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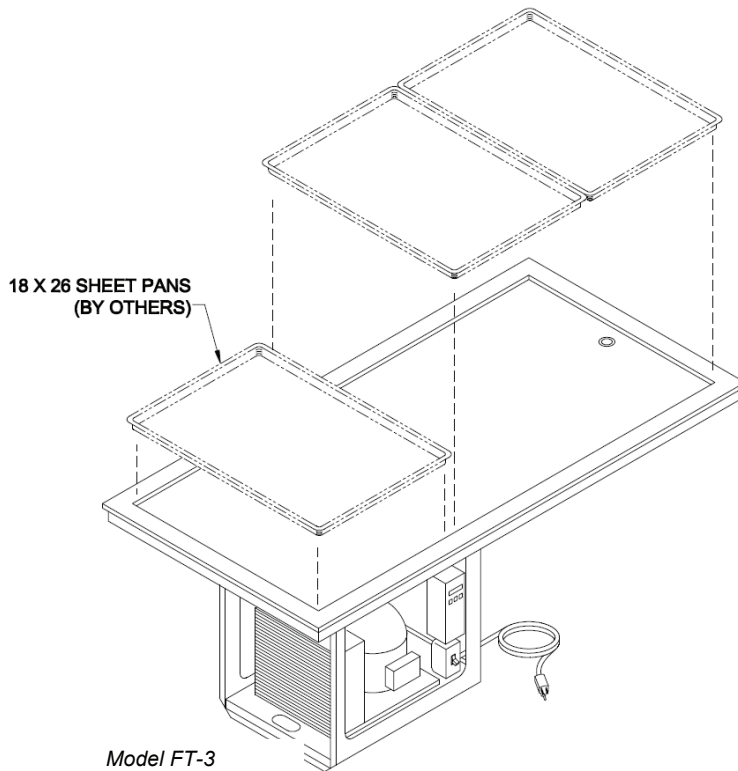
**415**

## OPERATIONS MANUAL

### DROP-IN FROST TOPS

#### MODELS

**FT-1**  
**FT-2**  
**FT-3**  
**FT-4**  
**FT-5**  
**FT-6**

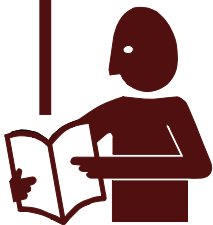


**Includes  
INSTALLATION,  
USE & CARE,  
SERVICE AND  
WIRING DIAGRAMS.**

#### **IMPORTANT: DO NOT DISCARD THIS MANUAL**

This manual is considered to be part of the appliance and is to be given to the OWNER or MANAGER of the restaurant, or to the person responsible for TRAINING OPERATORS of this appliance. Additional manuals are available from your WELLS DEALER.

**THIS MANUAL MUST BE READ AND UNDERSTOOD BY ALL PERSONS USING OR INSTALLING THIS APPLIANCE.** Contact your WELLS DEALER if you have any questions concerning installation, operation or maintenance of this equipment.



## LIMITED WARRANTY STATEMENT

Unless otherwise specified, all commercial cooking equipment manufactured by WELLS BLOOMFIELD, LLC is warranted against defects in materials and workmanship for a period of one year from the date of original installation or 18 months from the date of shipment from our factory, whichever comes first, and is for the benefit of the original purchaser only.

THIS WARRANTY IS THE COMPLETE AND ONLY WARRANTY, EXPRESSED OR IMPLIED IN LAW OR IN FACT, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND/OR FOR DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH WELLS BLOOMFIELD PRODUCTS. This warranty is void if it is determined that, upon inspection by an authorized service agency, the equipment has been modified, misused, misapplied, improperly installed, or damaged in transit or by fire, flood or act of God. It also does not apply if the serial nameplate has been removed, or if service is performed by unauthorized personnel. The prices charged by Wells Bloomfield for its products are

based upon the limitations in this warranty. Seller's obligation under this warranty is limited to the repair of defects without charge by a Wells Bloomfield factory authorized service agency or one of its sub-service agencies. This service will be provided on customer's premises for non-portable models. Portable models (a device with a cord and plug) must be taken or shipped to the closest authorized service agency, transportation charges prepaid, for service. In addition to restrictions contained in this warranty, specific limitations are shown in the Service Policy and Procedure Guide. Wells Bloomfield authorized service agencies are located in principal cities. This warranty is valid in the United States and Canada and void elsewhere. Please consult your classified telephone directory, your foodservice equipment dealer or contact:

**Wells Bloomfield, LLC**  
**10 Sunnen Dr., St. Louis MO 63143 USA**  
**phone (314) 678-6314 or fax (314) 781-2714**

for information and other details concerning warranty.

## SERVICE POLICY AND PROCEDURE GUIDE and ADDITIONAL WARRANTY EXCLUSIONS

1. Resetting of safety thermostats, circuit breakers, over load protectors, and/or fuse replacements are **not** covered by this warranty unless warranted conditions are the cause.
2. All problems due to operation at **voltages or phase other than specified on equipment nameplates** are **not** covered by this warranty. Conversion to correct voltage and/or phase must be the customer's responsibility.
3. All problems due to **electrical connections not made in accordance with electrical code requirements and wiring diagrams** supplied with the equipment are **not** covered by this warranty.
4. Replacement of items **subject to normal wear**, to include such items as knobs, light bulbs; and, normal maintenance functions including adjustments of thermostats, adjustment of micro switches and replacement of fuses and indicating lights are **not** covered by warranty.
5. Damage to electrical cords and/or plug due to exposure to excessive heat are **not** covered by this warranty.
6. Full use, care, and maintenance instructions supplied with each machine. Noted maintenance and preventative maintenance items, such as servicing and cleaning schedules, are customer responsibility. Those miscellaneous adjustments noted are customer responsibility. Proper attention to preventative maintenance and scheduled maintenance procedures will prolong the life of the appliance.
7. Travel mileage is limited to **sixty (60) miles** from an Authorized Service Agency or one of its sub-service agencies.
8. All labor shall be performed during regular working hours. Overtime premium will be charged to the buyer.
9. All genuine Wells replacement parts are warranted for ninety (90) days from date of purchase on non-warranty equipment. This parts warranty is limited only to replacement of the defective part(s). **Any use of non-genuine Wells parts completely voids any warranty.**
10. Installation, labor, and job check-outs are **not** considered warranty and are thus **not** covered by this warranty.
11. Charges incurred by delays, waiting time or operating restrictions that hinder the service technician's ability to perform service are **not** covered by warranty. This includes institutional and correctional facilities.

## SHIPPING DAMAGE CLAIM PROCEDURE

**NOTE:** For your protection, please note that equipment in this shipment was carefully inspected and packaged by skilled personnel before leaving the factory. Upon acceptance of this shipment, the transportation company assumes full responsibility for its safe delivery.

### IF SHIPMENT ARRIVES DAMAGED:

1. **VISIBLE LOSS OR DAMAGE:** Be certain that any visible loss or damage is noted on the freight bill or express receipt, and that the note of loss or damage is signed by the delivery person.
2. **FILE CLAIM FOR DAMAGE IMMEDIATELY:** Regardless of the extent of the damage.

3. **CONCEALED LOSS OR DAMAGE:** if damage is unnoticed until the merchandise is unpacked, notify the transportation company or carrier immediately, and file "CONCEALED DAMAGE" claim with them. This should be done within fifteen (15) days from the date the delivery was made to you. Be sure to retain the container for inspection.

Wells Bloomfield cannot assume liability for damage or loss incurred in transit. We will, however, at your request, supply you with the necessary documents to support your claim.

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## INTRODUCTION

Thank you for purchasing this Wells Bloomfield appliance.

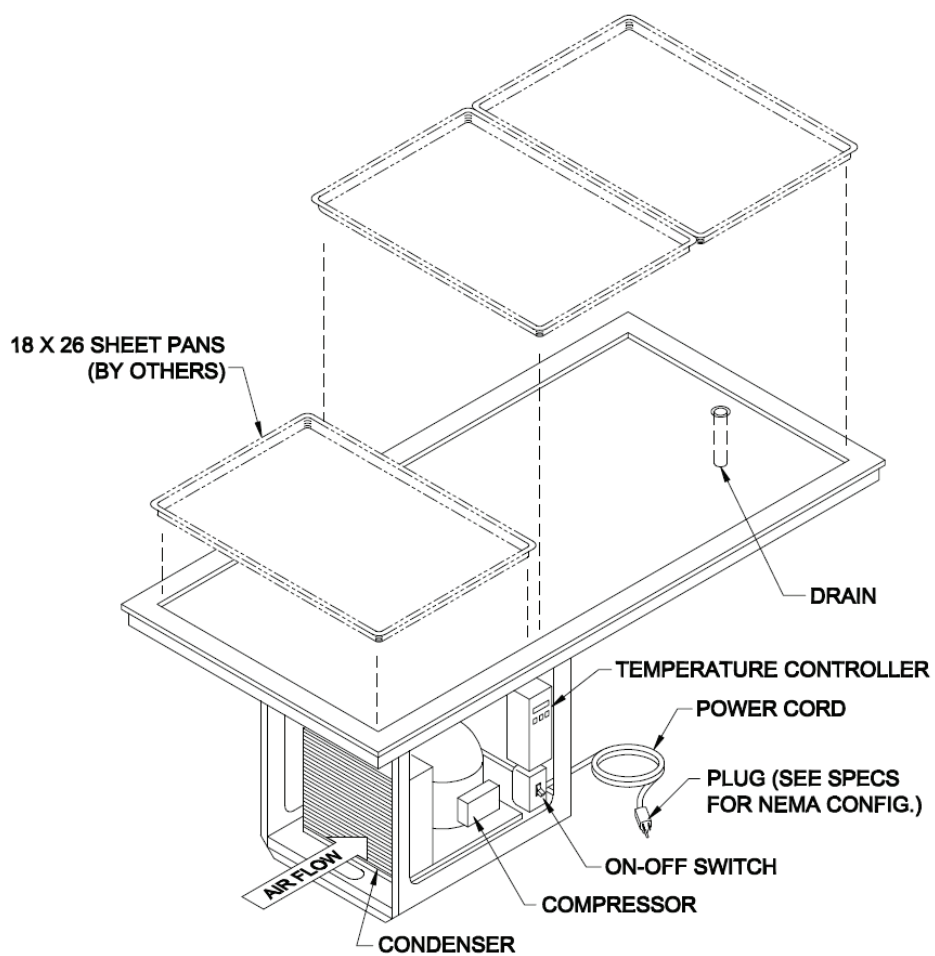
Proper installation, professional operation and consistent maintenance of this appliance will ensure that it gives you the very best performance and a long, economical service life.

This manual contains the information needed to properly install this appliance and to use and care for it in a manner which will ensure its optimum performance.

## ELECTRICAL & REFRIGERATION SPECIFICATIONS

MODEL	HP	AMPS 120VAC 1 $\phi$				REFRIGERANT		PRESSURE (psig)		POWER SUPPLY CORD
		TOTAL	MCA	MFS	LRA	TYPE	AMT.	HIGH	LOW	
FT-1 FT-2	1/4	4.9	8	11	24	R-134a	28 oz.	440	162	NEMA 5-15P
FT3	1/3	5.6	11	15	29	R-404a	24 oz.	440	162	NEMA 5-15P
FT-4	1/2	6.4	14	18	33	R-404a	34 oz.	500	174	NEMA 5-15P
FT-5 FT-6	3/4	15.3	21	30	59	R-404a	54 oz.	500	174	NEMA 5-20P

## FEATURES & OPERATING CONTROLS



**NOTE:**

This is a general arrangement drawing only. Actual component positions may vary between units.

## PRECAUTIONS AND GENERAL INFORMATION

This appliance is intended for use in commercial establishments only, and is intended to hold pre-chilled prepared food for human consumption. No other use is recommended or authorized by the manufacturer or its agents.

Operators of this appliance must be familiar with the appliance use, limitations and associated restrictions. Operating instructions must be read and understood by all persons using or installing this appliance.

Food must be kept in appropriate inserts. Never place food directly onto the top.

Cleanliness of this appliance is essential to good sanitation. Read and follow all included cleaning instructions and schedules to ensure the safety of the food product.

Disconnect this appliance from electrical power before performing any maintenance or servicing.

This appliance is not jet stream approved. Do not direct water jet or steam jet at this appliance, or at any control panel or wiring. Do not splash or pour water on, in or over any controls, control panel or wiring. Do not wash floor around this appliance with water or steam jet.

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and/or adjustment procedures, is intended for use by qualified technical personnel.

Any procedure which requires the use of tools must be performed by a qualified technician.

This manual is considered to be a permanent part of the appliance. This manual and all supplied instructions, diagrams, schematics, parts breakdown illustrations, notices and labels must remain with the appliance if it is sold or moved to another location.

This appliance is made in the USA. Unless otherwise noted, this appliance uses American-sized hardware.



### **WARNING: ELECTRIC SHOCK HAZARD**

All servicing requiring access to non-insulated electrical components must be performed by a factory authorized technician.

DO NOT open any access panel which requires the use of tools. Failure to follow this warning can result in severe electrical shock.



### **CAUTION: RISK OF DAMAGE**

**DO NOT** connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance might result if these instructions are not followed.

## AGENCY LISTING INFORMATION



This appliance is NSF certified and UL recognized.

## UNPACKING & INSPECTION

Carefully remove the appliance from the carton. Remove all protective plastic film, packing materials and accessories from the Appliance before connecting electrical power or otherwise performing any installation procedure.

Carefully read all instructions in this manual and the *Installation Instruction Sheet* packed with the appliance before starting any installation.

Read and understand all labels and diagrams attached to the appliance.

Carefully account for all components and accessories before discarding packing materials. Store all accessories in a convenient place for later use.

FT units must remain upright at all times (shipping and installation) to prevent damage to the condensing unit. If the unit is accidentally tipped, allow unit to sit upright for at least 24 hours before connecting to electric power.

## PREPARATION

Cutout dimensions for tank units and control panels are listed on the *Installation Instructions* provided with the unit.

Provide at least 1" clearance around the condensing unit chassis.

Countertop must be flat and level before the unit is installed. After cutout is made, add stiffeners or bottom braces to counter as required to support unit weight. Avoid placing this unit under a ceiling fan or A/C vent to prevent uneven frosting of the top plate.

### IMPORTANT:

**Refrigeration system is air cooled. Recommend louvered grills or equivalent openings front and rear, each with a minimum size of twice the surface area of the condenser, to provide adequate air circulation.**

**NOTE:** The condenser fan is provided with a fan guard. DO NOT remove the condenser fan guard.

Provide louvered grills and service access below control panel. Provide access to the POWER SWITCH and TEMPERATURE CONTROL UNIT located at the front of the condenser.

After installation, apply a thin bead of non-toxic silicone sealant around the flange to seal it to the counter.

Avoid storing flammable or combustible materials in, on or near the appliance.

Clean the unit thoroughly after installation and before first use.

**NOTE:** DO NOT discard the carton or other packing materials until you have inspected the appliance for hidden damage and tested it for proper operation. Refer to *SHIPPING DAMAGE CLAIM PROCEDURE* on the inside front cover of this manual.



### WARNING: RISK OF PERSONAL INJURY

Installation procedures must be performed by a qualified technician with full knowledge of all applicable electrical and plumbing codes. Failure can result in personal injury and property damage.

### IMPORTANT:

Unit must remain in an upright position during installation to prevent damage to the refrigeration system.

### IMPORTANT:

Refrigeration system is air cooled. Recommend louvered grills or equivalent openings front and rear, each with a minimum size of twice the surface area of the condenser, to provide adequate air circulation.

### IMPORTANT:

Access is required for the operation of the drain valve and for maintenance of the refrigeration unit. Provide adequate access to the drain valve and refrigeration unit.

### IMPORTANT:

Unit flange must be sealed to the counter top. Damage caused by leaks due to improper installation is NOT covered by warranty.

## INSTALLATION



### WARNING: ELECTRIC SHOCK HAZARD

All servicing requiring access to non-insulated electrical components must be performed by a factory authorized technician.

**DO NOT** open any access panel which requires the use of tools. Failure to follow this warning can result in severe electrical shock.



### CAUTION: RISK OF DAMAGE

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.



### CAUTION: ELECTRIC SHOCK HAZARD

Cord-connected units are equipped with a three-prong plug for your protection against electric shock. Never cut the large round prong from the plug, or twist a blade to fit an existing receptacle.

### IMPORTANT:

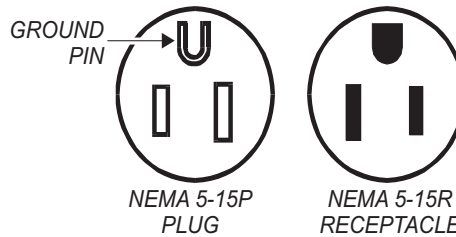
Contact a licensed electrician to install the correct circuit and receptacle (cord-connected units) or to install and connect electric power (field-wired units).

### IMPORTANT:

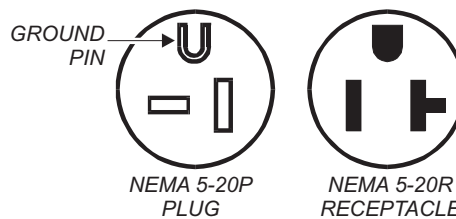
Damage due to being connected to the wrong voltage or phase is NOT covered by warranty.

## ELECTRICAL INSTALLATION

1. Refer to the nameplate. Verify the electrical service power. Voltage and phase must match the nameplate specifications. Wiring the unit to the wrong voltage can severely damage the unit, or cause a significant decrease in performance.
2. Available electrical amperage must meet or exceed the specifications listed on the specifications sheet provided with the unit.
  - a. Units are equipped with a three-prong (grounding) plug for your protection against electrical shocks. This must be plugged into a properly grounded matching receptacle.
  - b. FT-1 thru FT-4 Frost Tops are equipped with a NEMA 5-15P plug and require a matching NEMA 5-15R receptacle.



- c. FT-5 and FT-6 Frost Tops are equipped with a NEMA 5-20P plug and require a matching NEMA 5-20R receptacle.





## PLUMBING INSTALLATION

Install 1" drain valve (provided by others) on unit drain. Plumb to an appropriate waste as required by local plumbing and sanitation ordinances. Consult local codes for approved drain configurations.

### IMPORTANT:

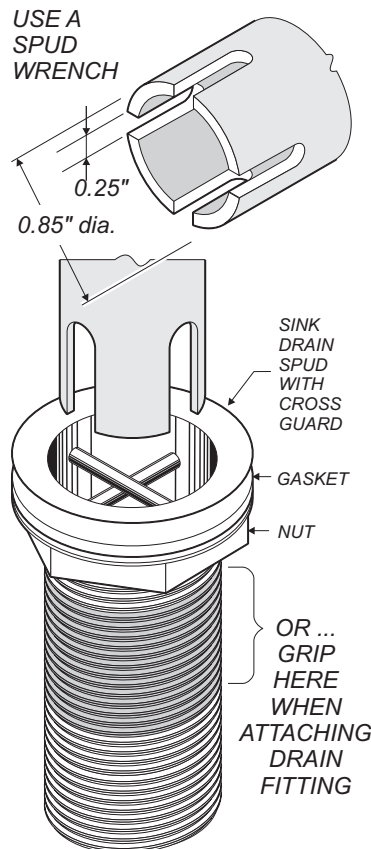
DO NOT allow the sink drain spud to turn during installation. Hold the spud with an appropriate cross-guard-style spud wrench, or carefully grip the center threaded portion with a strap wrench or slip-joint pliers to immobilize the drain spud during drain fitting installation.

DO NOT grip the drain spud nut or gasket.

### IMPORTANT:

Plumbing connections must be made in compliance with all federal, state and local codes and ordinances.

All plumbing must be performed by a qualified plumber.



## OPERATION



### **CAUTION: ELECTRIC SHOCK HAZARD**

**DO NOT** splash or pour water onto control panel or wiring.

FT units are designed to hold REFRIGERATED PRE-CHILLED product at serving temperature.

FT units should not be used to chill product, nor to hold product for long term storage.

### **OPERATION NOTES**

1. Never place food directly on the top. Always use insets, sheet pans, or food pans.
2. Use only *pre-chilled* products. Stir product occasionally to maintain chilled temperatures and prevent bottom freezing. Models FT-1 thru FT-6 Frost Tops are not NSF approved to hold potentially hazardous foods for extended periods of time.
3. Periodically clean condensing coils to remove accumulated dust and debris. Failure to clean coils will decrease performance and may void the warranty. See *CONDENSER CLEANING*, page 10.

### **DAILY START-UP**

1. Turn POWER SWITCH (located on condensing unit) *ON*. Allow unit to run for approximately 30-45 minutes to reach operating temperature and create a layer of frost.
2. Place pre-chilled product in sheet or food pans. Place pans on top of frosted surface.

### **DAILY SHUT-DOWN**

1. Turn POWER SWITCH *OFF*. Remove product and food pans.
2. Allow unit to defrost before cleaning. See *CLEANING INSTRUCTIONS*, page 9.

## CLEANING INSTRUCTIONS

**PREPARATION:** Turn POWER SWITCH OFF. Unplug unit or disconnect from electric power. Allow unit to defrost and drain off.

**FREQUENCY:** Daily

**TOOLS:** Warm Water and Mild Detergent  
Solution: 10 Parts Warm Water to 4 Parts Vinegar  
Plastic Scouring Pad  
Clean Cloth or Sponge  
Food-Grade Silicone Sealant



**CAUTION:  
ELECTRIC SHOCK  
HAZARD**

**DO NOT** splash or pour water onto control panel or wiring.

**IMPORTANT:** DO NOT use steel wool for cleaning.

1. Wipe top surface using a clean cloth or sponge and mild detergent.
2. Use a plastic scouring pad to remove any mineral deposits.
3. Rinse thoroughly with a vinegar and water solution to neutralize all detergent / cleanser residue.
4. Periodically inspect flange-to-counter seal. Reseal with non-toxic silicone sealant if necessary.
7. Inspect condenser coil and fan blades . Clean if required.
8. Inspect and clean any louvered panels in front of the condenser.
9. Reconnect to electric power. Turn POWER SWITCH ON only when unit is to be used.

## MAINTENANCE INSTRUCTIONS



### CAUTION: PERSONAL INJURY HAZARD

Disconnect appliance from electrical power before cleaning condenser coil.



### CAUTION: PERSONAL INJURY HAZARD

Condenser coil fins are sharp. Use care to avoid cuts while cleaning the condenser.

## CONDENSER COIL CLEANING INSTRUCTIONS

The condenser coil must be kept clean to allow adequate air flow for proper heat dissipation. Recommend this procedure be performed monthly.

1. Turn **POWER SWITCH OFF**. Disconnect unit from electrical power.
2. Remove louvers or access panel to allow coil to be reached.
3. Using a soft bristle brush, brush lint and debris from the condenser fins. Brush vertically, top to bottom. Collect and discard all lint and debris gathered from this operation. **DO NOT HOSE DOWN**.

**IMPORTANT:** The fins of the condenser coil are delicate and easily damaged. Use care to brush only in a vertical motion to avoid damaging the coil fins. Fins are very sharp, avoid cuts.

4. Wipe the fan blades to remove accumulated dirt.
5. Reconnect to electrical power. Test for proper operation.

### CARE OF STAINLESS STEEL

The surface can be damaged by mechanical abrasion, hard water deposits and chlorine:

1. **NEVER** use steel wool, wire brushes or metal scrapers to clean the appliance. These will damage the surface.
2. Hard water deposits left behind when water is evaporated will attack the surface and allow the stainless steel to rust.
3. Chlorides from chlorinated cleansers, calcium / lime / rust removers (e.g. muriatic acid), even heavily chlorinated city water will attack the surface and allow the stainless steel to rust.
4. **DO NOT** use any highly caustic cleaners. Use of caustic cleaners will damage the surface.
5. **LIMIT USE** of caustic cleaners. Rinse thoroughly with vinegar and water solution to neutralize any residue. Failure to do so may cause damage to the surface.
6. Cleansers with ammonia will cause the stainless steel to rust.
7. Use soft cloth and plastic scouring pads to clean the stainless steel surfaces.
8. Metallic pads may **ONLY** be used if the scrubbing motion is in the direction of the surface grain. **DO NOT** use in a circular motion or straight across the grain.
9. In the absence of any visible grain, use only a soft cloth or plastic pads.
10. **DO NOT** use any cleanser containing chlorine or ammonia. Contact your cleaning materials supplier for suitable alkaline cleansers, tools and cleaning materials. Keep your Wells appliance clean at all times. This will prevent the build-up of hard, stubborn stains and hard-to-remove deposits. Extreme stains or grease should be cleaned with a non-abrasive cleaner and plastic scrub pad. It is advisable to rub with the grain of the steel. There are also non-toxic stainless steel cleaners available which can restore and preserve the finish of the steel's protective layer. Early signs of stainless steel breakdown can consist of small pits and cracks. If this has begun, clean thoroughly and start to apply stainless steel cleaners in attempt to restore the passivity of the steel.  
**DO NOT ATTEMPT TO USE A WATER HOSE** to clean or rinse the appliance. It may cause serious damage to the electrical components and cause personal injury. It will also void the warranty.



### CAUTION: PERSONAL INJURY HAZARD

Disconnect appliance from electrical power before cleaning.

Wells frost tops are constructed of high quality stainless steel. As long as the stainless steel surface is intact, the equipment will not rust or corrode.

### Recommendation:

A water softening device or a cartridge-type filtration device may be used to minimize lime and calcium build-up.

## MAINTENANCE INSTRUCTIONS

### IMPORTANT:

DO NOT adjust the differential settings of the refrigeration system. Field adjustments of the differential settings must be made by qualified refrigeration personnel only. Unauthorized adjustment of the differential settings will void the warranty.

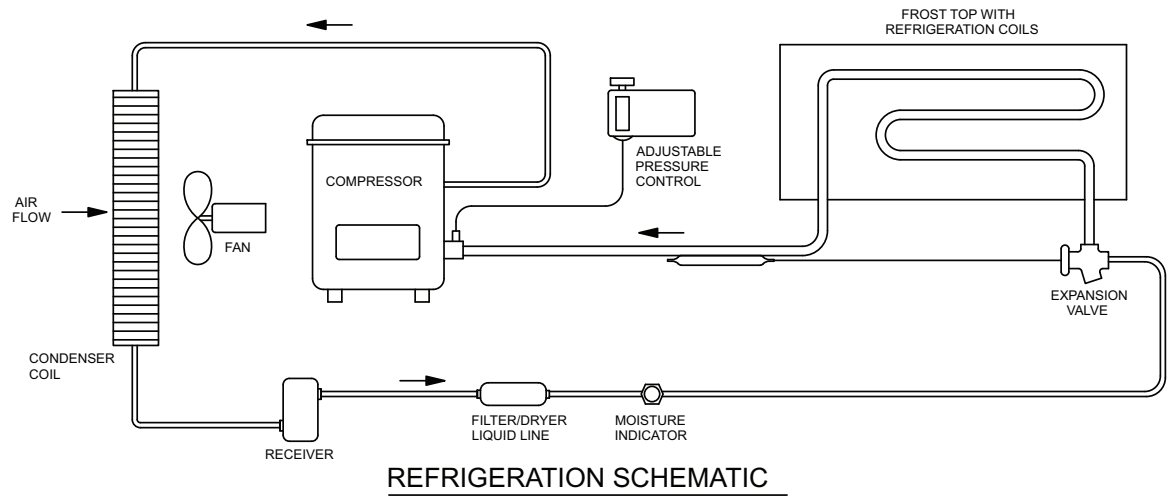
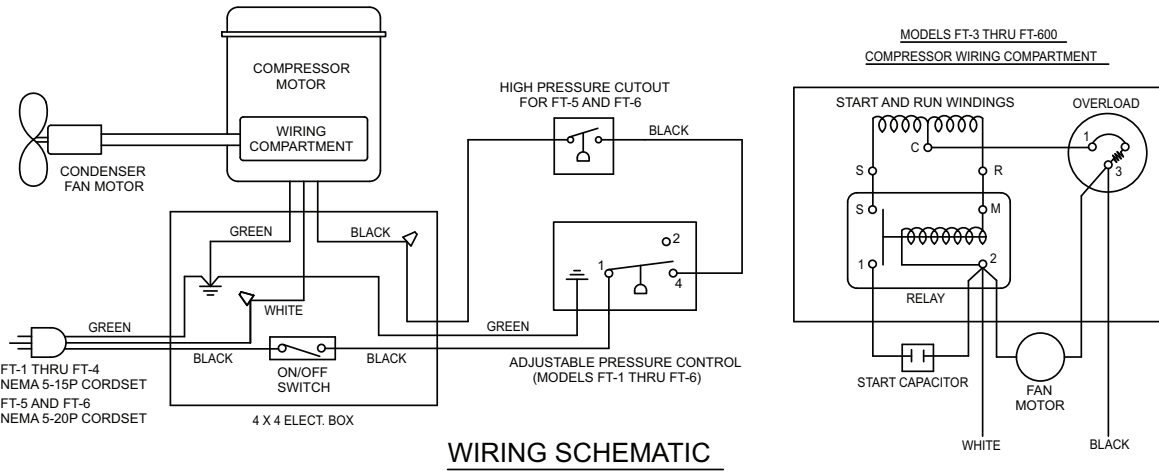
### TEMPERATURE ADJUSTMENT

1. The temperature has been preset at the factory to meet the frost top application.
2. If temperature adjustments are required, the pressure switch, located on the condensing unit, is adjustable. Temperature adjustment must be performed by a qualified refrigeration personnel only.
3. Normal temperature setting would be 28°F.

## TROUBLESHOOTING SUGGESTIONS

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
No power to unit	Circuit breaker tripped	Reset circuit breaker
	Power switch OFF	Turn power switch ON
	Unit is not plugged in	Plug unit in
Food not cold enough	Food was not pre-chilled	Add only pre-chilled products
	Food too thick	Stir food frequently
	Set point too high	Set to desired temperature
	Clogged louvers or condenser coils	Clean louvers and/or coils
	Air movement over product	Relocate unit or redirect air
	Refrigerant charge low	Call authorized service agency

# WIRING DIAGRAM



REFRIGERATION SPECIFICATIONS: 115VAC SINGLE PHASE 60 HZ

MODEL	HP	VOLTS (VAC)	AMPS	REFRIGERANT		DESIGN PRESSURE		PLUG (NEMA)
				TYPE	QTY (OZ)	HIGH	LOW	
FT-1, FT-2	1/4	115	4.9	R134A	28	440	162	5-15P
FT-3	1/3	115	5.6	R404A	24	500	174	5-15P
FT-4	1/2	115	6.4	R404A	32	500	174	5-15P
FT-5, FT-6	3/4	115	15.3	R404A	34	500	174	5-20P

M415 p/n 2M-Z16058 Owner's Manual, Drop-In Frost Tops



**NOTES:**

## NOTES

## ACCESSORY PARTS & SERVICE

**IMPORTANT: Use only factory authorized service parts and replacement filters.**

For factory authorized service, or to order factory authorized replacement parts, contact your Wells authorized service agency, or call:

**Wells Bloomfield, LLC**

10 Sunnen Dr.,  
St. Louis MO 63143 USA

**Service Dept.**

phone: (314) 678-6314  
fax: (314) 781-2714

Service Parts Department can supply you with the name and telephone number of the **WELLS AUTHORIZED SERVICE AGENCY** nearest you.

**THERE ARE NO ACCESSORIES OFFERED FOR THE FT SERIES.**

### CUSTOMER SERVICE DATA

please have this information available if calling for service

RESTAURANT \_\_\_\_\_ LOCATION \_\_\_\_\_  
INSTALLATION DATE \_\_\_\_\_ TECHNICIAN \_\_\_\_\_  
SERVICE COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
TELEPHONE NUMBER (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

EQUIPMENT MODEL NO. \_\_\_\_\_  
EQUIPMENT SERIAL NO. \_\_\_\_\_  
VOLTAGE: (check one)  120



Wells Bloomfield proudly supports CFESA  
Commercial Food Equipment Service Association

**SERVICE TRAINING - QUALITY SERVICE**



**CUSTOMER SATISFACTION**



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