard, Inc.	Cleveland, OH 44136
66682	Cospolich, Inc.	Norco, LA 70079

Table B—Parts List for DFM-N

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
1	S/S CONTROL MOUNTING BRACKET	DFMCMB01	DFMCMB01	COSPOLICH	1	EA
2	RUBBER MOUNTING FEET	HXDB02	9540K14	MCMaster-CARR	4	EA
3	1/4" GRAY PVC BASE	HXPG03	HXPG03	COSPOLICH	1	EA
4	ON/OFF, HEAT & CHILL MODE SWITCH	LRLS09	683-0468	ALLIED ELECTRONICS	1	EA
5	CONDENSER COIL	MERCC01	MERCC01	BOIS D'ARC	1	EA
6	MALE POWER CORD	LLTC14	216316	WALTHER	1	EA
7	LIQUID TIGHT CONNECTOR	LLTC06	22534	MOTORS & CONTROLS	1	EA
8	S/S FAN COVER/HOUSING	DFMFCH01	DFMFCH01	COSPOLICH	1	EA
9	S/S FRONT END ACCESS PANEL	DFMEAP01	DFMEAP01	COSPOLICH	1	EA
10	POWER SUPPLY, 24V DC, 12.5 AMP	PSB02	800-0016 (LEP240F-24)	ALLIED ELECTRONICS	1	EA
11	POTENTIOMETER	PTGU2031	GU2031S26-ND	DIGI-KEY	1	EA
12	COMPRESSOR, 134A	RWC999	RWC999	COSPOLICH	1	EA
13	AXIAL FAN MOTOR, 24V DC	RWEM39	3414NHH	EBM PAPER	2	EA
14	EXPANSION VALVE, 134A	RWEV50	EFJ-1/8-C	SPORLAN	1	EA
15	FILTER DRYER	RWFD01	C-032-S	SPORLAN	1	EA
16	ENCAPSULATED LOW PRESSURE SWITCH	RWPL16	SLP0520	SUPCO	1	EA
17	WHITE INDICATOR LIGHT	RWPL50	679-5070	ALLIED ELECTRONICS	1	EA
18	RED INDICATOR LIGHT	RWPL52	679-5050	ALLIED ELECTRONICS	1	EA
19	RECEIVER TANK, HORIZONTAL	RWRT33	SPECIAL	SPORLAN	1	EA
20	SIGHT GLASS	RWSG03	SA-12S	SPORLAN	1	EA
21	TEMPERATURE SENSOR LEAD	RWTS08	SN8T6H1502	ELIWELL	1	EA
22	TEMPERATURE CONTROLLER—CHILL MODE	RWTT48	ID1ADB0TCJ601	ELIWELL	1	EA
23	TEMPERATURE CONTROLLER—HEAT MODE	RWTT53	CV-CCHH-0000-0300-4	WATLOW	1	EA
24	PORCELAIN HEATER PLATE	UNHTR05	(Q001077-6B)	ROESCH INC.	1	EA
25	SILICONE HEATER, 900 WATT	UNHTR07	SHS80287	TEMPCO	1	EA
26	RIGHT & LEFT S/S SIDE COVER PANEL	DFMSCP01	DFMSCP01	COSPOLICH	2	EA
27	FIBER BOARD INSULATION	CF010	BDFIJ2024814F	BRANTON	2	FT ²

Table B – Parts List for DFM-N

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
28	HIGH PRESSURE ACCESS FITTING	RWSF02	WGVAX-4	A/C SUPPLY	1	EA
29	LOW PRESSURE ACCESS FITTING	RWSF02	WGVAX-4	A/C SUPPLY	1	EA
30	HOT/COLD S/S PAN INTERIOR ONLY	DFM-INTERIOR*	DFM-INTERIOR	KSI	1	EA
31	STATIC EVAPORATOR COIL	STATICCOIL*	STATICCOIL	COSPOLICH	1	EA
32	S/S LOWER REMOVABLE HEAT COVER	DFMRHC01*	DFMRHC01	COSPOLICH	1	EA
33	URETHANE INSULATION RING	DFMUIR01*	DFMUIR01	COSPOLICH	1	EA
34	EXTERIOR S/S COVER/SHELL	DFMEC01	DFMEC01	COSPOLICH	1	EA
35	S/S 10/24 CAGE NUT	CCCN01	CCCN01	LIGHTNING SUPPLY	4	EA

*Not a field replaceable part

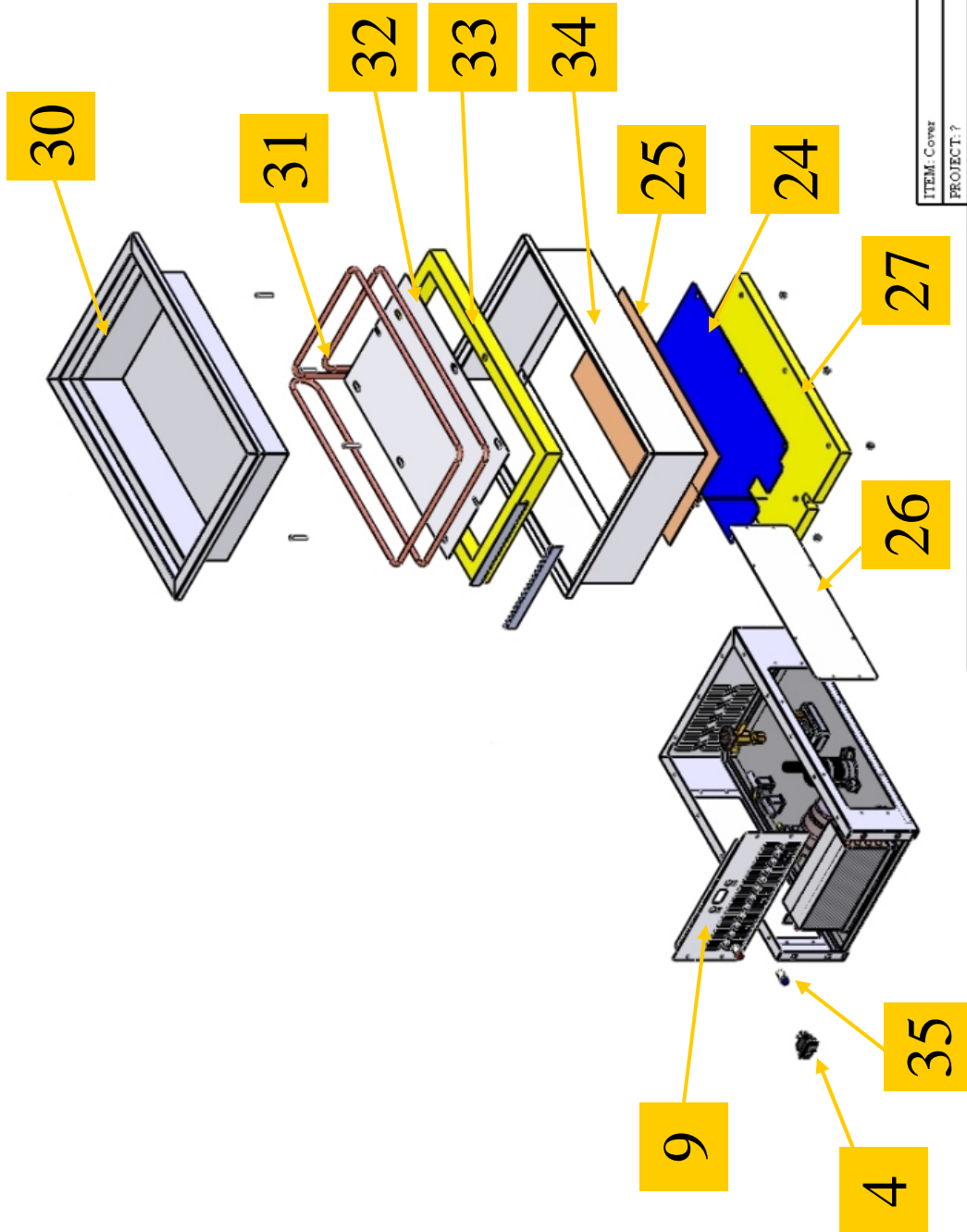
Table C – Common Accessory Parts

	ITEM	COSP#	MFG#	Vendor	QTY	U/M
38	15 AMP, 2 POLE, BREAKER	PCCC55	S202-B16	MG	1	EA
39	AXIAL FAN MOTOR	RWEM26**	FA1238S11T7-52	COOLTRON	TBD	EA

NOTE: When mounted into a serving line or cabinet, 1 ea PCCC55 15 Amp breaker is required per DFM-N serving module

**Axial fan motors are commonly installed within the cabinet that the DFM-N dual serving modules are housed within and are used for ventilation. They are NOT part of the DFM-N module itself.

Exploded-View Drawing



ITEM: Cover	Process: ?
PROJECT: ?	DWG # 7-1
DATE: 2/9/2011	SCALE: 1:8
DESIGNED BY: ?	DRAWN BY: ?
COSPOLICH INC. DESTREHAN, LOUISIANA	
SHEET 1 of 1	

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Illustrations 5.A, 5.B – DFM-N Dual Flex Module



Illustration
5.A



Illustration
5.B

Illustrations 5.E, 5.F & 5.G – Interior Components & Lower Detail

Illustration 5.E

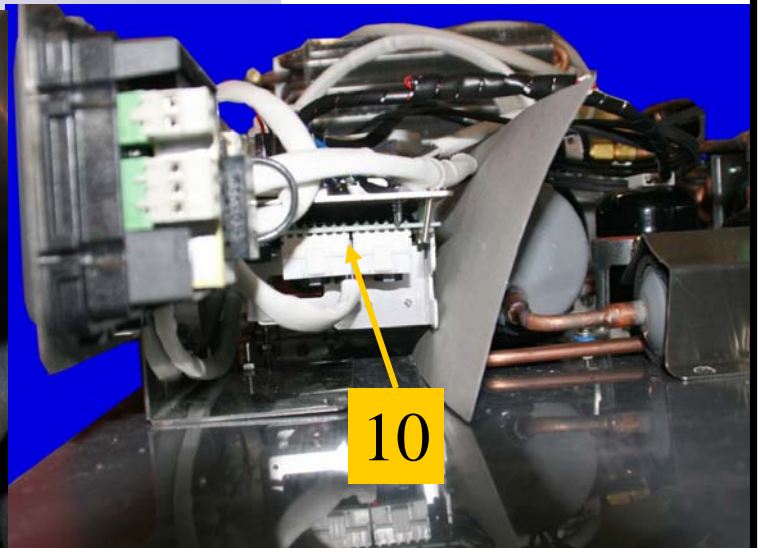
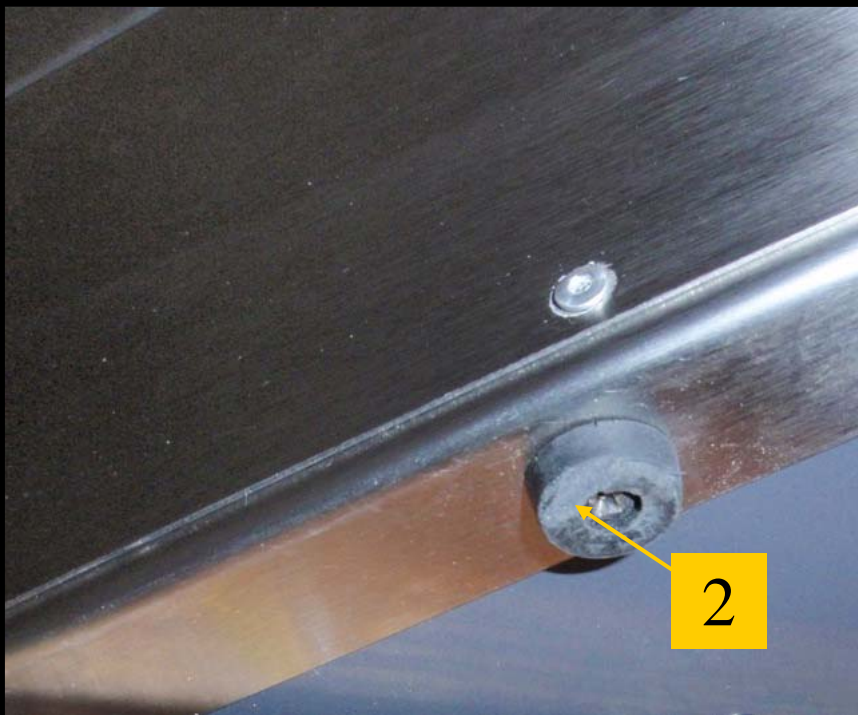


Illustration 5.G

Illustration 5.F

Chapter 6 – 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 housing 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.